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ThKA — Amphitheater

Keynote Addresses (Keynote)

Chair: Hudson, Donna — Univ of California, San Francisco
Co-Chair: Kim, Yongmin — Univ. of Washington
Co-Chair: Dittmar, Andre — INSA Lyon

10:00-10:45 — ThKA.1

Microscale Bioengineering Inspired by Nature: From Widgets to Cell Biology, pp. 1-1.
Beebe, David — Univ. of Wisconsin-Madison

10:45-11:30 — ThKA.2

What Is the Added Value of Biomedical Engineering Technologies?, pp. 2-2.
Healy, Jean-Claude — EU Telematics Programs

ThB01 — Gratte Ciel 1

Time-Frequency and Time-Scale Analysis I (Oral Session)

Chair: Flandrin, Patrick — CNRS - Ec. Normale Supérieure de Lyon

12:45-13:00 — ThB01.1

The Use of Time-Frequency Distributions for Epileptic Seizure Detection in EEG Recordings, pp. 3-6.
Tzallas, Alexandros — Univ. of Ioannina
Tsipouras, Markos G. — Univ. of Ioannina
Fotiadis, Dimitrios I. — Univ. of Ioannina

13:00-13:15 — ThB01.2

A Feature Set for EEG Seizure Detection in the Newborn Based on Seizure and Background Charactersitics, pp. 7-10.
Stevenson, Nathan — Univ. of Queensland
Mesbah, Mostefa — Univ. of Queensland
Boashash, Boualem — Univ. of Queensland

13:15-13:30 — ThB01.3

Robust Time-Frequency Analysis of Newborn EEG Seizure Corrupted by Impulsive Artefacts, pp. 11-14.
Brotchie, James Peter — Univ. of Queensland
Rankine, Luke — Univ. of Queensland
Mesbah, Mostefa — Univ. of Queensland
Colditz, Paul — Univ. of Queensland
Boashash, Boualem — Univ. of Queensland

13:30-13:45 — ThB01.4

Depth of Anesthesia Index Using Cumulative Power Spectrum, pp. 15-18.
Jospin, Mathieu — Tech. Univ. of Catalonia (UPC)
Caminal, Pere — Tech. Univ. of Catalonia (UPC)
Jensen, Erik Weber — danmeter
Vallverdu, Montserrat — Tech. Univ. of Catalonia
Struys, Michel — Ghent Univ. Hospital
Vereecke, Hugo — Ghent Univ. Hospital
Kaplan, Daniel T. — Macalester Coll.

13:45-14:00 — ThB01.5

EEG Analysis in Wakefulness Maintenance State against Sleepiness by Instantaneous Equivalent Bandwidths, pp. 19-22.
Yoshida, Hisashi — Kinki Univ.

14:00-14:15 — ThB01.6

Study of the EEG Changes During the Combined Ingestion of Alcohol and H1-Antihistamines by Using the Wavelet Transform, pp. 23-26.
Poza, Jesús — Univ. de Valladolid
Caminal, Pere — Tech. Univ. of Catalonia (UPC)
Vallverdu, Montserrat — Tech. Univ. of Catalonia
Hornero, Roberto — Univ. of Valladolid
Romero, Sergio — Tech. Univ. of Catalonia (UPC)
Barbanoj, Manuel — Farmacología Clínica. Hospital de la Santa Creu i Sant Pau

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ThB02 — Gratte Ciel 2

Signal Processing and Physiological System Modeling I (Oral Session)

Chair: Istepanian, Robert — Kingston Univ.

12:45-13:00 — ThB02.1

Accuracy of Local Conduction Velocity Determination from Non-Fractionated Cardiac Activation Signals, pp. 27-30.
Wiener, Thomas — Medical Univ. of Graz
Thurner, Thomas — Graz Univ. of Tech.
Prassl, Anton J. — Medical Univ. of Graz
Plank, Gernot — Medical Univ. of Graz
Hofer, Ernst — Medical Univ. Graz

13:00-13:15 ThB02.2

Lost Sample Recovering of ECG Signals in E-Health Applications, pp. 31-34.

Prieto Guerrero, Alfonso — Univ. Autonoma Metropolitana
Mailhes, Corinne — ENSEEIHT
CASTANIE, Francis — TESA

13:15-13:30 ThB02.3

Phase-Rectified Signal Averaging: A Useful Tool for the Estimation of the Dominant Frequency in ECG Signals During Atrial Fibrillation, pp. 35-38.

Lemay, Mathieu — EPFL
Prudat, Yann — EPFL
Jacquemet, Vincent — Duke Univ.
Vesin, Jean-Marc — EPFL

13:30-13:45 ThB02.4

Clinical Quality Guarantee in Real-Time ECG Compression, pp. 39-42.

Alesanco, Alvaro — Univ. of Zaragoza
García Moros, José — Univ. of Zaragoza
Serrano, Pedro — Clinical Hospital Lozano Blesa
Ramos, Luciano — Uospital of Santa Marina
Portolés, Ana — Miguel Servet Hospital
Istepanian, Robert — Kingston Univ.

13:45-14:00 ThB02.5

Artifact Reduction in Maternal Abdominal ECG Recordings for Fetal ECG Estimation, pp. 43-46.

Vullings, Rik — Eindhoven Univ. of Tech.
Peters, Christiaan Hendrik Leonard — Máxima Medical Center
Mischi, Massimo — Eindhoven Univ. of Tech.
Sluijter, Rob — Eindhoven Univ. of Tech.
Oei, S. Guid — Maxima Medisch Centrum, Veldhoven
Bergmans, Johannes Wilhelmus Maria — Eindhoven Univ. of Tech.

14:00-14:15 ThB02.6

Prediction of Respiratory Measurements Based on Cross Embedding Techniques, pp. 47-50.

Rathnayake, Suren Indrajith — Univ. of Queensland, Australia
Abeyratne, Udantha R — Univ. of Queensland

ThB03 — Bellecour 1

Contrast-Enhanced MRI (Oral Session)

Chair: Wiart, Marlene — Univ. of Lyon, Creatis, UMR CNRS 5220, U630Inserm,INSA de Lyon
Co-Chair: Liang, Zhi-Pei — Univ. of Illinois, Urbana-Champaign

12:45-13:00 ThB03.1

Manganese-Enhanced MRI Detected the Gray Matter Lesions in the Late Phase of Mild Hypoxic-Ischemic Injury in Neonatal Rat, pp. 51-54.

Yang, Jian — The Univ. of Hong Kong
Wu, Ed X. — The Univ. of Hong Kong

13:00-13:15 ThB03.2

Visualization of Quantitative Breast DCE-MRI Functional Parametric Maps by Dedicated Image Processing, pp. 55-58.

Bracco, Christian — Istitute for Cancer Res. and Treatment
Martincich, Laura — Istitute for Cancer Res. and Treatment
Regge, Daniele — Istitute for Cancer Res. and Treatment
becchio, marco — Im3D S.p.A.
persano, diego — ISI foundation
Bert, Alberto — ISI foundation
Rizzo, Giovanna — National Res. Council (CNR)

13:15-13:30 ThB03.3

Improved Detection of Liver Metastasis by Registration and Subtraction of Dynamic Contrast -Enhanced Magnetic Resonance Imaging, pp. 59-62.

Passera, Katia — Pol. di Milano
Mainardi, Luca — Pol. di Milano
Setti, Ernesto — Istituto Nazionale dei Tumori
Potepan, Paolo — Istituto Nazionale dei Tumori

13:30-13:45 ThB03.4

DyCoH: An Innovative Tool to Dynamic Contrast Enhancement Analysis, pp. 63-66.

Setola, Roberto — Univ. Bio-Medico di Roma
Beomonte Zobel, Bruno — Univ. CAMPUS Bio-Medico
Grasso, Rosario Francesco — Univ. CAMPUS Bio-Medico
Russo, Valentina — Univ. CAMPUS Bio-Medico
Del Vecchio, Riccardo — Univ. CAMPUS Bio-Medico

13:45-14:00 ThB03.5

Evaluation of the Visual System in a Rat Model of Chronic Glaucoma Using Manganese-Enhanced Magnetic Resonance Imaging, pp. 67-70.

Chan, Kevin C. — The Univ. of Hong Kong
Fu, Qing-ling — The Univ. of Hong Kong
So, Kwok-fai — The Univ. of Hong Kong
Wu, Ed X. — The Univ. of Hong Kong

14:00-14:15 ThB03.6

An Evaluation of Four Parametric Models of Contrast Enhancement for Dynamic Magnetic Resonance Imaging of the Breast, pp. 71-74.

Gal, Yaniv — Univ. of Queensland
Mehnert, Andrew James Heinrich — The Univ. of Queensland
Bradley, Andrew Peter — Univ. of Queensland
McMahon, Kerry — Greenslopes Private Hospital
Crozier, Stuart — The Univ. of Queensland

ThB04 — Bellecour 3

Elastography and Tissue Motion (Oral Session)

Co-Chair: Magnin, Isabelle — INSA

12:45-13:00 ThB04.1

Locally Regularized Strain Field Estimation for Freehand Elastography, pp. 75-78.

Brusseau, Elisabeth — UMR CNRS5515
Deprez, Jean-François — UMR CNRS5515 INSERM U630
Duboeuf, Francois — INSERM
Basset, Olivier — Univ. Lyon1, INSA-Lyon, CNRS UMR 5220, INSERM U630.

13:00-13:15 ThB04.2

3D Elastography for Early Detection of Lesions. Evaluation on a Pressure Ulcer Mimicking Phantom, pp. 79-82.

Deprez, Jean-François — INSA Lyon
Cloutier, Guy — Lab. of Biorheology and Medical Ultrasonics
Schmitt, Cédric — Univ. of Montreal Hospital Res. Center
Gehin, Claudine — INSA Lyon
Dittmar, Andre — INSA Lyon
Basset, Olivier — Univ. Lyon1, INSA-Lyon, CNRS UMR 5220, INSERM U630.
Brusseau, Elisabeth — UMR CNRS5515

13:15-13:30 ThB04.3

Acoustic Elastography under Dynamic Compression Using One-Dimensional Track Motion, pp. 83-86.

Pereira Neves, Lucio — Univ. de São Paulo
Jiang, Jingfeng — Univ. of Wisconsin
J. Hall, Timothy — Univ. of Wisconsin
Carneiro, Antonio — Univ. de São Paulo

13:30-13:45 ThB04.4

Fast B-Mode Ultrasound Image Simulation of Deformed Tissue, pp. 87-90.

Goksel, Orcun — Univ. of British Columbia
Salcudean, Septimiu E. — Univ. of British Columbia

13:45-14:00 ThB04.5

Non-Rigid Registration of Three-Dimensional (3D) Grayscale and Doppler Ultrasound Breast Images, pp. 91-94.

Narayanasamy, Ganesh — Univ. of Michigan
LeCarpentier, Gerald — Univ. of Michigan
Zabuawala, Sakina — Univ. of Michigan, Ann Arbor, MI
Fowlkes, Brian — Univ. of Michigan
Roubidoux, Marilyn — Univ. of michigan
Sinha, Sumedha — Univ. of Michigan
Carson, Paul L. — Univ. of Michigan

14:00-14:15 ThB04.6

Motion Tracking on Elbow Tissue from Ultrasonic Image Sequence for Patients with Lateral Epicondylitis, pp. 95-98.

Liu, Yuh-Hwan — Chia Nan Univ. of Pharmacy and Science
Chen, Shu-Min — National Cheng Kung Univ.
Lin, Chi-Yi — National Cheng-Kung Univ.
Huang, Chung-I — National Cheng-Kung Univ.
Sun, Yung-Nien — National Cheng Kung Univ.

ThB05 — Tęte d'Or Lounge

Chemo/bio Sensing, Materials, Surfaces and Analysis (Oral Session)

Chair: Laureyn, Wim — IMEC

12:45-13:00 ThB05.1

A Microsensor for the Detection of a Single Pathogenic Bacterium Using Magnetotatic Bacteria-Based Bio-Carriers: Simulations and Preliminary E, pp. 99-102.

Denomme, Ryan — Nanorobtics Lab. Ec. Pol. de Montreal
lu, zhao — Ec. Pol. de Montreal
Martel, Sylvain — Ec. Pol. de Montreal

13:00-13:15 ThB05.2

Design and Characterization of a Nano-Encapsulated Self-Referenced Fluorescent Nitric Oxide Sensor for Wide-Field Optical Imaging, pp. 103-106.

Zhang, Guodong — Clarkson Univ.
Shu, Florence — Clarkson Univ.
Robinson, Charles — Clarkson Univ.

13:15-13:30 ThB05.3

Polymer Semiconductors As a Biosensing Platform: Peroxidase Activity of Enzyme Bound to Organic Semiconducting Films, pp. 107-110.

Omari, Eenas — Univ. of Wisconsin - Milwaukee
Klemer, David — Univ. of Wisconsin - Milwaukee
Steeber, Douglas — Univ. of Wisconsin - Milwaukee
Gaertner, William — Univ. of Wisconsin - Milwaukee

13:30-13:45 ThB05.4

Polymer Based Microchip for Combined Capillary Electrophoresis and Electrochemical Detection, pp. 111-114.

Rashid, Mamun — Univ. of Teesside
Auger, Vincent — Univ. of Teesside
Williams, Lee — Univ. of Sunderland
Dou, Yuehua — The Univ. of Glasgow
Pruneanu, Stela — Newcastle Univ.
Ali, Zulfiqur — Univ. of Teesside

13:45-14:00 ThB05.5

A Novel Point of Care Diagnostic Device: Impedimetric Detection of a Biomarker in Whole Blood, pp. 115-118.

McMurray, Amanda Anne — Cenamps
Ali, Zulfiqur — Univ. of Teesside
Kyselovic, Jan — Comenius Univ. Bratislava
Mills, Christopher — Bioengineering Inst. of Catalonia (IBEC)
Jaffrezic-Renault, Nicole — Claude Bernard Univ. Lyon 1
Santha, Hunor — Budapest Univ. of Tech. and Ec.
Strohhöfer, Christof — Fraunhofer IZM

14:00-14:15 ThB05.6

An Integrated Biosensor for the Detection of Bio-Entities Using Magnetotactic Bacteria and CMOS Technology, pp. 119-122.

El Fouladi, Jaouad — Ec. Pol. de Montreal
Lu, Zhao — Ec. Pol. de Montreal
Savaria, Yvon — Ec. Pol. de Montreal
Martel, Sylvain — Ec. Pol. de Montreal

ThB06 Tęte d'Or 2

Bioinformatics Algorithms I (Oral Session)

Chair: Wang, May Dongmei — Georgia Tech. and Emory Univ.

12:45-13:00 ThB06.1

Clustering of Individuals Given SNPs Similarity Based in Normalized Mutual Information: F7 SNPs in the GAIT Sample, pp. 123-126.

Perera, Alexandre — Tech. Univ. of Catalonia
Buil Demur, Alfonso — Hospital de la Santa Creu i Sant Pau
Di Bernardo, Maria Chiara — Tech. Univ. of Catalonia
Sabater-Lleal], María — Hospital de la Santa Creu i Sant Pau
Pattini, Linda — Pol. Univ. of Milan
Souto Andrés, Juan Carlos — Hospital de la Santa Creu i Sant Pau
Fontcuberta Boj, Jordi — Hospital de la Santa Creu i Sant Pau
Vallverdu, Montserrat — Tech. Univ. of Catalonia
Soria, José Manuel — Santa Creu i Sant Pau Hospital
Caminal, Pere — Tech. Univ. of Catalonia (UPC)

13:00-13:15 ThB06.2

A Pluggable Framework for Parallel Pairwise Sequence Search, pp. 127-130.

Archuleta, Jeremy — Virginia Tech.
Feng, Wu-chun — Virginia Tech.
Tilevich, Eli — Virginia Tech.

13:15-13:30 ThB06.3

Fast Drug Action Solving from Cardiac Action Potential by Model Fitting in a Sampled Parameter Space, pp. 131-134.

Lu, Jianyin — Kyoto Univ.
Keichi, Asakura — Nippon Shinyaku Co. Ltd.
Amano, Akira — Kyoto Univ.
Matsuda, Tetsuya — Kyoto Univ.

13:30-13:45 ThB06.4

ECG Compression through Segment Matching and Progressive Error Encoding, pp. 135-138.

Brito, Mario — CISUC, Centre for Informatics and Systems, Univ. of
Henriques, Jorge — Univ. of Coimbra
Carvalho, Paulo — Univ. of Coimbra
Ribeiro, Bernardete — Univ. of Coimbra
Antunes, Manual — Univ. of Coimbra

13:45-14:00 ThB06.5

Detecting Over-Represented Motifs in Alternatively Spliced Exons Using Gibbs Sampling, pp. 139-142.

Malousi, Andigoni — Aristotle Univ. of Thessaloniki
Kouidou, Sofia — Aristotle Univ. of Thessaloniki
Maglaveras, Nikolaos — Aristotle Univ. of Thessaloniki

14:00-14:15 ThB06.6

Modified Genetic Algorithm for Parameter Selection of Compartmental Models, pp. 143-146.

Shah, Neil — Georgia Inst. of Tech.
Moffitt, Richard A. — Georgia Inst. of Tech.
Wang, May Dongmei — Georgia Tech. and Emory Univ.

ThB07 Bellecour 2

Basic Electrophysiology - Cell to Organ (Oral Session)

Chair: Wilders, Ronald — Acad. Medical Center, Univ. of Amsterdam
Co-Chair: MacLeod, Rob — Univ. of Utah

12:45-13:00 ThB07.1

3D Visualization of Cardiac Anatomical MRI Data with Para-Cellular Resolution, pp. 147-151.

Kohl, Peter — Univ. of Oxford
Goodyer, Christopher — Univ. of Leeds
Grau, Vicente — Univ. of Oxford
Mansoori, Tahir — Oxford Univ.
Schneider, Jurgen E. — Univ. of Oxford
Ken, Brodlie — Univ. of Leeds

13:15-13:30 ThB07.3

25 Years of SA Nodal Cell Modeling, pp. 152-155.

Wilders, Ronald — Acad. Medical Center, Univ. of Amsterdam

13:30-13:45 ThB07.4

Computational Model of Rabbit SA Node Pacemaker Activity Probed with Action Potential and Calcium Transient Clamp, pp. 156-159.

van Borren, Marcel M. G. J. — Acad. Medical Center, Univ. of Amsterdam
Zegers, Jan G. — Acad. Medical Center, Univ. of Amsterdam
Verkerk, Arie O. — Acad. Medical Center, Univ. of Amsterdam
Wilders, Ronald — Acad. Medical Center, Univ. of Amsterdam

13:45-14:00 ThB07.5

A Framework for Modeling of Mechano-Electrical Feedback Mechanisms of Cardiac Myocytes and Tissues, pp. 160-163.

Sachse, Frank B. — Univ. of Utah
Hunter, Geoffrey A. M. — Univ. of Utah
Weiss, Daniel L. — Univ. Karlsruhe (TH)
Seemann, Gunnar — Univ. Karlsruhe (TH)

14:00-14:15 ThB07.6

Structure Related Modification of the Shock Induced Excitation in Guinea Pig Papillary Muscle, pp. 164-166.

Windisch, Herbert — Medical Univ. Graz
Platzer, Dieter — Medical Univ. Graz

ThB08 Gratte Ciel Lounge

Neural Nano/Microsystems (Oral Session)

Chair: Schuettler, Martin — Univ. of Freiburg

12:45-13:00 ThB08.1

Cell Recordings with a CMOS High-Density Microelectrode Array, pp. 167-170.

Frey, Urs — ETH Zurich
Diaz Sanchez-Bustamante, Carlota — ETH Zurich
Ugniwenko, Tanja — Univ. of Kaiserslautern
Heer, Flavio — ETH Zurich
Sedivy, Jan — ETH Zurich
Hafizovic, Sadik — ETH Zurich
Roscic, Branka — ETH Zurich
Fussenegger, Martin — ETH Zurich
Blau, Axel — Univ. of Kaiserslautern
Egert, Ulrich — Albert-Ludwigs-Univ.
Hierlemann, Andreas — ETH Zurich

13:00-13:15 ThB08.2

BioMEA: A 256-Channel MEA System with Integrated Electronics, pp. 171-174.

Charvet, Guillaume — CEA Grenoble
Billoint, Olivier — CEA-LETI
Rousseau, Lionel — Univ.
Yvert, Blaise — CNRS & Univ. Bordeaux 1&2

13:15-13:30 ThB08.3

Microprobe Array with Low Impedance Electrodes and Highly Flexible Polyimide Cables for Acute Neural Recording, pp. 175-178.

Kisban, Sebastian Aron — Univ. of Freiburg
Herwik, Stanislav — Univ. of Freiburg
Seidl, Karsten — Univ. of Freiburg - IMTEK
Rubehn, Birthe — Univ. of Freiburg
Jezzini, Ahmad — Univ. of Parma
Umiltŕ, Maria Alessandra — Univ. of Parma
Fogassi, Leonardo — Univ. of Parma
Stieglitz, Thomas — Univ. of Freiburg
Paul, Oliver — Univ. of Freiburg
Ruther, Patrick — Univ. of Freiburg

13:30-13:45 ThB08.4

Mechanical Properties of Micro Probe and Tube Array for Neural Penetrating Devices, pp. 179-182.

Takei, Kuniharu — Toyohashi Univ. of Tech.
Kawashima, Takahiro — Toyohashi Univ. of Tech.
Sawada, Kazuaki — Toyohashi Univ. of Tech.
Ishida, Makoto — Toyohashi Univ. of Tech.

13:45-14:00 ThB08.5

Measurement of Defects in Spin Coated Polyimide Films, pp. 183-185.

Rubehn, Birthe — Univ. of Freiburg
Stieglitz, Thomas — Univ. of Freiburg

14:00-14:15 ThB08.6

Electrochemical Properties of Platinum Electrodes in Vitro: Comparison of Six Different Surface Qualities, pp. 186-189.

Schuettler, Martin — Univ. of Freiburg

ThB09 — Gratte Ciel 3

Surgical Robotics I (Oral Session)

Co-Chair: Ortmaier, Tobias — German Aerospace Centre

12:45-13:00 ThB09.1

Parameter Identification for a Needle-Tissue Interaction Model, pp. 190-193.

Dehghan, Ehsan — Univ. of British Columbia
Wen, Xu — Univ. of British Columbia
Zahiri-Azar, Reza — Univ. of British Columbia
Marchal, Maud — Univ. of British Columbia
Salcudean, Septimiu E. — Univ. of British Columbia

13:00-13:15 ThB09.2

Fully Automated Image-Guided Needle Insertion: Application to Small Animal Biopsies, pp. 194-197.

Ayadi, Ahmed — EAVR/LSIIT
Bour, Gaetan — IRCAD
Aprahamian, Pierre Marc — INSERM
Bayle, Bernard — Univ. of Strasbourg, LSIIT
Graebling, Pierre — Univ. Louis Pasteur de Strasbourg (ULP)
Gangloff, Jacques — Univ. Louis Pasteur of Strasbourg
Soler, Luc — IRCAD
Egly, Jean Marc — IGBMC
Marescaux, jacques — IRCAD

13:15-13:30 ThB09.3

Novel Haptic Tool and Input Device for Real Time Bilateral Biomanipulation Addressing Endoscopic Surgery, pp. 198-201.

Houston, Keith — Scuola Superiore Sant'Anna
Sieber, Arne — Profactor Res. and Solution GmbH
Eder, Clemens — Neurodan A/S
Tonet, Oliver — Scuola Superiore SantAnna
Menciassi, Arianna — Scuola Superiore Sant'Anna
Dario, Paolo — Scuola Superiore Sant'Anna

13:30-13:45 ThB09.4

Anatomically Realistic Patient-Specific Surgical Planning of Complex Congenital Heart Defects Using MRI and CFD, pp. 202-205.

Sundareswaran, Kartik — Georgia Inst. of Tech.
de Zelicourt, Diane — Georgia Tech.
Pekkan, Kerem — Carnegie Mellon Univ.
Jayaprakash, Gopinath — Georgia Tech.
Kim, David — Georgia Tech.
Whited, Brian — Georgia Tech.
Rossignac, Jarek — Georgia Tech.
Fogel, Mark — Children's Hospital of Philadelphia, Univ. of Pennsylvania
Kanter, Kirk — Children's Healthcare of Atlanta, Emory Univ. School
Yoganathan, Ajit — Georgia Tech.

13:45-14:00 ThB09.5

Positioning Accuracy of Neurosurgeons, pp. 206-209.

Sandoval, Roberto — Carnegie Mellon Univ.
MacLachlan, Robert A. — Carnegie Mellon Univ.
Oh, Michael — Allegheny General Hospital
Riviere, Cameron — Carnegie Mellon Univ.

14:00-14:15 ThB09.6

Surface-Data-Based Haptic Rendering for Simulation of Surgery of Closed Reduction and Internal Fixation, pp. 210-213.

Cho, Jang Ho — Korea Advanced Inst. of Science and Tech.
Jung, Hoe Ryong — KAIST
Yu, Insik — Korea Advanced Inst. of Science and Tech.
Lee, Kyungno — KAIST
Lee, Doo Yong — KAIST
Ahn, Hyung Soo — Kyungpook National Univ.
Park, Ilhyung — Kyungpook Univ. Hospital
Yeo, Sang Hee — Kyungpook Univ. School of Medicine
Han, Seung-Ho — The Catholic Univ. of Korea Coll. of Medicine

ThB10 Rhône 1

Image Guided Therapy I (Oral Session)

Chair: Rousseau, Jean — INSERM - Univ. de Lille 2
Co-Chair: Melodelima, David — INSERM

12:45-13:00 ThB10.1

Determination of the Lesion Size in Laser-Induced Interstitial Thermal Therapy (litt) Using a Low-Field Mri, pp. 214-217.

Viard, Romain — CHRU Lille
Steiner, Aline — Lille Univ. Hospital
Piron, berengčre — Univ. Lille2
Rochon, Philippe — Lille Univ. Hospital
Wassmer, Benjamin — Osyris SA
Mordon, Serge — Lille Univ. Hospital

13:00-13:15 ThB10.2

Enhancing the Focusing Properties of a Prototype Non-Invasive Brain Hyperthermia System: A Simulation Study, pp. 218-221.

Karathanasis, Konstantinos — National Tech. Univ. of Athens
Karanasiou, Irene — National Tech. Univ. of Athens
Uzunoglu, Nikolaos — National Tech. Univ. of Athens

13:15-13:30 ThB10.3

Automatic Feedback Control of the Temperature for MRI-Guided Therapeutic Ultrasound, pp. 222-225.

Salomir, Rares Vincent — Unit 556

13:30-13:45 ThB10.4

From Intensity Modulated Radiation Therapy to 4D Radiation Therapy – an Advance in Targeting Mobile Lung Tumors, pp. 226-229.

Song, Yulin — Memorial Sloan-Kettering Cancer Center
Mueller, Boris — Memorial Sloan-Kettering Cancer Center
Burman, Chandra — Memorial Sloan-Kettering Cancer Center
Mychalczak, Borys — Memorial Sloan-Kettering Cancer Center

13:45-14:00 ThB10.5

Toric HIFU Transducer for Large Thermal Ablation, pp. 230-233.

Melodelima, David — INSERM
N'Djin, William Apoutou — INSERM
Parmentier, Hubert — INSERM
Rivoire, Michel — Centre Leon Berard
Chapelon, Jean-Yves — INSERM U556

14:00-14:15 ThB10.6

High Power Phased Array Prototype for Clinical High Intensity Focused Ultrasound: Applications to Transcostal and Transcranial Therapy, pp. 234-237.

Pernot, Mathieu — SuperSonic Imagine
Aubry, Jean-Francois — ESPCI, CNRS, INSERM
Tanter, Mickaël — CNRS
Marquet, Fabrice — CNRS UMR7587
Montaldo, Gabriel — CNRS
Boch, Anne-Laure — Groupe Hospitalier Pitie-Salpetriere
Kujas, Michele — Hopital de la Pitie
Seilhean, Danielle — Hopital de la Pitie
Fink, Mathias — CNRS

ThB11 Tęte d'Or 1

Women in Biomedical Engineering and Health Informatics (Minisymposium)

Chair: McGregor, Carolyn — Univ. of Ontario Inst. of Tech.
Organizer: McGregor, Carolyn — Univ. of Ontario Inst. of Tech.

12:45-13:00 ThB11.1

Women in Biomedical Engineering and Health Informatics (I), pp. 238-238.

McGregor, Carolyn — Univ. of Western Sydney
Frize, Monique — Carleton Univ.

ThB12 Rhône 2

Student Paper Competition I (Oral Session)

Chair: James, Christopher — Univ. of Southampton

12:45-13:00 ThB12.1

*Microprobe Array with Low Impedance Electrodes and Highly Flexible Polyimide Cables for Acute Neural Recording**.

Kisban, Sebastian Aron — Univ. of Freiburg
Herwik, Stanislav — Univ. of Freiburg
Seidl, Karsten — Univ. of Freiburg - IMTEK
Rubehn, Birthe — Univ. of Freiburg
Jezzini, Ahmad — Univ. of Parma
Umiltŕ, Maria Alessandra — Univ. of Parma
Fogassi, Leonardo — Univ. of Parma
Stieglitz, Thomas — Univ. of Freiburg
Paul, Oliver — Univ. of Freiburg
Ruther, Patrick — Univ. of Freiburg

13:00-13:15 ThB12.2

*Multivariate Parametric Model for the Identification of Diastolic Pressure and Pulse Pressure Components**.

Aletti, Federico — Pol. di Milano - Dipartimento di Bioingegneria
Baselli, Giuseppe — Pol. di Milano
Bassani, Tito — Pol. di Milano
Lucini, Daniela — Univ. degli studi di Milano
Pagani, Massimo — Univ. degli studi di Milano

13:15-13:30 ThB12.3

*Narrowband vs. Broadband Phase Synchronization Analysis Applied to Independent Components of Ictal and Interictal EEG**.

Gupta, Disha — Univ. of Southampton
James, Christopher — Univ. of Southampton

13:30-13:45 ThB12.4

*Detection of Blood Vessels in Fundus Images of the Retina Using Gabor Wavelets (I)**.

Oloumi, Faraz — SCHULICH School of Engineering, Univ. of Calgary
Rangayyan, Raj — Univ. of Calgary
Oloumi, Foad — SCHULICH School of Engineering, Univ. of Calgary
Eshghzadeh-Zanjani, Peyman — SCHULICH School of Engineering, Univ. of Calgary
Ayres, Fabio — Schulich School of Engineering, Univ. of Calgary

13:45-14:00 ThB12.5

*Minimum Cross-Entropy Reconstruction of PET Images with Anatomically Based Anisotropic Median-Diffusion Filtering**.

Chan, Chung — Univ. of Sydney
Fulton, Roger — Univ. of Sydney
Cai, Tom — Univ. of Sydney
Feng, Dagan — The Univ. of Sydney
Meikle, Steven — Univ. of Sydney

14:00-14:15 ThB12.6

*Methodology for MR Diffusion Tensor Imaging of the Cat Spinal Cord**.

Cohen-Adad, Julien — Univ. of Montreal - INSERM
Benali, Habib — INSERM - Univ. Pierre et Marie Curie
Rossignol, Serge — Univ. of Montreal

ThB13 — Roseraie 1,2

Recent Advances in Medical Infrared Imaging (Invited Session)

Chair: Diakides, Nicholas A. — Advanced Concepts Analysis, Inc.
Organizer: Diakides, Nicholas A. — Advanced Concepts Analysis, Inc.

12:45-13:00 ThB13.1

Reaction of Normal and Burned Tissue to Cold Excitation (I), pp. 239-242.

Nowakowski, Antoni Z. — Gdansk Univ. of Tech.
Kaczmarek, Mariusz — Gdansk Univ. of Tech.
Renkielska, Alicja — Medical Univ. of Gdansk
Grudzinski, Jacek — Medical Univ. of Gdansk
Stojek, Wojciech — Gdansk Univ.

13:00-13:15 ThB13.2

Forehead Thermal Signature Extraction in Lie Detection (I), pp. 243-246.

Zhu, Zhen — Univ. of Houston
Tsiamyrtzis, Panagiotis — Athens Univ. of Ec. and Business
Pavlidis, Ioannis — Univ. of Houston

13:15-13:30 ThB13.3

Thermal Signatures of Emotional Arousal: A Functional Infrared Imaging Study (I), pp. 247-249.

Merla, Arcangelo — ITAB - Inst. of Advanced Biomedical Tech. - Foundation
Romani, Gian Luca — Univ. of Chieti-Pescara

13:30-13:45 ThB13.4

Virtual Thermistor, pp. 250-253.

Fei, Jin — Univ. of Houston
Pavlidis, Ioannis — Univ. of Houston

13:45-14:00 ThB13.5

Thermal Monitoring of the Myocardium under Blood Arrest Preliminary Study (I), pp. 254-257.

Kaczmarek, Mariusz — Gdansk Univ. of Tech.
Nowakowski, Antoni Z. — Gdansk Univ. of Tech.
Stojek, Wojciech — Gdansk Univ.
Topolewicz, Jerzy — Gdansk Univ. of Tech.
Siebert, Janusz — Medical Univ. of Gdansk
Rogowski, Jan — Medical Univ. of Gdansk

14:00-14:15 ThB13.6

Representation of Thermal Infrared Imaging Data in the DICOM Using XML Configuration Files (I), pp. 258-262.

Ruminski, Jacek — Gdansk Univ. of Tech.

ThC01 Gratte Ciel 1

Time-Frequency and Time-Scale Analysis II (Oral Session)

Chair: Rix, Hervé, Henri — Univ. of Nice-Sophia Antipolis

14:30-14:45 ThC01.1

Heart Rate and Systolic Blood Pressure Variability before and During Obstructive Sleep Apnea Episodes, pp. 263-266.

Glos, Martin — Charite-Univ. Berlin
Romberg, Dietrich — Univ. of Applied Sciences
Fietze, Ingo — Charite-Univ. Berlin
Penzel, Thomas — Charite Univ. Hospital

14:45-15:00 ThC01.2

Evaluation of Two Detrending Techniques for Application in Heart Rate Variability, pp. 267-270.

Shafqat, Kamran — City Univ.
Pal, Sandip — Broomfield Hospital
Kyriacou, Panayiotis — City Univ.

15:00-15:15 ThC01.3

A Gaussian Mixture Model for Time-Frequency Analysis of Atrial Fibrillation Electrocardiograms, pp. 271-274.

Corino, Valentina — Pol. di Milano
Mainardi, Luca — Pol. di Milano
Bollmann, Andreas — Univ. Hospital Magdeburg
Husser, Daniela — Univ. Hospital Magdeburg
Stridh, Martin — Lund Univ.
Sornmo, Leif — Lund Univ.

15:15-15:30 ThC01.4

Algorithm for Identifying Patients with Paroxysmal Atrial Fibrillation without Appearance on the ECG, pp. 275-278.

Kikillus, Nicole — Univ. of Karlsruhe
Hammer, Gerd — Univ. of Karlsruhe
Wieland, Steven — Univ. of Karlsruhe
Bolz, Armin — Univ. of Karlsruhe

15:30-15:45 ThC01.5

Influence of the Pedalling Frequency on the Heart Rate Variability, pp. 279-282.

Meste, Olivier — UNSA-CNRS
Blain, Gregory — Uniuversity of Nice Sophia Antipolis
BERMON, Stephane — Inst. IM2S

15:45-16:00 ThC01.6

A Simple and Efficient Algorithm with a Coarse to Fine Approach for Arterial Beat Pulse Detection, pp. 283-286.

Le Page, Ronan — Ec. Nationale Supérieure des Sciences Appliquées et de Tech.
Goujon, Jean-Marc — Ec. Nationale Supérieure des Sciences Appliquées et de Tech.
Guyader, Patrick — Ec. Nationale Supérieure des Sciences Appliquées et de Tech.
Billon, Michel — Ec. Nationale Supérieure des Sciences Appliquées et de Tech.

ThC02 Gratte Ciel 2

Signal Processing and Physiological System Modeling II (Oral Session)

Chair: Baselli, Giuseppe — Pol. di Milano
Co-Chair: Mukkamala, Ramakrishna — Michigan State Univ.

14:30-14:45 ThC02.1

Multivariate Parametric Model for the Identification of Diastolic Pressure and Pulse Pressure Components, pp. 287-290.

Aletti, Federico — Pol. di Milano - Dipartimento di Bioingegneria
Baselli, Giuseppe — Pol. di Milano
Bassani, Tito — Pol. di Milano
Lucini, Daniela — Univ. degli studi di Milano
Pagani, Massimo — Univ. degli studi di Milano

14:45-15:00 ThC02.2

Comparison of BRS Estimates During Mild Dynamical Exercise and Recovery, pp. 291-294.

Vallais, Frédéric — Pol. di Milano
Baselli, Giuseppe — Pol. di Milano
Lucini, Daniela — Univ. degli studi di Milano
Pagani, Massimo — Univ. degli studi di Milano
Porta, Alberto — Univ. degli Studi di Milano

15:00-15:15 ThC02.3

Estimation of Long-Term Correlations from Fetal Heart Rate Variability Signal for the Identification of Pathological Fetuses, pp. 295-298.

Ferrario, Manuela — Pol. di Milano
Signorini, Maria G. — Pol. di Milano
Magenes, Giovanni — Univ. of Pavia

15:15-15:30 ThC02.4

Changes in Heart Rate Variability in Patients under Local Anesthesia, pp. 299-302.

Shafqat, Kamran — City Univ.
Pal, Sandip — Broomfield Hospital
Kumari, Santhi — Broomfield Hospital
Kyriacou, Panayiotis — City Univ.

15:30-15:45 ThC02.5

Evaluation of Adaptation to Visually Induced Motion Sickness by Using Physiological Index Associated with Baroreflex Function, pp. 303-306.

Sugita, Norihiro — Tohoku Univ.
Yoshizawa, Makoto — Tohoku Univ.
Abe, Makoto — Graduate School of Engineering, Tohoku Univ.
Tanaka, Akira — Fukushima Univ.
Yambe, Tomoyuki — Tohoku Univ.

15:45-16:00 ThC02.6

Analysis of Respiratory Flow Signals in Chronic Heart Failure Patients with Periodic Breathing, pp. 307-310.

Garde, Ainara — Tech. Univ. of Catalonia (UPC)
Giraldo, Beatriz — Tech. Univ. of Catalonia (UPC)
Jané, Raimon — Univ. Pol. de Catalunya
Diaz, Ivan — Hospital de la Santa Creu i Sant Pau
Herrera, Sergio — Hospital de la Santa Creu i Sant Pau
Benito, Salvador — Hospital de la Santa Creu i Sant Pau
Domingo, Maite — Hospital de la Santa Creu i Sant Pau
Bayes-Genis, Antoni — Hospital de la Santa Creu i Sant Pau

ThC03 — Bellecour 1

Diffusion-Weighted and Diffusion-Tensor Imaging (Oral Session)

Chair: Georgiadis, John — Univ. of Illinois at Urbana-Champaign
Co-Chair: Wu, Ed X. — The Univ. of Hong Kong

14:30-14:45 ThC03.1

High-Resolution Diffusion MRI, pp. 311-314.

Haldar, Justin — Univ. of Illinois at Urbana-Champaign
Liang, Zhi-Pei — Univ. of Illinois, Urbana-Champaign

14:45-15:00 ThC03.2

Fiber Tracking: A Recursive Stack Algorithmic Approach, pp. 315-318.

Goksel Duru, Dilek — Bogazici Univ.
Ozkan, Mehmed — Bogazici Univ.

15:00-15:15 ThC03.3

Modified Fast Marching Tractography Algorithm and Its Ability to Detect Fiber Crossing, pp. 319-322.

Dargi, Fahimeh — Medical Science, Tehran Univ.
Oghabian, Mohammad Ali — Medical Sciences, Tehran Univ.
Ahmadian, Alireza — Tehran Univ. of Medical Sciences
Soltanian Zadeh, Hamid — Univ. of Tehran
Zarei, Mojtaba — Univ. of Oxford
Boroomand, Ameneh — Medical Sciences/Univ. of Tehran

15:15-15:30 ThC03.4

Methodology for MR Diffusion Tensor Imaging of the Cat Spinal Cord, pp. 323-326.

Cohen-Adad, Julien — Univ. of Montreal - INSERM
Benali, Habib — INSERM - Univ. Pierre et Marie Curie
Rossignol, Serge — Univ. of Montreal

15:30-15:45 ThC03.5

In Vivo Study of Cross-Sectional Skeletal Muscle Fiber Asymmetry with Diffusion-Weighted MRI, pp. 327-330.

Karampinos, Dimitrios — Univ. of Illinois at Urbana-Champaign
King, Kevin — GE Healthcare
Sutton, Brad — Univ. of Illinois at Urbana-Champaign
Georgiadis, John — Univ. of Illinois at Urbana-Champaign

ThC04 — Bellecour 3

Cardiovascular Ultrasound Imaging (Oral Session)

Co-Chair: Shung, K. Kirk — Univ. of Southern California

14:30-14:45 ThC04.1

Classification of Contrast Ultrasound Images Using Autoregressive Model Coupled to Gaussian Mixture ModelModel, pp. 331-334.

Ghazal, Bilal — Claude Bernard Univ. & Balamand Univ.
Khachab, Maha — Balamand Univ.
Friboulet, Denis — INSA Univ.
Mokbel, Chafic — Balamand Univ.
Cachard, Christian — Univ. Lyon 1

14:45-15:00 ThC04.2

Accurate and Automatic Carotid Plaque Characterization in Contrast Enhanced 2-D Ultrasound Images, pp. 335-338.

Molinari, Filippo — Pol. di Torino
LIBONI, WILLIAM — GRADENIGO HOSPITAL
Pavanelli, Enrica — Presidio Sanitario Gradenigo
Giustetto, Pierangela — Presidio Sanitario Gradenigo
Badalamenti, Sergio — GRADENIGO HOSPITAL
Suri, Jasjit S — Eigen LLC

15:00-15:15 ThC04.3

Validation of a New 3D-US Imaging Robotic System to Detect and Quantify Lower Limb Arterial Stenoses, pp. 339-342.

Janvier, Marie-Ange — Lab. of Biorheology and Medical Ultrasonics
Destrempes, François — Lab. of Biorheology and Medical Ultrasonics, Univ. of
Soulez, Gilles — Univ. de Montreal
Cloutier, Guy — Lab. of Biorheology and Medical Ultrasonics

15:15-15:30 ThC04.4

Cardiac Phase Extraction in IVUS Sequences Using 1-D Gabor Filters, pp. 343-346.

Barajas Zamora, Joel — Autonomous Univ. of Barcelona
Caballero Espinosa, Karla Lizbeth — Autonomous Univ. of Barcelona
Radeva, Petia — Autonomous Univ. of Barcelona

15:30-15:45 ThC04.5

An Original Methodology for Quantitative Assessment of Perfusion in Small Animal Studies Using Contrast-Enhanced Ultrasound, pp. 347-350.

Mulé, Sebastien — INSERM
De Cesare, Alain — INSERM
FROUIN, Frederique — INSERM
Lucidarme, Olivier — CHU Pitié-Salpętričre
Herment, Alain — INSERM

15:45-16:00 ThC04.6

Development of Recognition Software of Heart to Find the Standard Cross Section on Echocardiography, pp. 351-354.

Masuda, Kohji — Tokyo Univ. A&T
Matsuura, Hirotaka — Tokyo Univ. A&T
Imai, Takao — Tokyo Univ. A&T
Inoue, Hiroto — Tokyo Univ. A&T

ThC05 Tęte d'Or Lounge

Sensor Based Systems for Monitoring I (Oral Session)

Chair: Zhang, Yuan-Ting — The Chinese Univ. of Hong Kong

14:30-14:45 ThC05.1

A Finite Element Analysis of Local Oscillometric Blood Pressure Measurements, pp. 355-358.

Shaltis, Phillip — MIT
Reisner, Andrew — Massachusetts General Hospital
Asada, Harry — MIT

14:45-15:00 ThC05.2

Measurement of Biomedical Signals from Helmet Based System, pp. 359-362.

Kim, Yun Seong — Seoul National Univ.
Choi, Jong Min — Seoul National Univ.
Kim, Jung Soo — Seoul National Univ.
Lee, Haet Bit — Seoul National Univ.
Baek, Hyun Jae — Seoul National Univ.
Ryu, Myung Suk — ABRC
Son, Ryang Hee — Yun Sei Univ.
Park, Kwang S. — Seoul National Univ.

15:00-15:15 ThC05.3

Development of HIHM (Home Integrated Health Monitor)for Ubiquitous Home Healthcare, pp. 363-365.

Kim, Jung Soo — Seoul National Univ.
Beom Oh, Kim — Seoul National Univ.
Park, Kwang S. — Seoul National Univ.

15:15-15:30 ThC05.4

Cardiopulmonary Signal Sensing from Subject Wearing Body Armor, pp. 366-369.

Park, Byung-Kwon — Univ. of Hawaii at Manoa
Lubecke, Victor — Univ. of Hawaii Manoa
Boric-Lubecke, Olga — Univ. of Hawaii Manoa
Host-Madsen, Anders — Univ. of Hawaii

15:30-15:45 ThC05.5

Adaptive Hydrostatic Blood Pressure Calibration: Development of a Wearable, Autonomous Pulse Wave Velocity Blood Pressure Monitor, pp. 370-373.

McCombie, Devin — Massachusetts Inst. of Tech.
Shaltis, Phillip — MIT
Reisner, Andrew — Massachusetts General Hospital
Asada, Harry — MIT

15:45-16:00 ThC05.6

Non-Contact Measurement Method of Respiratory Movement under Pedal Stroke Motion, pp. 374-377.

Aoki, Hirooki — Tokyo Univ. of Science
ICHIMURA, Shiro — Tokyo Univ. of Science
KIYOOKA, Satoru — Tokyo Univ. of Science
Koshiji, Kohji — Tokyo Univ. of Science

16:00-16:15 ThC05.7

Wireless Inertial Sensors for Monitoring Animal Behavior, pp. 378-381.

Venkatraman, Subramaniam — Univ. of California, Berkeley
Long, John D. — Univ. of California, Berkeley
Pister, Kristofer S. J. — Univ. of California, Berkeley
Carmena, Jose M. — Univ. of California, Berkeley

ThC06 Tęte d'Or 2

Ontologies and Vocabularies for Bioinformatics (Oral Session)

Chair: Nielsen, Poul — Univ. of Auckland

14:30-14:45 ThC06.1

A Generic Representation Format of Physiological Experimental Protocols for Computer Simulation Using Ontology, pp. 382-385.

Shimayoshi, Takao — ASTEM Res. Inst. of Kyoto
Amano, Akira — Kyoto Univ.
Matsuda, Tetsuya — Kyoto Univ.

14:45-15:00 ThC06.2

Ontology of the Musculo-Skeletal System of the Lower Limbs, pp. 386-389.

DAO, Tien-Tuan — Univ. de Tech. de Compičgne
HO BA THO, Marie-Christine — Univ. de Tech. de Compičgne
MARIN, Frédéric — Univ. de Tech. de Compičgne

15:00-15:15 ThC06.3

Normalization of Gene/Protein Names in Biological Literatures Using Vector-Space Model, pp. 390-393.

Lim, Joon-Ho — Electronics and Telecommunications Res. Inst.
Jang, Hyunchul — Electronics and Telecommunications Res. Inst.
Lim, Jaesoo — Electronics and Telecommunications Res. Inst.
Park, Soo-Jun — Electr & Telecomm Res. Inst.

15:15-15:30 ThC06.4

A Web-Enabled Database of Human Gene Expression Controlled Annotations for Gene List Functional Evaluation, pp. 394-397.

Ceresa, Mario — Pol. di Milano
Masseroli, Marco — Pol. di Milano
Campi, Alessandro — Pol. di Milano

15:30-15:45 ThC06.5

A Semantic Inheritance/Inverse-Inheritance Mechanism for Systematic Bio-Ontology Construction, pp. 398-401.

Kim, Ki-Heon — Chonbuk National Univ.
Yang, Jaedong — Chonbuk National Univ.
Choi, Jaehun — Electronics and Telecommunications Res. Inst.
Yang, Kyung-ah — Chonbuk National Univ.
Ha, Young-Guk — Electronics and Telecommunications Res. Inst.

15:45-16:00 ThC06.6

Field Markup Language: Biological Field Representation in XML, pp. 402-405.

Chang, David — Univ. of New South Wales
Dokos, Socrates — Univ. of New South Wales
Lovell, Nigel H — Univ. of New South Wales

ThC07 Bellecour 2

Cardiac Arrhythmias (Oral Session)

Chair: MacLeod, Rob — Univ. of Utah
Co-Chair: Wilders, Ronald — Acad. Medical Center, Univ. of Amsterdam

14:30-14:45 ThC07.1

Arrhythmogenesis Research: A Perspective from Computational Electrophysiology Viewpoint, pp. 406-409.

Trayanova, Natalia — Johns Hopkins Univ.
Plank, Gernot — Medical Univ. of Graz

15:00-15:15 ThC07.3

Susceptibility to Ventricular Arrhythmias in Aged Hearts, pp. 410-414.

Rossi, Stefano — Univ. degli Studi
Baruffi, Silvana — Univ. degli Studi
Bertuzzi, Andrea — Univ. degli Studi
Mastorci, Francesca — Univ. degli Studi
Sgoifo, Andrea — Univ. degli Studi
Musso, Ezio — Univ. degli Studi
Corradi, Domenico — Univ. degli Studi
Maestri, Roberta — Univ. degli Studi
FENICI, Riccardo — Catholic Univ. of Sacred Haert
BRISINDA, Donatella — Catholic Univ. of Sacred Haert
Macchi, Emilio — Univ. degli Studi

15:15-15:30 ThC07.4

Oblique Propagation of Activation Allows the Detection of Uncoupling Microstructures from Cardiac Near Field Behavior, pp. 415-418.

Hofer, Ernst — Medical Univ. Graz
Wiener, Thomas — Medical Univ. of Graz
Prassl, Anton J. — Medical Univ. of Graz
Thurner, Thomas — Graz Univ. of Tech.
Plank, Gernot — Medical Univ. of Graz

15:30-15:45 ThC07.5

Behaviour of the Purkinje System During Defibrillation-Strength Shocks, pp. 419-422.

Boyle, Patrick Michael — Univ. of Calgary
Deo, Makarand — Univ. of Calgary
Vigmond, Edward — Univ. of Calgary

15:45-16:00 ThC07.6

Bayesian Analysis of Fiber Impedance Measurements, pp. 423-429.

Barr, Roger — Duke Univ.
Nolte, Loren — Duke Univ.
Pollard, Andrew E — Univ. of Alabama at Birmingham

ThC08 Gratte Ciel Lounge

Neural Recording Systems and Instrumentation I (Oral Session)

Chair: Butera, Robert — Georgia Inst. of Tech.

14:30-14:45 ThC08.1

The Effect of Residual Electrode Resistance and Sampling Delay on Transient Instability in the Dynamic Clamp System, pp. 430-433.

Preyer, Amanda — Georgia Inst. of Tech.
Butera, Robert — Georgia Inst. of Tech.

14:45-15:00 ThC08.2

On the Noise Performance of Pt-Electrodes, pp. 434-436.

Liu, Xiao — Univ. Coll. London
Demosthenous, Andreas — Univ. Coll. London
Donaldson, Nicholas de Neufville — Univ. Coll. London

15:00-15:15 ThC08.3

A Single-Chip, 100-Channel, Neural-Signal Acquisition, Processing, and Telemetry Device, pp. 437-440.

Farshchi, Shahin — Univ. of California, Los Angeles
Dejan, Markovic — UCLA
Pamarti, Sudhakar — UCLA
Razavi, Behzad — UCLA
Judy, Jack — UCLA

15:15-15:30 ThC08.4

A Compact Multichannel System for Acquisition and Processing of Neural Signals, pp. 441-444.

Bonfanti, Andrea — Pol. di Milano - IU.NET
Zambra, Guido — Pol. di Milano
Borghi, Tommaso — Pol. di Milano - IU.NET
Gusmeroli, Riccardo — Pol. di Milano - IU.NET
S. Spinelli, Alessandro — Pol. di Milano - IU.NET
Baranauskas, Gytis — Pol. di Milano

15:30-15:45 ThC08.5

A Brain Implantable Microsystem with Hybrid RF/IR Telemetry for Advanced Neuroengineering Applications, pp. 445-448.

Song, Yoon-Kyu — Brown Univ.
Patterson, William — Brown Univ.
Bull, Christopher — Brown Univ.
Borton, David — Brown Univ.
Li, Yanqiu — Brown Univ.
Nurmikko, Arto — Brown Univ.
Simeral, John — Brown Univ.
Donoghue, John — Brown Univ.

15:45-16:00 ThC08.6

Non Linear Methods Estimating Neural Network Behavior on Micro-Electrode Array Technology, pp. 449-452.

Maffezzoli, Andrea — Pol. di Milano
Signorini, Maria G. — Pol. di Milano
Gullo, Francesca — Univ. degli Studi di Milano-Bicocca
Wanke, Enzo — Univ. degli Studi di Milano-Bicocca

ThC09 Gratte Ciel 3

Computer-Assisted Surgery (Oral Session)

Chair: Riviere, Cameron — Carnegie Mellon Univ.
Co-Chair: Linte, Cristian A. — Robarts Res. Inst. - Univ. of Western Ontario

14:30-14:45 ThC09.1

Paradigms and Experimental Set-Up for the Determination of the Acceptable Delay in Telesurgery, pp. 453-456.

PEREZ, Manuela — IADI, UHP-Inserm ERI 13 and Digestive Department of CGU
QUIAIOS, Frederic — Ensem Nancy
Andrivon, Pierre — Ensem Nancy
HUSSON, Damien — IADI, UHP-Inserm ERI 13
DUFAUT, Michel — Ensem Nancy
FELBLINGER, Jacques — IADI, UHP-Inserm ERI 13
HUBERT, Jacques — IADI, UHP-Inserm ERI 13 and Urology Department

14:45-15:00 ThC09.2

Enhancing Perception in Minimally Invasive Robotic Surgery through Self-Calibration of Surgical Instruments, pp. 457-460.

Navarro, Agustin — Tech. Univ. of Catalonia (UPC)
Hernansanz, Albert — Tech. Univ. of Catalonia
Villarraga Hurtado, Edgar Alberto — Univ. Pol. de Cataluña
giralt, xavier — Tech. Univ. of Catalonia
Aranda, Joan — Tech. Univ. of Catalonia

15:00-15:15 ThC09.3

'Smart' Needle for Percutaneous Surgery: Influential Factor Investigation, pp. 461-464.

Yan, Kaiguo — Thomas Jefferson Univ.
Podder, Tarun — Thomas Jefferson Univ.
Ng, Wan-Sing — Nanyang Tech. Univ.
Yu, Yan — Univ. of Rochester Medical Center

15:15-15:30 ThC09.4

MRI-Compatible Micromanipulator-Design and Implementation and MRI-Compatibility Tests, pp. 465-468.

koseki, yoshihiko — AIST
Tanikawa, Tamio — Natl Inst. of Adv Industrial Science
Chinzei, Kiyoyuki — National Inst. of Advanced Industrial Science and Tech.

15:30-15:45 ThC09.5

Developing an Intraoperative Methodology Using the Finite Element Method and the Extended Kalman Filter to Identify the Material Parameters of an Organ Model, pp. 469-474.

Hoshi, Takeharu — Waseda Univ.
Kobayashi, Yo — Waseda Univ.
Kawamura, Kazuya — Waseda Univ.
Fujie, Masakatsu G. — Waseda Univ.

15:45-16:00 ThC09.6

On Enhancing Planning and Navigation of Beating-Heart Mitral Valve Surgery Using Pre-Operative Cardiac Models, pp. 475-478.

Linte, Cristian A. — Robarts Res. Inst. - Univ. of Western Ontario
Wierzbicki, Marcin — Robarts Res. Inst.
Moore, John — Robarts Res. Inst.
Guiraudon, Gerard — Univ. of Western Ontario
Jones, Douglas — Univ. of Western Ontario
Peters, Terry — Robarts Res. Inst.

16:00-16:15 ThC09.7

Computation and Validation of Intra-Operative Camera Uncertainty, pp. 479-482.

Simpson, Amber Lea — Queen's Univ.
Ma, Burton — Kingston General Hospital
Chen, Elvis — Queen's Univ.
Ellis, Randy — Harvard Medical School
Stewart, James — Queen's Univ.

ThC10 — Rhône 1

Therapeutic Devices I (Oral Session)

14:30-14:45 ThC10.1

Wearable Accelerometer System for Measuring the Temporal Parameters of Gait, pp. 483-486.

Lee, Jung-Ah — Yonsei Univ.
Cho, Sang-Hyun — Yonsei Univ.
Lee, Jeong-Whan — Konkuk Univ.
Lee, Kang-Hwi — Konkuk Univ.
Yang, Heui-Kyung — Chungju Univ.

14:45-15:00 ThC10.2

An Improved Quasi-Static Finite-Difference Scheme for Induced Field Evaluation in MRI Based on the Biconjugate Gradient Method, pp. 487-490.

Wang, Hua — Univ. of Queensland
Liu, Feng — The Univ. of Queensland
Trakic, Adnan — The Univ. of Queensland
Xia, Ling — Zhejiang Univ.
Crozier, Stuart — The Univ. of Queensland

15:00-15:15 ThC10.3

Effects of Different Insertion Methods on Reducing Needle Deflection, pp. 491-494.

Abolhassani, Niki — Univ. of Western Ontario
Patel, Rajni — London Health Sciences Centre
Ayazi, Farzam — Lawson Health Res. Inst.

15:15-15:30 ThC10.4

Robust Closed-Loop Control of the Inspired Fraction of Oxygen for the Online Assessment of Recruitment Maneuvers, pp. 495-498.

Luepschen, Henning — Helmholtz-Inst. RWTH Aachen Univ.
Zhu, Ling — RWTH Aachen Univ.
Leonhardt, Steffen — RWTH Aachen Univ.

15:30-15:45 ThC10.5

Design of a Magnetic Localisation System for In-Vivo Endovascular Interventions, pp. 499-503.

Placidi, Giuseppe — Univ. of L'Aquila - ITALY
Franchi, Danilo — Univ. of L'Aquila
Gallo, Pasquale — Univ. of L'Aquila - ITALY
Sotgiu, Antonello — Univ. of L'Aquila - ITALY

15:45-16:00 ThC10.6

A Fast Parallel Imaging Rotary Phased Array Head Coil with Improved Sensitivity Profile Deep in the Center of the Human Brain, pp. 504-507.

Weber, Ewald — The Univ. of Queensland
Li, Bing Keong — The Univ. of Queensland
Liu, Feng — The Univ. of Queensland
Crozier, Stuart — The Univ. of Queensland

16:00-16:15 ThC10.7

Description, Specifications, and ASIC Configurations of MEMOPATCH, a Transdermal Pulse Generator Medical Device to Promote Patient Adherence to Medication Regimens, pp. 508-511.

De Geest, Wim — TheraSolve
De Geest, Jan — TheraSolve
De Geest, Sabina — Univ. of Basel
Abraham, Ivo — Matrix45

ThC11 Tęte d'Or 1

Ambient Intelligent Microsystems: Contribution of the HEALTHY AIMS Project (Minisymposium)

Chair: Hodgins, Diana — European Tech. for Business (ETB) Ltd
Organizer: Hodgins, Diana — European Tech. for Business (ETB) Ltd

14:30-14:45 ThC11.1

Mediplus Ltd - Development of Novel Sphincter Sensors for Use in Gastroenterology and Urology Diagnostic Applications (I), pp. 512-512.

Urie, James — Mediplus

14:45-15:00 ThC11.2

STIMuGRIP®; a New Hand Control Implant (I), pp. 513-513.

Spensley, John — Finetech Medical Ltd

15:00-15:15 ThC11.3

Telemetric Implantable Pressure Sensor for Short and Long-Term Monitoring of Intracranial Pressure (I), pp. 514-514.

Frischholz, Manfred — Campus Micro Tech. GmbH

15:15-15:30 ThC11.4

Technology Developments for Next Generation Cochlear Implants (I), pp. 515-518.

Corless, Anthony Robert — Univ. of Newcastle
Volckaerts, Bart — Cochlear
Mercanzini, Andre — EPFL
Silmon, Angela — Newcastle Univ.
Bertsch, Arnaud — EPFL
Van Himbeeck, Carl M N A — Cochlear
Wasikiewicz, Jaroslaw — Queen Mary Univ. of London
Vanden Bulcke, Mathieu — IMEC
Vadgama, Pankaj — Queen Mary Univ. of London
Renaud, Philippe — EPFL

15:30-15:45 ThC11.5

Software Tools for Accelerometer-Based Systems (I), pp. 519-519.

Kenney, Laurence — Univ. of Salford
Thies, Sibylle — Univ. of Salford
Tresadern, Phil — Univ. of Salford
Howard, David — Univ. of Salford
Goulermas, John Yannis — Univ. of Liverpool
Preece, Stephen — Univ. of Salford

ThC12 Rhône 2

Student Paper Competition II (Oral Session)

Chair: Azpiroz-leehan, Joaquin — Univ. Autonoma Metropolitana

14:30-14:45 ThC12.1

*Magnetoencephalogram Blind Source Separation and Component Selection Procedure to Improve the Diagnosis of Alzheimer's Disease Patients**.

Escudero, Javier — Univ. of Valladolid
Hornero, Roberto — Univ. of Valladolid
Abásolo, Daniel — Univ. of Valladolid
Fernandez, Alberto — Univ. Complutense de Madrid
Poza, Jesús — Univ. de Valladolid

14:45-15:00 ThC12.2

*A Dual Band Wireless Power and FSK Data Telemetry for Biomedical Implants**.

Jung, Louis Hyunsuk — Univ. of New South Wales
Byrnes-Preston, Phil J. — The Univ. of New South Wales
Hessler, Roland — Univ. of New South Wales
Lehmann, Torsten — Univ. of New South Wales
Suaning, Gregg — The Univ. of Newcastle
Lovell, Nigel H — Univ. of New South Wales

15:00-15:15 ThC12.3

*Powered Ankle-Foot Prosthesis for the Improvement of Amputee Ambulation**.

Au, Samuel — MIT
Herr, Hugh — MIT
Weber, Jeff — MIT Biomechatronics Lab.
Martinez-Villalpando, Ernesto Carlos — Massachusetts Inst. of Tech.

15:15-15:30 ThC12.4

*A Planar 3DOF Robotic Exoskeleton for Rehabilitation and Assessment**.

Ball, Stephen Joseph — Queen's Univ.
Brown, Ian Edward — Queen's Univ.
Scott, Stephen H. — Queen's Univ.

15:30-15:45 ThC12.5

*High-Resolution Diffusion MRI**.

Haldar, Justin — Univ. of Illinois at Urbana-Champaign
Liang, Zhi-Pei — Univ. of Illinois, Urbana-Champaign

15:45-16:00 ThC12.6

*An Efficient Algorithm for Current Source Localization with Tetrodes**.

Lee, Chang Won — Univ. of California, Irvine
Dang, Hieu — Univ. of California, Irvine
Nenadic, Zoran — UC Irvine

ThC13 Roseraie 1,2

Emerging Technologies Including Emerging Imaging Technologies (Invited Session)

Chair: Li, Xingde — Univ. of Washington
Organizer: Li, Xingde — Univ. of Washington

14:30-14:45 ThC13.1
Optical Imaging in Biological Tissue: Taking Advantage of the Light Coherence Properties (I), pp. 520-520.
BOCCARA, ALBERT CLAUDE — ESPCI CNRS

14:45-15:00 ThC13.2
Low-Coherence Enhanced Backscattering and Its Applications (I), pp. 521-523.
Backman, Vadim — Northwestern Univ.

15:00-15:15 ThC13.3
Multifunctional Quantum Dots for Cellular and Molecular Imaging (I), pp. 524-525.
Gao, Xiaohu — Univ. of Washington

15:15-15:30 ThC13.4
From Bench-Top Small Animal Diffuse Optical Tomography towards Clinical Imaging (I), pp. 526-529.
da silva, anabela — CEA-LETI, MINATEC
dinten, jean-marc — CEA-LETI, MINATEC
coll, jean-luc — INSERM U578
rizo, philippe — CEA-LETI, MINATEC

15:30-15:45 ThC13.5
Optical Coherence Tomography – High Resolution Imaging of Structure and Function (I), pp. 530-532.
Leitgeb, Rainer A. — Ec. Pol. Federale de Lausanne

ThP2A1 Forum 5&6

Signal Processing and Physiological System Modeling IX (Poster Session)

16:30-17:30 ThP2A1.1
Shoulder Motion Analysis Using Simultaneous Skin Shape Registration, pp. 533-536.
Schwartz, Cédric — ENST Bretagne
Lempereur, Mathieu — INSERM U650
Burdin, Valérie — Ec. Nationale Supérieure des Télécommunications
Jacq, Jean-José — CHU Morvan
Rémy-Néris, Olivier — CHU Morvan

16:30-17:30 ThP2A1.2
Nonlinear Modeling of Cerebral State Index in Dogs, pp. 537-540.
Brás, Susana — Faculdade de Ciencias da Univ. do Porto
Bressan, Nadja — Faculdade de Ciencias da Univ. do Porto
Ribeiro, Lénio — Hospital Veterinário do Porto
Ferreira, David A — Univ. de Trás-os-Montes e Alto Douro
Antunes, Luis — Univ. de Trás-os-Montes e Alto Douro
Nunes, Catarina S — Faculdade de Ciencias da Univ. do Porto

16:30-17:30 ThP2A1.3
An Algorithm for QRS Onset and Offset Detection in Single Lead Electrocardiogram Records, pp. 541-544.
ILLANES MANRIQUEZ, Alfredo — INRIA
ZHANG, Qinghua — INRIA

16:30-17:30 ThP2A1.4
Providing Statistical Measures of Reliability for Body Core Temperature Predictions, pp. 545-548.
Gribok, Andrei — U.S. Army Medical Res. and Materiel Command
Buller, Mark — U.S. Army Res. Inst. of Environmental Medicine
Hoyt, Reed — US Army Res. Inst. of Environmental Medicine
Reifman, Jaques — U.S. Army Medical Res. and Materiel Command

16:30-17:30 ThP2A1.5
Theoretical Comparison between the Model-Based and Amplitude-Based Compliance Estimation Techniques, pp. 549-552.
Talts, Jaak — Univ. of Tartu
Raamat, Rein — Univ. of Tartu
Jagomagi, Kersti — Univ. of Tartu
Kivastik, Jana — Univ. of Tartu

16:30-17:30 ThP2A1.6
Automatic Detection of Burst Suppression, pp. 553-556.
Wang, Yunhua — Stellate System Inc.
Agarwal, Rajeev — Concordia Univ.

16:30-17:30 ThP2A1.7
An Approach to the Assessment of Diabetic Neuropathy Based on Dynamic Pupillometry, pp. 557-560.
Ferrari, Giselle — Federal Univ. of Tech.
marques, jefferson — Univ. of sheffield
Gandhi, Rajiv — Univ. of Sheffield
emery, celia — Univ. of Sheffield
tesfaye, solomon — Univ. of Sheffield
heller, simon — Univ. of Sheffield
Schneider, Fabio Kurt — Federal Tech. Univ. of Parana
Gamba, Humberto — Federal Univ. of Tech.

16:30-17:30 ThP2A1.8
Signal Conditioning with Almost No Multiplications Via Filter Sharpening, pp. 561-565.
Holland, Alex — Welch Allyn, Oregon Health Sciences Univ.

16:30-17:30 ThP2A1.9

Abdominal Signals: Denoising by Application of the Event Synchronuous Canceller, pp. 566-569.

Taralunga, Dragos-Daniel — Pol. Univ. of Bucharest
Wolf, Werner — Univ. AF Munich
Strungaru, Rodica — Pol. Univ. of Bucharest
Ungureanu, Mihaela — Pol. Univ. of Bucharest

16:30-17:30 ThP2A1.10

In Vivo Determination of the Frequency Response of the Tooth Root Canal Impedance versus Distance from the Apical Foramen, pp. 570-573.

rambo, marcos vinicio haas — Federal Univ. of Tech. - Parana (UTFPR)
Gamba, Humberto — Federal Univ. of Tech.
Ratzke, Alexandre — Federal Univ. of Tech.
Schneider, Fabio Kurt — Federal Tech. Univ. of Parana
Maia, Joaquim Miguel — Federal Univ. of Tech.
Ramos, Carlos Alberto Spiroelli — State Univ. of Londrina

16:30-17:30 ThP2A1.11

Wireless Biomedical Signal Monitoring Device on Wheelchair Using Noncontact Electro-Mechanical Film Sensor, pp. 574-577.

Kim, Jong Myoung — Chungbuk National Univ.
Hong, Joo Hyun — Chungbuk National Univ.
Cho, Myeong-Chan — Chungbuk National Univ.
Cha, Eun Jong — Chungbuk National Univ.
Lee, Tae Soo — Chungbuk National Univ.

16:30-17:30 ThP2A1.12

Heart Rate and Vasomotor Control During Exercise, pp. 578-581.

Vallais, Frédéric — Pol. di Milano
Baselli, Giuseppe — Pol. di Milano
Lucini, Daniela — Univ. degli studi di Milano
Pagani, Massimo — Univ. degli studi di Milano

16:30-17:30 ThP2A1.13

Berkeley-Madonna Implementation of Ikeda's Model, pp. 582-585.

Fontecave Jallon, Julie — Univ. Joseph Fourier
Baconnier, Pierre — Univ. Joseph Fourier

16:30-17:30 ThP2A1.14

Application of the Cell Averaging Constant False Alarm Rate Technique to Saccade Detection in Electro-Oculography, pp. 586-589.

Niemenlehto, P-H — Univ. of Tampere
Juhola, Martti — Univ. of Tampere

16:30-17:30 ThP2A1.15

Reducing the Effects of Electrocardiographic Artifacts on Electro-Oculography in Automatic Sleep Analysis, pp. 590-593.

Virkkala, Jussi — Finnish Inst. of Occupational Health
Hasan, Joel — Pirkanmaa Hospital District
Värri, Alpo — Tampere Univ. of Tech.
Huupponen, Eero — Pirkanmaa Hospital District
Himanen, Sari-Leena — irkanmaa Hospital District
Müller, Kiti — Finnish Inst. of Occupational Health, Helsinki

16:30-17:30 ThP2A1.16

Analysis of Neonatal EEG Signals Using Stockwell Transform, pp. 594-597.

POH, KOK-KIONG — Nanyang Tech. Univ.
Marziliano, Pina — Nanyang Tech. Univ.

16:30-17:30 ThP2A1.17

Combining WMN and FOCUSS Recursive Approach to Estimating the Current Density Distribution in the Brain, pp. 598-601.

ZOUCH, Wassim — LAMIH UNR CNRS 8530
TALEB-AHMED, abdelmalik — Univ. de Valenciennes et du Hainaut Cambresis
BEN HAMIDA, Ahmed — TIEM

16:30-17:30 ThP2A1.18

Separation of Spatially Localized Cortical Activities in the EEG: Model-Based Analysis and Optimization, pp. 602-607.

Sazonov, Andrei Vladimirovich — Eindhoven Univ. of Tech.
Bergmans, Johannes Wilhelmus Maria — Eindhoven Univ. of Tech.
Cluitmans, Pierre J.M. — Eindhoven Univ. of Tech.
Griep, Paul — Epilepsy Centre Kempenhaeghe
Arends, Johan B.A.M. — Epilepsy Center Kempenhaeghe
Boon, Paul — Univ. Hospital Ghent, Lab. for Clinical and Experimen

16:30-17:30 ThP2A1.19

Arterial Pulse System: Modern Methods for Traditional Indian Medicine, pp. 608-611.

Joshi, Aniruddha — IIT Bombay
Chandran, Sharat — IIT Bombay
jayaraman, Valadi — National Chemical Lab.
Kulkarni, Bhaskar — National Chemical Lab.

16:30-17:30 ThP2A1.20

Comparative Study of Non-Invasive Blood Pressure Measurement Methods in Elderly People, pp. 612-615.

Fabian, Vratislav — CTU in Prague
Janouch, Martin — CTU in Prague
Novakova, Lenka — CTU in Prague
Stepankova, Olga — CTU in Prague

16:30-17:30 ThP2A1.21

A New Modeling of the Overlapping T Wave for the Efficient Estimation of the P-R Intervals During Exercise and Recovery, pp. 616-619.

Cabasson, Aline — Univ. of Nice Sophia Antipolis
Meste, Olivier — UNSA-CNRS
Blain, Gregory — Uniuversity of Nice Sophia Antipolis
Bermon, Stephane — Inst. IM2S

16:30-17:30 ThP2A1.22

Evaluation of Performance of Several Established Pitch Detection Algorithms in Pathological Voices, pp. 620-623.

Jang, Seung Jin — Yonsei Univ.
Choi, Seong Hee — Univ. of Wisconsin-Madison
Kim, HyoMin — Yonsei Univ.
Choi, HongShik — Yongdong Severance Hospital
Yoon, Young-ro — Yonsei Univ.

16:30-17:30 ThP2A1.23

Design of Luenberger Observer for Glucose-Insulin Control Via Mathematica, pp. 624-627.

Kovacs, Levente — Budapest Univ. of Tech. & Ec.
Palancz, Bela — Budapest Univ. of Tech. and Ec.
Benyo, Zoltan — Budapest Univ. of Tech. & Ec.

16:30-17:30 ThP2A1.24

Tracer Kinetics of Forearm Endothelial Function: Comparison of an Empirical Method and a Quantitative Modeling Technique, pp. 628-631.

Zhao, Xueli — Montreal Heart Inst. & Concordia Univ.
Arsenault, Andre — Montreal Heart Inst.
Lavoie, Kim — Univ. of Quebec at Montreal (UQAM); Montreal Heart Inst.
meloche, bernard — Montreal Heart Inst.
Bacon, Simon L — Concordia Univ.

16:30-17:30 ThP2A1.25

Analysis of Physical Activities in Wu-Shu Training, pp. 632-635.

Lee, Sang-Bock — NamBu Univ.
Hong, Joo Hyun — Chungbuk National Univ.
Lee, Tae Soo — Chungbuk National Univ.

16:30-17:30 ThP2A1.26

Morphological Classification of ST Segment Using Reference STs Set, pp. 636-639.

Jeong, Guyoung — Chonbuk National Univ.
Keeho, Yu — Chonbuk National Univ.

16:30-17:30 ThP2A1.27

Action Potential Alternans in LQT3 Syndrome: A Simulation Study, pp. 640-643.

Alonso Atienza, Felipe — Univ. Rey Juan Carlos
Requena Carrion, Jesus — Univ. Rey Juan Carlos, Fuenlabrada, Madrid
Rojo Alvarez, Jose Luis — Univ. Rey Juan Carlos
Berenfeld, Omer — SUNY Upstate Medical Univ.
Jalife, Jose — Upstate Medical Univ. of New York

16:30-17:30 ThP2A1.28

Measuring Task-Related Changes in Heart Rate Variability, pp. 644-647.

Moses, Ziev — Tulane Univ.
Luecken, Linda — Arizona State Univ.
Eason, James — Washington and Lee Univ.

16:30-17:30 ThP2A1.29

Real-Time Continuous Estimation of Respiratory Frequency During Sleep Based on Heart Rate Time Series, pp. 648-651.

Yoshida, Yutaka — Aichi Inst. of Tech.
Yokoyama, Kiyoko — Nagoya City Univ.
Ishii, Naohiro — Aichi Inst. of Tech.

16:30-17:30 ThP2A1.30

Low Variance Adaptive Filter for Cancelling Motion Artifact in Wearable Photoplethysmogram Sensor Signals, pp. 652-655.

Wood, Levi Benjamin — Massachusetts Inst. of Tech.
Asada, Harry — MIT

16:30-17:30 ThP2A1.31

Heart Beat Detections in the EKG Recorded in Fmri and Its Analysis for the Affection in Noise and Heart Beat Rate Changes, pp. 656-658.

Oh, Sung Suk — Korea Advanced Inst. of Science and Tech.
Chung, Jun-Young — Gachon Univ. of Medicine and Science
Yoon, Hyo Woon — Gachon Univ. of Medicine and Science
Park, HyunWook — Korea Advanced Inst. of Science and Tech.

16:30-17:30 ThP2A1.32

The Concurrent Validity of the Body Center of Mass in Accelerometric Measurement, pp. 659-661.

Lee, Hyo Ki — Yonsei Univ.
Cho, Sung Pil — Yonsei Univ.
You, Joshua H. — Yonsei Univ.
Lee, Kyoung Joung — Yonsei Univ.

16:30-17:30 ThP2A1.33

Semi-Parametric Estimation in Magnetic Resonance Spectroscopy: Automation of the Disentanglement Procedure, pp. 662-665.

RABESON, Herald — Univ. de Lyon, Univ. Lyon 1, CNRS UMR 5220, ESCPE
ratiney, Helene — Univ. Claude Bernard LYON1, CPE
van Ormondt, Dirk — Delft Univ. of Tech.
Graveron-Demilly, Danielle — Univ. de Lyon, Univ. Claude Bernard LYON1, CPE

16:30-17:30 ThP2A1.34

The Linearity-Improvement Sigma-Delta Modulator for Single-Ended Biomedical Sensors, pp. 666-669.

Wang, Wei-Song — National Cheng Kung Univ. Department ofElectricalEngineeri
Hsu, Chen-Ming — National Cheng Kung Univ. Department ofElectricalEngineeri
Luo, Ching-Hsing — National Cheng Kung Univ.

16:30-17:30 ThP2A1.35

Optimal Selection of Interesting Intracerebral Epileptic Signals by Means of a Multi-Agents System, pp. 670-673.

Ndiaye, mamadou — Univ. rennes 1, iut saint malo
MONTOIS, JEAN JACQUES — Univ. rennes 1, IUT de Saint Malo
kinie, abel — Univ. rennes 1, iut de saint malo
Jacquelet, Yann — Univ. de Rennes 1, IUT de Saint Malo

16:30-17:30 ThP2A1.36

The Effect of Pathologic Cardiac Events on the Spectral Content of ECG, pp. 674-677.

DARWICH, Ayham — Univ. of Tech. of Compiegne
Fokapu, Odette — UTC

16:30-17:30 ThP2A1.37

Classification of Imagined Beats for Use in a Brain Computer Interface, pp. 678-681.

de Kruif, Bas — Radboud Univ. Nijmegen

16:30-17:30 ThP2A1.38

Wavelet-Independent Component Analysis to Remove Electrocardiography Contamination in Surface Electromyography, pp. 682-685.

Taelman, Joachim — Katholieke Univ. Leuven
Van Huffel, Sabine — Katholieke Univ. Leuven
Spaepen, Arthur — Katholieke Univ. Leuven

16:30-17:30 ThP2A1.39

Automated Detection of Paroxysmal Atrial Fibrillation from Inter-Heartbeat Intervals, pp. 686-689.

Shouldice, Redmond — BiancaMed
de Chazal, Philip — BiancaMed Ltd
Heneghan, Conor — Univ. Coll. Dublin

16:30-17:30 ThP2A1.40

T-Wave Alternans Analysis Improvement by Means of Curve Alignment Prior to Distance Calculation, pp. 690-693.

Cuesta-Frau, David — Pol. Univ. of Valencia

16:30-17:30 ThP2A1.41

Band-Specific Temporal Periodicity Enhancement for Cantonese Tone Perception with Noise-Excited Vocoder, pp. 694-697.

Yuan, Meng — The Chinese Univ. of Hong Kong
Lee, Tan — The Chinese Univ. of Hong Kong
Yuen, Kevin C. P. — The Chinese Univ. of Hong Kong
Soli, Sigfrid D. — House Ear Inst.
Tong, Michael C. F. — The Chinese Univ. of Hong Kong
van Hasselt, Charles A. — The Chinese Univ. of Hong Kong

16:30-17:30 ThP2A1.42

F-Wave Decomposition for Time of Arrival Profile Estimation, pp. 698-700.

Han, Zhixiu — Neurometrix Inc
Kong, Xuan — Neurometrix Inc

16:30-17:30 ThP2A1.43

Identifying Local Ultrametricity of EEG Time Series for Feature Extraction in a Brain-Computer Interface, pp. 701-704.

Coyle, Damien — Univ. of Ulster
McGinnity, T. Martin — Univ. of Ulster
Prasad, Girijesh — Univ. of Ulster

16:30-17:30 ThP2A1.44

Preliminary Study of Motion Artifact Rejection for NIBP Measurement in an Ambulance, pp. 705-708.

Koo, Yoonseo — Seoul National Univ.
Kang, Jaemin — Seoul National Univ.
Shin, Il Hyung — Seoul National Univ.
Jung, Min Yang — Seoul National Univ.
Suh, Gil Joon — Seoul National Univ. Hospital
Kim, Hee Chan — Seoul National Univ.

16:30-17:30 ThP2A1.45

Sleep-Stage and Event Dependency of Brain Asynchthrough Surface EEG, pp. 709-712.

Abeyratne, Udantha R — Univ. of Queensland
Swarnkar, Vinayak — Univ. of Queensland
Rathnayake, Suren Indrajith — Univ. of Queensland, Australia

16:30-17:30 ThP2A1.46

A Novel Scheme for Joint Multi-Channel ECG-Ultrasound Image Compression, pp. 713-716.

ZEYBEK, Emre Halil — LISSI EA 3956 - Univ. Paris XII
NAIT-ALI, Amine — Univ. Paris 12
Christian, OLIVIER — Univ. de Poitiers
Azza, Ouled Zaid — ISI

16:30-17:30 ThP2A1.47

The Effect of Frequency Band on Quantitative EEG Measures in Neonates with Hypoxic-Ischaemic Encephalopathy, pp. 717-721.

Doyle, Orla Margaret — Univ. Coll. Cork
Greene, Barry R. — Univ. Coll. Cork
Murray, Deirdre — Univ. Coll. Cork
Marnane, Liam — Univ. Coll. Cork
Lightbody, Gordon — Univ. Coll. Cork
Boylan, Geraldine — Univ. Coll. Cork

16:30-17:30 ThP2A1.48

A Preliminary Study on Driver's Stress Index Using a New Method Based on Differential Skin Temperature Measurement, pp. 722-725.

Yamakoshi, Takehiro — Kanazawa Univ.
Yamakoshi, Ken-ichi — Kanazawa Univ.
Tanaka, Shinobu — Kanazawa Univ.
Nogawa, Masamichi — Kanazawa Univ.
Sawada, Yukihiro — Sapporo Medical Univ.
Rolfe, Peter — Oxford BioHorizons Ltd
Shibata, Masahiro — Univ. of Tokyo
Hirose, Yukio — Kanazawa Univ.

ThP2B1 — Forum 5&6

Biomedical Image Reconstruction (CT) (Poster Session)

16:30-17:30 ThP2B1.1

Algebraic and Analytic Reconstruction Methods for Dynamic Tomography, pp. 726-730.

Desbat, Laurent — Grenoble Univ. (UJF)
Rit, Simon — Univ. Lumičre Lyon 2
Clackdoyle, Rolf — Univ. Jean Monnet
Mennessier, Catherine — CPE-Lyon
Promayon, Emmanuel — Univ. Joseph Fourier
Ntalampeki, Sofia — TIMC-IMAG, IN3S, MEDICAL FACULTY, GRENOBLE Univ.

16:30-17:30 ThP2B1.2

Simulation Checks in Ultrasonic Computed Tomography, pp. 731-734.

Zacal, Jiri — Brno Univ. of Tech.
Hemzal, Dusan — Masaryk Univ. Brno
Jan, Jiri — Brno Univ. of Tech.
Dedek, Libor — Brno Univ. of Tech.
Jirik, Radovan — Brno Univ. of Tech.
ruiter, nicole — Forschungszentrum Karlsruhe

16:30-17:30 ThP2B1.3

3D Motion Compensated Tomographic Reconstruction of Coronary Stents from X-Ray Rotational Sequence: An Experimental Study, pp. 735-738.

perrenot, beatrice — CREATIS-LRMN; General Electric Healthcare
Vaillant, Régis — General Electric Healthcare
Gavit, Laurence — General Electric Healthcare
Motoya, Hayase — Skirball Center for Cardiovascular Res. Cardiovascular Res.
Douek, Philippe — CREATIS-LRMN, Hospices Civils de Lyon
prost, remy — CREATIS-LRMN
finet, gerard — hospices civils lyon
PEYRIN, Francoise — UMR CNRS 5220; Inserm U630; INSA-Lyon; ESRF

16:30-17:30 ThP2B1.4

Penalized-Likelihood Region-Of-Interest CT Reconstruction by Local Object Supersampling, pp. 739-742.

Hamelin, Benoit — École Pol. de Montréal
Goussard, Yves — École Pol. de Montréal
Dussault, Jean-Pierre — Univ. de Sherbrooke

16:30-17:30 ThP2B1.5

The Benefit of a Kernel Estimate Based Forward Projection for Iterative Tomographic Reconstruction Techniques, pp. 743-746.

Chakchouk, Moez — Univ. de René Descartes
Sevestre-Ghalila, Sylvie — U2S, ENIT / MAP5 Univ. Paris Descartes
Graffigne, Christine — René Descartes Paris 5 Univ.

ThP2B2 — Forum 5&6

Biomedical Image Reconstruction (other Modalities) (Poster Session)

16:30-17:30 ThP2B2.1

In Vivo Three-Dimensional Reconstruction of the Cornea from Confocal Microscopy Images, pp. 747-750.

Scarpa, Fabio — Univ. of Padova
Fiorin, Diego — Univ. of Padova
Ruggeri, Alfredo — Univ. of Padova

16:30-17:30 ThP2B2.2

Magnetic Resonance Image Reconstruction Using Equation System Solving-Based Singularity Function Analysis, pp. 751-754.

Luo, Jianhua — Shanghai Jiaotong Univ.
ZHU, Yuemin — -

16:30-17:30 ThP2B2.3

A Comparison of Image Deconvolution Approaches Applied to the Detection of Endocytic Vesicles in Fluorescence Images of Neural Proteins, pp. 755-758.

Vega-Alvarado, Leticia — Univ. Nacional Autónoma de México
Elezgaray, Izaskun — Inst. François Magendie
Hémar, Agnes — Inst. François Magendie
Menard, Michel — Univ. de La Rochelle
Ranger, Christophe — Explora Nova
Corkidi, Gabriel — Univ. Nacional Autónoma de México

16:30-17:30 ThP2B2.4

On High Sensitivity Emission Imaging by Scattered Gamma Radiation, pp. 759-762.

DRIOL, Clémence — Univ. of Cergy-Pontoise
NGUYEN, Mai K. — Univ. of CERGY-PONTOISE
TRUONG, Tuong T. — Univ. of Cergy-Pontoise

16:30-17:30 ThP2B2.5

Carotid Plaque 3D Compound Imaging and Echo-Morphology Analysis: A Bayesian Approach, pp. 763-766.

Seabra, José Carlos — Inst. Superior Técnico, Lisboa
Sanches, João — Inst. Superior Técnico / Inst. de SistemaseRobótica
Pedro, Luis Mendes — Faculdade de Medicina de Lisboa
Fernandes e Fernandes, José — Faculdade de Medicina de Lisboa

16:30-17:30 ThP2B2.6

Model Reduction by Multiresolution Method Applied to Fluorescence Diffuse Optical Tomography, pp. 767-770.

Frassati, Anne — CEA-LETI, MINATEC
da silva, anabela — CEA-LETI, MINATEC
dinten, jean-marc — CEA-LETI, MINATEC
Georges, Didier — INPG

16:30-17:30 ThP2B2.7

Interest of the Steady State Free Precession (SSFP) Sequence for 3D Modeling of the Whole Fetus, pp. 771-774.

Anquez, Jeremie — ENST
Angelini, Elsa — Ec. Nat. Superieure des Telecom
Bloch, Isabelle — GET- Télécom Paris (ENST) - CNRS UMR 5141 LTCI
Merzoug, Valérie — St Vincent de Paul Hospital
Bellaiche-Millischer, Anne-Elodie — St Vincent de Paul Hospital
Adamsbaum, Catherine — St Vincent de Paul Hospital

ThP2B3 — Forum 5&6

Segmentation Village I: Variational Methods and Others (Poster Session)

16:30-17:30 ThP2B3.1

Segmentation of Squamous Epithelium from Ultra-Large Cervical Histological Virtual Slides, pp. 775-778.

Wang, Yinhai — Queen's Univ. Belfast
Crookes, Danny — Queen's Univ. Belfast

16:30-17:30 ThP2B3.2

Resolving the Initial Contour Problem of GVF Snake in the Sequential Images, pp. 779-782.

Seol, Yunhwan — Korea Univ.
Yu, Jaeseung — Korea Univ.
Kang, Teahoon — Korea Univ.
Choi, Kwanghee — Korea Univ.
Kim, Hochul — Korea Univ.
Kim, MinGi — Korea Univ.

16:30-17:30 ThP2B3.3

An Evaluation of a Combined Spline Based and Rate of Energy Dissipation Based Segmentation of Medical Blood Flow Images, pp. 783-786.

Pashaee, Ali — Amirkabir Univ. of Tech. (Tehran Pol.
Moosavi, M. Hossein — Amirkabir Univ. of Tech. (Tehran Pol.
Pashaee, Mohammad — Ardebil Univ. of Medical Sciences
Fatouraee, Nasser — Amirkabir Univ. of Tech.

16:30-17:30 ThP2B3.4

Analysis of Left Ventricular Surface Deformation During Isovolumic Contraction, pp. 787-790.

Yeo, Si Yong — Inst. of High Performance Computing
Zhong, Liang — National Heart Centre
Su, Yi — Inst. of High Performance Computing
tan, ru san — National heart center
Ghista, Dhanjoo — Nanyang Tech. Univ.

16:30-17:30 ThP2B3.5

Fast-Marching Contours for the Segmentation of Vessel Lumen in CTA Cross-Sections, pp. 791-794.

Baltaxe, Michael — Univ. de los Andes
Flórez Valencia, Leonardo — Univ. Javeriana
Magnin, Isabelle — INSA
ORKISZ, Maciej — Univ. Lyon 1, INSA-Lyon, CNRS UMR5220, INSERM U630
Hernández Hoyos, Marcela — Univ. de los Andes

16:30-17:30 ThP2B3.6

Airway Segmentation and Measurement in CT Images, pp. 795-799.

Cheng, Irene — Univ. of Pennsylvania
Nilufar, Sharmin — Univ. of Alberta
Flores-Mir, Carlos — Univ. of Alberta
Basu, Anup — Univ. of Alberta

16:30-17:30 ThP2B3.7

Medical Image Segmentation Using Feature-Based GVF Snake, pp. 800-803.

Ng, Hsiao Piau — National Univ. of Singapore / Agency for Science,Tech.
Foong, Kelvin Weng Chiong — National Univ. of Singapore
Ong, Sim Heng — National Univ. of Singapore
Goh, Poh Sun — National Univ. of Singapore
Nowinski, L. Wieslaw — Agency for Science, Tech. & Res.

16:30-17:30 ThP2B3.8

Modified Data Fidelity Speed in Anisotropic Diffusion, pp. 804-807.

JERBI, Taha — La Manouba Univ.
Burdin, Valérie — Ec. Nationale Supérieure des Télécommunications
GHORBEL, Faouzi — Univ. de la Manouba
Jacq, Jean-José — CHU Morvan

16:30-17:30 ThP2B3.9

An Improved Level Set Method for Automatically Volume Measure: Application in Tumor Tracking from MRI Images, pp. 808-811.

RUAN, Su — IUT de Troyes, Univ. de Reims
Li, Xiaobing — Dalian Univ. of Tech.
LEBONVALLET, Stéphane — IUT TROYES
Qiu, TianShuang — Dalian Univ. of Tech.

16:30-17:30 ThP2B3.10

Automated Cell Apoptosis Characterization Using Active Contours, pp. 812-815.

Doukas, Charalampos — Univ. of the Aegean
Maglogiannis, Ilias — Univ. of the Aegean

16:30-17:30 ThP2B3.11

Three Different Strategies for Real-Time Prostate Capsule Volume Computation from 3-D End-Fire Transrectal Ultrasound, pp. 816-818.

Barqawi, Albaha — Univ. of Colorado Hospital
Li, Lu — Univ. of Connecticut
Crawford, David — Univ. of Colorado
Fenster, Aaron — Robarts Res. Inst.
Werahera, Priya — Univ. of Colorado at Denver and Health Sciences Center
Kumar, Dinesh — Eigen LLC
Miller, Steve — Eigen LLC
Suri, Jasjit S — Eigen LLC

16:30-17:30 ThP2B3.12

Level Set-Based Core Segmentation of Mammographic Masses Facilitating Three Stage (Core, Periphery, Spiculation) Analysis, pp. 819-824.

Ball, John — Naval Surface Warfare Center Dahlgren
Bruce, Lori — Mississippi State Univ.

16:30-17:30 ThP2B3.13

A Contour Extraction Method Using Active Contour Model on Ultrasonic Images, pp. 825-828.

Oshiro, Masakuni — Waseda Univ.
Nishimura, Toshihiro — Waseda Univ.

16:30-17:30 ThP2B3.14

Computational Aspects of the EEG Forward Problem Solution for Real Head Model Using Finite Element Method, pp. 829-832.

Rytsar, Romana — Univ. of Geneva
Pun, Thierry — Univ. of Geneva

ThP2B4 — Forum 5&6
Image Registration II (Poster Session)

Chair: Boire, Jean-Yves — INSERM
Co-Chair: SARRY, Laurent — Faculté de Médecine, Univ. d'Auvergne

16:30-17:30 ThP2B4.1

Image-Fusion Operators for 3D Anatomical and Functional Analysis of the Brain, pp. 833-835.

Marquez, Jorge Alberto — UNAM-CCADET
Padilla Castañeda, Miguel Angel — Univ. Nacional Autonoma de Mexico
Gastélum Strozzi, Alfonso — CCADET-UNAM

16:30-17:30 ThP2B4.2

A Coarse-To-Fine Surface Registration Algorithm for Frameless Brain Surgery, pp. 836-839.

Lee, Jiann-Der — Chang Gung Univ.
Lan, Tzu-Yen — Chang Gung Univ.
Huang, Chung-Hsien — Chang Gung Univ.

16:30-17:30 ThP2B4.3

Artificial Immune Network for Automatic Point Correspondence in Medical Images, pp. 840-843.

DELIBASIS, KONSTANTINOS — Inst. OF COMMUNICATION & COMPUTER SYSTEMS
Asvestas, Pantelis — Inst. OF COMMUNICATION & COMPUTER SYSTEMS
MOURAVLIANSKY, NIKOLAOS — Inst. OF COMMUNICATION & COMPUTER SYSTEMS
Economopoulos, Theodoros — Inst. OF COMMUNICATION & COMPUTER SYSTEMS
MATSOPOULOS, GEORGE K — Inst. OF COMMUNICATION & COMPUTER SYSTEMS

16:30-17:30 ThP2B4.4

Computer-Aid Evaluation System for Parkinson's Disease Using Image Registration and Labeling, pp. 844-847.

Lee, Jiann-Der — Chang Gung Univ.
Chen, Cheng-Wei — Chang Gung Univ.
Huang, Chung-Hsien — Chang Gung Univ.

16:30-17:30 ThP2B4.5

Estimation of Intra-Operative Brain Shift Using a Tracked Laser Range Scanner, pp. 848-851.

Ding, Siyi — Vanderbilt Univ.
Miga, Michael — Vanderbilt Univ.
Reid, Thompson — Vanderbilt Univ. Medical Center
Dumpuri, Prashanth — Vanderbilt Univ.
Cao, Aize — Vanderbilt Univ.
Dawant, Benoit — Vanderbilt Univ.

16:30-17:30 ThP2B4.6

Model Based and Iconic Multimodal Registration to Merge Gated Cardiac PET, CT and MR Sequences, pp. 852-855.

Baty, Xavier — Univ. d'Angers
ROULLIER, Vincent — Univ. of Angers
Cavaro-Ménard, Christine — Univ. d'Angers
Le Jeune, Jean-Jacques — Centre Hospitalier Univ. d'Angers

16:30-17:30 ThP2B4.7

Non-Rigid Registration of the Liver in Consecutive CT Studies for Assessment of Tumor Response to Radiofrequency Ablation, pp. 856-859.

Niculescu, Gabriela — Rutgers Univ.
Foran, David J. — UMDNJ-Robert Wood Johnson Medical School and The Cancer Inst.
Nosher, John — Robert Wood Johnson Univ. Hospital

16:30-17:30 ThP2B4.8

2D/3D Registration of Multiple Bones, pp. 860-863.

Ma, Burton — Kingston General Hospital
Stewart, James — Queen's Univ.
Pichora, David — Kingston General Hospital
Ellis, Randy — Harvard Medical School
Abolmaesumi, Purang — Queen's Univ.

16:30-17:30 ThP2B4.9

Color Based Texture Classification of Hysteroscopy Images of the Endometrium, pp. 864-867.

Neofytou, Marios — Univ. of Cyprus
Tanos, Vasilios — Temp
Pattichis, Marios — Univ. of New Mexico,
Pattichis, Constantinos — Univ. of Cyprus
Kyriacou, Efthyvoulos — Univ. of Cyprus
Pavlopoulos, Sotiris — National Tech. Univ. of Athens

16:30-17:30 ThP2B4.10

A Comparison between the Surface-Based and Mutual-Information-Based Methods for Co-Registering SPECT and MR Images, pp. 868-871.

Liao, Yuan-Lin — National Cheng Kung Univ.
Sun, Yung-Nien — National Cheng Kung Univ.
Guo, Wan-Yuo — Taipei Veterans General Hospital
Chou, Yuan-Hwa — Taipei Veterans General Hospital
Hsieh, Jen-Chuen — Taipei Veterans General Hospital
Wu, Yu-Te — National Yang-Ming Univ.

16:30-17:30 ThP2B4.11

Framework for a Low-Cost Intra-Operative Image-Guided Neuronavigator Including Brain Shift Compensation, pp. 872-875.

Bucki, Marek — Univ. Joseph Fourier
Lobos, Claudio — Univ. Joseph Fourier
Payan, Yohan — Lab. TIMC-IMAG, UMR CNRS 5525

16:30-17:30 ThP2B4.12

Improvement in C-Arm Acquired DSA Image Quality Via Combined Effect of Inverse Consistent Motion Correction and Nonlinear Normalization, pp. 876-879.

Kumar, Dinesh — Eigen LLC
wei, liyang — Eigen LLC
Turlapati, Ram — Theda Clark Hospital
Suri, Jasjit S — Eigen LLC

16:30-17:30 ThP2B4.13

Virtual Slide Telepathology Systems with JPEG2000, pp. 880-883.

Garcia Ortiz, Juan Pablo — Univ. of Almeria
Gonzalez Ruiz, Vicente — Univ. of Almeria
Garcia, Inmaculada — Univ. of Almeria

16:30-17:30 ThP2B4.14

Regional Assessment of Left Ventricular Surface Shape from Magnetic Resonance Imaging, pp. 884-887.

Zhong, Liang — National Heart Centre
Yeo, Si Yong — Inst. of High Performance Computing
Su, Yi — Inst. of High Performance Computing
Le, Thu Thao — National Heart Centre
tan, ru san — National heart center
Ghista, Dhanjoo — Nanyang Tech. Univ.

ThP2B5 Forum 5&6

Retinal Image Analysis (Poster Session)

Chair: Ruggeri, Alfredo — Univ. of Padova

16:30-17:30 ThP2B5.1

Preliminary Study on the Association of Vessel Diameter Variation and Glaucoma (I), pp. 888-891.

VLACHOKOSTA, ALEXANDRA — National Tech. Univ. of Athens
Asvestas, Pantelis — Inst. OF COMMUNICATION & COMPUTER SYSTEMS
MATSOPOULOS, GEORGE K — Inst. OF COMMUNICATION & COMPUTER SYSTEMS
Uzunoglu, Nikolaos — National Tech. Univ. of Athens
ZEYEN, THIERRY — Univ. Hospital

16:30-17:30 ThP2B5.2

Improvement of a Retinal Blood Vessel Segmentation Method Using the Insight Segmentation and Registration Toolkit (ITK) (I), pp. 892-895.

Martinez-Perez, M. Elena — Inst. of Res. in Applied Mathematics and Systems,UNAM
Hughes, Alun D. — St. Mary's Hospital, Imperial Coll. London
Thom, Simon A. McG. — Imperial Coll. London
Parker, Kim H. — Imperial Coll. London

16:30-17:30 ThP2B5.3

3-D Retinal Surface Inference: Stereo or Monocular Fundus Camera? (I), pp. 896-899.

Martinello, Manuel — Univ. di Padova
Favaro, Paolo — Heriot-Watt
Muyo, Gonzalo — Heriot-Watt Univ.
Harvey, Andy — Heriot Watt Univ.
Grisan, Enrico — Univ. of Padova
Scarpa, Fabio — Univ. of Padova
Ruggeri, Alfredo — Univ. of Padova

16:30-17:30 ThP2B5.4

Segmentation of Optic Nerve Head Using Warping and RANSAC (I), pp. 900-903.

Kim, Sun Kwon — Graduate School, Seoul National Univ. Korea
Kong, Hyoun-Joong — Seoul National Univ.
Seo, Jong Mo — Dongguk Univ. Ilsan Hospital
Cho, Bum Joo — Seoul National Univ. School of Medicine
Park, Ki Ho — Seoul National Univ. School of Medicine
Hwang, Jeong Min — Seoul National Univ. School of Medicine
Kim, Dong Myung — Seoul National Univ. School of Medicine
Chung, Hum — Seoul National Univ. School of Medicine
Kim, Hee Chan — Seoul National Univ.

ThP2C1 Forum 5&6

Electrocardiology and Pacing (Poster Session)

16:30-17:30 ThP2C1.1

Single Cells Isolated from Human Sinoatrial Node: Action Potentials and Numerical Reconstruction of Pacemaker Current, pp. 904-907.

Verkerk, Arie O. — Acad. Medical Center, Univ. of Amsterdam
van Borren, Marcel M. G. J. — Acad. Medical Center, Univ. of Amsterdam
Peters, Ron J. G. — Acad. Medical Center, Univ. of Amsterdam
Broekhuis, Eli — Acad. Medical Center, Univ. of Amsterdam
Lam, Kayan — Acad. Medical Center, Univ. of Amsterdam
Coronel, Ruben — Acad. Medical Center, Univ. of Amsterdam
de Bakker, Jacques M. T. — Acad. Medical Center, Univ. of Amsterdam
Tan, Hanno L. — Acad. Medical Center, Univ. of Amsterdam
Wilders, Ronald — Acad. Medical Center, Univ. of Amsterdam

16:30-17:30 ThP2C1.2

Computational Model of Atrial Electrical Activation and Propagation, pp. 908-911.

Dokos, Socrates — Univ. of New South Wales
Cloherty, Shaun L — Univ. of New South Wales
Lovell, Nigel H — Univ. of New South Wales

16:30-17:30 ThP2C1.3

New Physiological Model of Serum Creatine Phosphokinase Activity in Acute Myocardial Infarction -- Estimation of the Total Creatine Phosphokinase Release, pp. 912-915.

Kitawaki, Tomoki — Okayama Univ. Graduate School
Oka, Hisao — Okayama Univ. Graduate School
Kusachi, Shozo — Okayama Univ. Graduate School
Himeno, Ryutaro — RIKEN

16:30-17:30 ThP2C1.4

Cardiac Output Measurement in Patients with an Implanted Pacemaker, pp. 916-918.

Vondra, Vlastimil — Czech Acad. of Scientific Inst.
Halamek, Josef — Inst. of Scientific Inst. Acad. of Sciencesofthe Cz
Viscor, Ivo — Inst. of Scientific Inst. Czech Acad. of Sciences
Jurak, Pavel — Inst. of Scientific Inst. Acad.
Novak, Miroslav — St. Anna's Univ. Hospital

16:30-17:30 ThP2C1.5

Dynamic QT/RR Coupling in Patients with Pacemakers, pp. 919-922.

Halamek, Josef — Inst. of Scientific Inst. Acad. ofSciencesofthe Cze
Jurak, Pavel — Inst. of Scientific Inst. Acad.
Villa, Marco — Univ. di Bergamo
Novak, Miroslav — St. Anna's Univ. Hospital
Vondra, Vlastimil — Inst. of Scientific Inst. AS CR
Soucek, Miroslav — St Anne's Univ. Hospital, Brno,
Frana, Petr — St Anne's Univ. Hospital, Brno,
Somers, Virend — Mayo Clinic
Kara, Tomas — St Anne's Univ. Hospital, Brno

16:30-17:30 ThP2C1.6

A Novel Method for Reducing Pain Sensation at Transesophageal Atrial Stimulation, pp. 923-926.

Anier, Andres — OÜ ELIKO Tehnoloogia Arenduskeskus
Kaik, Jüri — Tallinn Univ. of Tech.
Meigas, Kalju — Tallinn Univ. of Tech.

16:30-17:30 ThP2C1.7

Multistability As Intrinsic Property of a Single Cardiac Cell: A Simulation Study, pp. 927-930.

Surovyatkina, Elena — Space Res. Inst. of Russian Acad. of Science
Egorchenkov, Roman — Space Res. Inst. of Russian Acad. of Science
Ivanov, Guennady — Moscow Medical Acad.

16:30-17:30 ThP2C1.8

Contribution of the Left Anterior Myocardium to the Body Surface Potentials in Case of Apical Ectopic Beat, pp. 931-934.

Väisänen, Juho — Tampere Univ. of Tech.
Requena Carrion, Jesus — Univ. Rey Juan Carlos, Fuenlabrada, Madrid
Alonso Atienza, Felipe — Univ. Rey Juan Carlos
Rojo Alvarez, Jose Luis — Univ. Rey Juan Carlos
Malmivuo, Jaakko — Tampere Univ. of Tech.
hyttinen, jari — Tampere Univ. of Tech.

ThP2C2 Forum 5&6
Hemodynamics and PWV (Poster Session)

16:30-17:30 ThP2C2.1

A New Blood Pressure and Heart Rate Signal Analysis Technique to Assess Orthostatic Hypotension and Its Subtypes, pp. 935-938.

Deegan, Brian Michael Thomas — National Univ. of Ireland, Galway
O'Connor, Margaret — Mid-Western Regional Hospital, Limerick
Lyons, Declan — Mid-Western Regional Hospital, Limerick
ÓLaighin, Gearóid — National Univ. of Ireland, Galway

16:30-17:30 ThP2C2.2

Blood Pressure Dynamics in Hypertensive Subjects During Tilt Table, pp. 939-942.

Jurak, Pavel — Inst. of Scientific Inst. Acad.
Halamek, Josef — Inst. of Scientific Inst. Acad. ofSciencesofthe Cze
Plachy, Martin — St Anne's Univ. Hospital, Brno,
Frana, Petr — St Anne's Univ. Hospital, Brno,
Leinveber, Pavel — Mayo Clinic
Soucek, Miroslav — St Anne's Univ. Hospital, Brno,
Kara, Tomas — St Anne's Univ. Hospital, Brno

16:30-17:30 ThP2C2.3

A Computational Investigation on the Importance of Biomechanical Factors Related to Stent-Graft Models in the Thoracic Aorta, pp. 943-946.

Lam, Shang King — Univ. of Hong Kong
Fung, George S. K. — The Univ. of Hong Kong
Cheng, Stephen W.K. — Univ. of Hong Kong
Chow, K.W. — Univ. of Hong Kong

16:30-17:30 ThP2C2.4

A Parallel Image-Based Blood Flow Simulator, pp. 947-950.

Garbey, Marc — Univ. of Houston
Hadri, Bilel — Univ. of Houston
Karmonik, Christof — The Methodist Hospital Res. Inst.

16:30-17:30 ThP2C2.5

A Technique for the Computation of Lower Leg Muscle Volume from MRI Images in the Context of Venous Return, pp. 951-954.

ÓLaighin, Gearóid — National Univ. of Ireland, Galway
Broderick, Barry — National Univ. of Ireland, Galway
Clarke-Moloney, Mary — Mid-Western Regional Hospital
Wallis, Fintan — Mid-Western Regional Hospital
Grace, Pierce — Mid Western Regional Hospital

16:30-17:30 ThP2C2.6

Comparison of Cardiac Output Monitoring Methods for Detecting Central Hypovolemia Due to Lower Body Negative Pressure, pp. 955-958.

Reisner, Andrew — Massachusetts General Hospital
Xu, Da — Michigan State Univ.
Ryan, Kathy — US Army Inst. of Surgical Res.
Convertino, Victor — U.S. Army Inst. of Surgical Res.
Mukkamala, Ramakrishna — Michigan State Univ.

16:30-17:30 ThP2C2.7

Study on the Microcirculatory Blood Velocity of Acupoint Monitored by Laser Doppler Signal, pp. 959-962.

Hsin, Hsiu — Yuan Ze Univ.
Shih-Min, Huang — Yuan Ze Univ.
Wei-Chen, Hsu — Taipei City Hospital
Pin-Tsun, Chao — Acad. Sinica
Chia-Liang, Hsu — Yuan Ze Univ.
Ming-Yie, Jan — Acad. Sinica
Wei-Kung, Wang — Acad. Sinica
Yuh-Ying, Wang Lin — National Taiwan Normal Univ.

16:30-17:30 ThP2C2.8

Continuous Ejection Fraction Estimation by Model-Based Analysis of an Aortic Pressure Waveform: Comparison to Echocardiography, pp. 963-966.

Swamy, Gokul — Michigan State Univ.
Olivier, Bari — Michigan State Univ.
Kuiper, Jacob — Michigan State Univ.
Mukkamala, Ramakrishna — Michigan State Univ.

16:30-17:30 ThP2C2.9

Effect of Gender on Blood Flow Velocities and Blood Pressure: Role of Body Weight and Height, pp. 967-970.

Azran, Azhim — The Univ. of Tokushima
Akioka, Kohei — Univ. of Tokushima
Akutagawa, Masatake — The Univ. of Tokushima
Hirao, Yuji — Tokushima Pref. I.T.C.
Yoshizaki, Kazuo — The Univ. of Tokushima
Nomura, Masaharu — The Univ. of Tokushima
Tanaka, Hiroyuki — Naruto Univ. of Education
Yamaguchi, Hisao — Tokushima Bunri Univ.
obara, shigeru — Univ. of Tokushima
Kinouchi, Yohsuke — The Univ. of Tokushima

16:30-17:30 ThP2C2.10

Instantaneous versus Average Wave Speed Calculation in Large Mammals under Acute Hemorrhage, pp. 971-972.

Quinsac, Celine — The Univ. of Manchester
Heil, Matthias — Univ. of Manchester
Jackson, Alan — Univ. of Manchester
Dark, Paul — Univ. of Manchester

16:30-17:30 ThP2C2.11

The Variabilities of Blood Pressure and Pulse Arrival Time in Normotensive Young Subjects under Dynamic Conditions, pp. 973-974.

Wong, Mico Yee Man — The Chinese Univ. of Hong Kong
Zhang, Yuan-Ting — The Chinese Univ. of Hong Kong

16:30-17:30 ThP2C2.12

A Coronary Pulse Wave Velocity Measurement System, pp. 975-977.

Nam, Taewoo — Inje Univ.
Cho, Jongman — Inje Univ.
Choi, Junghyeon — Inje Univ.
Park, Junho — Inje Univ.
Cho, Wookhyun — Inje Univ. Seoul Paik hospital

16:30-17:30 ThP2C2.13

Doppler Ultrasound Measurements of Venous Return in the Popliteal Vein, pp. 978-981.

Breen, Paul — National Univ. of Ireland Galway
Galvin, Olivia — Mid Western Regional Hospital
Grace, Pierce — Mid Western Regional Hospital
ÓLaighin, Gearóid — National Univ. of Ireland, Galway

16:30-17:30 ThP2C2.14

Evaluation of Stationarity of Laser Doppler Signal in the Pulse-Based Synchronized-Averaging Analysis, pp. 982-984.

Hsin, Hsiu — Yuan Ze Univ.
Pin-Tsun, Chao — Acad. Sinica
Wen-Rei, Chiang — Yuan Ze Univ.
Rei-Yan, Hsu — Yuan Ze Univ.
Ming-Yie, Jan — Acad. Sinica
Tse-Lin, Hsu — Acad. Sinica
Wei-Kung, Wang — Acad. Sinica
Yuh-Ying, Wang Lin — National Taiwan Normal Univ.

16:30-17:30 ThP2C2.15

Determination of Wave Intensity in Flexible Tubes Using Measured Diameter and Velocity, pp. 985-988.

Feng, Jiling — Brunel Univ.
Khir, Ashraf — Brunel Univ.

16:30-17:30 ThP2C2.16

Effects of Aging and Exercise Training on the Common Carotid Blood Velocities in Healthy Men, pp. 989-993.

Noor Azmi, Azran Azhim — The Univ. of Tokushima
Kinouchi, Yohsuke — The Univ. of Tokushima
Akutagawa, Masatake — The Univ. of Tokushima
Hirao, Yuji — Tokushima Pref. I.T.C.
Yoshizaki, Kazuo — The Univ. of Tokushima
Nomura, Masaharu — The Univ. of Tokushima
Yamaguchi, Hisao — Tokushima Bunri Univ.
Akioka, Kohei — Univ. of Tokushima
Tanaka, Hiroyuki — Naruto Univ. of Education
obara, shigeru — Univ. of Tokushima

16:30-17:30 ThP2C2.17

Towards Automating the Pulmonary Artery Catheter: A Canine Validation Study, pp. 994-997.

Xu, Da — Michigan State Univ.
Olivier, Bari — Michigan State Univ.
Mukkamala, Ramakrishna — Michigan State Univ.

16:30-17:30 ThP2C2.18

Analysis of Pressure Losses in the Hemodialysis Graft Vascular Circuit Using Finite Element Analysis, pp. 998-1001.

Beasely, Madison P — Louisiana State Univ. Health Sciences Center
Conrad, Steven A — Univ. State Univ. Health Sciences Center

16:30-17:30 ThP2C2.19

A Haemodynamic Model of the Venous Network of the Lower Limbs, pp. 1002-1005.

Fragomeni, Gionata — Magna Graecia Univ. of Catanzaro
Merola, Alessio — Univ. degli Studi Magna Graecia di Catanzaro
De Franciscis, Stefano — Magna Graecia Univ. of Catanzaro
Amato, Francesco — Univ. degli Studi Magna Graecia di Catanzaro

16:30-17:30 ThP2C2.20

Analogue Step-By-Step DC Component Eliminator for 24–Hour PPG Signal Monitoring, pp. 1006-1009.

Pilt, Kristjan — Tech. Univ. of Tallinn
Meigas, Kalju — Tallinn Univ. of Tech.
Lass, Jaanus — Tallinn Univ. of Tech.
Rosmann, Mart-Rein — Tensiotrace Ltd.
Kaik, Jüri — Tallinn Univ. of Tech.

ThP2C3 — Forum 5&6

Cardiovascular Models and Ventricular Assist Devices (Poster Session)

16:30-17:30 ThP2C3.1

Infant Circulation Model Based on the Electrophysiological Cell Model, pp. 1010-1013.

Nobuaki, Yutaka — Kyoto Univ.
Amano, Akira — Kyoto Univ.
Shimayoshi, Takao — ASTEM Res. Inst. of Kyoto
Lu, Jianyin — Kyoto Univ.
Shim, Eun — Kangwon National Univ.
Matsuda, Tetsuya — Kyoto Univ.

16:30-17:30 ThP2C3.2

A Mathematical Model of the Cardiovascular System under Exercise, pp. 1014-1017.

Wang, Lu — Univ. of New South Wales
Su, Steven Weidong — Univ. of Tech. Sydney
Chan, Gregory S H — The Univ. of New South Wales
Celler, Branko George — Univ. of New South Wales

16:30-17:30 ThP2C3.3

Noninvasive Pulsatile Flow Estimation for an Implantable Rotary Blood Pump, pp. 1018-1021.

Karantonis, Dean M — Univ. of New South Wales
Cloherty, Shaun L — Univ. of New South Wales
Mason, David G — Ventracor Ltd
Ayre, Peter Joseph — Ventracor Ltd
Lovell, Nigel H — Univ. of New South Wales

16:30-17:30 ThP2C3.4

Impact of Superoxide Dismutase on Nitric Oxide and Peroxynitrite Levels in the Microcirculation - a Computational Model, pp. 1022-1026.

Chavez, Miriam Defibaugh — Univ. of Arkansas
Lakshmanan, Nisha — Univ. of Arkansas
Kavdia, Mahendra — Univ. of Arkansas

16:30-17:30 ThP2C3.5

Flow Simulation of a Diaphragm-Type Ventricular Assist Device with Structural Interactions, pp. 1027-1030.

Moosavi, M. Hossein — Amirkabir Univ. of Tech. (Tehran Pol.
Fatouraee, Nasser — Amirkabir Univ. of Tech.

16:30-17:30 ThP2C3.6

The Circumferential Loading of a Direct Cardiac Compression Assist Device, pp. 1031-1034.

Keeling, David — The Univ. of Leeds

16:30-17:30 ThP2C3.7

The Re-Design at the Transformer Portion of Transcutaneous Energy Transmission System for All Implantable Devices, pp. 1035-1038.

Watada, Masaya — Musashi Inst. of Tech.
Saisho, Ryohei — Musashi Inst. of Tech.
Kim, Yong-Jae — Musashi Inst. of Tech.
Ohuchi, Katsuhiro — Tokyo Medical and Dental Univ.
Takatani, Setsuo — Tokyo Medical and Dental Univ.
Um, Yong-Su — Gyeongsang National Univ.

ThP2C4 — Forum 5&6
Sleep Disorders II (Poster Session)

16:30-17:30 ThP2C4.1

Temporal Knowledge in the Intelligent Diagnosis of Sleep Apnea Syndrome: A New Approach, pp. 1039-1042.

Fernandez-Leal, Angel — A Coruña Univ.
Moret-Bonillo, Vicente — A Coruña Univ.

16:30-17:30 ThP2C4.2

Monitoring of Obstructive Sleep Apnea in Heart Failure Patients, pp. 1043-1046.

Patangay, Abhilash — Univ. of Minnesota
Vemuri, Prashanthi — Mayo Clinic, Rochester
Tewfik, Ahmed — Univ. of Minnesota

16:30-17:30 ThP2C4.3

ECG Biomarkers for Simultaneous Detection of Obstructive Sleep Apnea and Cheyne-Stokes Breathing, pp. 1047-1050.

Sanjee, Suhas Ramesh — Univ. of Texas at Arlington
Vijendra, Sridhar — Univ. of Texas at Arlington
Burk, John R. — Sleep Consultants Inc.
Lucas, Edgar A — Sleep Consultants Inc.
Behbehani, Khosrow — Univ. of Texas at Arlington

ThP2C5 — Forum 5&6
Respiratory Systems II (Poster Session)

16:30-17:30 ThP2C5.1

Identification of the Total Peripheral Resistance Baroreflex Impulse Response from Spontaneous Hemodynamic Variability: Validation by Chronic Arterial Baroreceptor Denervation, pp. 1051-1054.

Chen, Xiaoxiao — Michigan State Univ.
Kim, Jong-Kyung — Wayne State Univ. School of Medicine
Sala-Mercado, Javier — Wayne State Univ. School of Medicine
Hammond, Robert — Wayne State Univ. School of Medicine
Swamy, Gokul — Michigan State Univ.
Scislo, Tadeusz — Wayne State Univ. School of Medicine
O'Leary, Donal — Wayne State Univ. School of Medicine
Mukkamala, Ramakrishna — Michigan State Univ.

16:30-17:30 ThP2C5.2

Respiratory Inductance Plethysmography Is Suitable for Voluntary Hyperventilation Test, pp. 1055-1057.

Calabrese, Pascale — Univ. Joseph Fourier
Besleaga, Tudor — Univ. de médecine et pharmacie
Eberhard, André — Univ. Joseph Fourier
Vovc, Victor — Univ. de médecine et pharmacie
Baconnier, Pierre — Univ. Joseph Fourier

16:30-17:30 ThP2C5.3

Theoretical and Experimental Studies on the Nonlinear Mechanical Property of Tracheal Cartilage, pp. 1058-1061.

Teng, Zhongzhao — Univ. of Zaragoza
Ochoa, Ignacio — Univ. of Zaragoza
Bea, Jose Antonio — Univ. of Zaragoza
Doblare, Manuel — Univ. of Zaragoza

16:30-17:30 ThP2C5.4

Sensitivity of Pulmonary Crackle Parameters to Filter Cut-Off Frequency, pp. 1062-1065.

Kahya, Yasemin P. — Bogazici Univ.
Yeginer, Mete — Bogazici Univ.

16:30-17:30 ThP2C5.5

High Frequency Chest Compression Effects Heart Rate Variability, pp. 1066-1069.

Lee, Jongwon — Univ. OF MINNESOTA
Lee, Yong Wan — Univ. of Minnesota
Warwick, Warren J. — Univ. of Minnesota

16:30-17:30 ThP2C5.6

Absorption Characteristics Evaluation from Pulsed Photo-Thermal Radiometry in the Determination of Lung Air-Leak Integrity by Vital Staining, pp. 1070-1073.

Tokunaga, Hisako — KEIO Univ.
Gotoh, Maya — KEIO Univ. (Japan)
Oka, Yasunobu — KEIO Univ. (Japan)
Arai, Tsunenori — Keio Univ.

16:30-17:30 ThP2C5.7

Stroke Volume Estimation by Thoracocardiography Is Better When Glottis Is Closed, pp. 1074-1077.

Abdulhay, Enas — Univ. Joseph Fourier
Baconnier, Pierre — Univ. Joseph Fourier

16:30-17:30 ThP2C5.8

A Study of IOS Data Using Two Mead-Related Models of Respiratory Impedance, pp. 1078-1081.

Nguyen, Thuc-Uyen — Texas Christian Univ.
Diong, Bill — Texas Christian Univ.
Nazeran, Homayoun — The Univ. of Texas at El Paso
Goldman, Michael David — Univ. of California Los Angeles

ThP2D1 Forum 5&6

Modeling of Biological Systems II (Poster Session)

16:30-17:30 ThP2D1.1

Research on 3D Modeling for Head MRI Image Based on Immune Sphere-Shaped Support Vector Machine, pp. 1082-1085.

Guo, Lei — Hebei Univ. of Tech.
Wang, Lei — Hebei Univ. of Tech.
Wu, Youxi — Hebei Univ. of Tech.
Yan, Weili — Hebei Univ. of Tech.
Shen, Xueqin — Hebei Univ. of Tech.

16:30-17:30 ThP2D1.2

Estimation of Parameters in the Linear-Fractional Models, pp. 1086-1089.

Wu, FangXiang — Univ. of Saskatchewan

16:30-17:30 ThP2D1.3

Dosage Prediction Via Estimation of Shell Thickness and Concentration of Drug Carrier with Microbubbles, pp. 1090-1093.

Lu, Shih-Jen — National Taiwan Univ.
Chuang, chih-yang — National Taiwan Univ.
Tsao, Jenho — National Taiwan Univ.

16:30-17:30 ThP2D1.4

Leading to Long-Term Nonprogressor Via Gradual Reduction of Drug Dose with Immune Dynamics Strongly Dependant on Target Cells, pp. 1094-1097.

Chang, Hyeygjeon — Imperial Coll. London
Astolfi, Alessandro — Imperial Coll. London and Univ. of Rome

16:30-17:30 ThP2D1.5

A Computational Model of Rat Cerebral Blood Flow Using Non-Uniform Rational B-Splines, pp. 1098-1100.

Pushkin, Sergey — Inst. of Cytochemistry and Molecular Pharmacology
Podoprigora, Guennady — Inst. of Cytochemistry and Molecular Pharmacology
Comas, Laurent — CHU Jean Minjoz
Boulahdour, Hatem — Jean Minjoz Univ. Hospital and Univ. of Franche-Comte
Cardot, Jean-Claude — CHU Jean Minjoz
Baud, Michel — CHU Jean Minjoz
Nartsissov, Yaroslav — Inst. of Cytochemistry and Molecular Pharmacology
Blagosklonov, Oleg — CHU Jean Minjoz

16:30-17:30 ThP2D1.6

A Computational Framework for the Analysis of Biological Models, pp. 1101-1104.

Petsios, Stefanos - Konstantinos — Univ.
Fotiadis, Dimitrios I. — Univ. of Ioannina

16:30-17:30 ThP2D1.7

Investigating the Coupling between Stimulation and Neural Activity: A Dynamic Modeling Approach, pp. 1105-1108.

Lefebvre, Veronique — Univ. of Sheffield
Zheng, Ying — Univ. of Sheffield
Devonshire, Ian Mark — Univ. of Oxford
Martin, Chris — Univ. of sheffield
Mayhew, John — Univ. of Sheffield

16:30-17:30 ThP2D1.8

A Two Dimension Model of the Uterine Electrical Wave Propagation, pp. 1109-1112.

Rihana, Sandy — Univ. of Tech. of Compiegne
Lefrançois, Emmanuel — Univ. of Tech. of Compiegne
Marque, Catherine — Univ. of Tech. of compiegne

16:30-17:30 ThP2D1.9

Investigation of an Optical Fiber Cerebral Oximeter Using a Monte Carlo Model, pp. 1113-1116.

Phillips, Justin — St Bartholomew's Hospital
Langford, Richard — St Bartholomew's Hospital
Jones, Deric — City Univ.

16:30-17:30 ThP2D1.10

Modeling the Interaction of Electric Current and Tissue: Importance of Accounting for Time Varying Electric Properties, pp. 1117-1120.

Evans, Daniel — Univ. of Idaho
Manwaring, Mark — Univ. of Idaho

16:30-17:30 ThP2D1.11

Exploration of Quantitative Scoring Metrics to Compare Systems Biology Modeling Approaches, pp. 1121-1124.

Kaddi, Chanchala — Georgia Inst. of Tech.
Oden, Erica — Georgia Inst. of Tech.
Quo, Chang Feng — Georgia Inst. of Tech.
Wang, May Dongmei — Georgia Tech. and Emory Univ.

16:30-17:30 ThP2D1.12

Cellular Ion Channel-Pump System Modeling Using Switched Stochastic Differential Equations, pp. 1125-1131.

Weaver, Jeffrey — Univ. of Western Ontario

16:30-17:30 ThP2D1.13

Finite Element Bidomain Model of Epiretinal Stimulation, pp. 1132-1135.

Joarder, Saiful Ahsan — Univ. of Newcastle, Australia
Dokos, Socrates — Univ. of New South Wales
Suaning, Gregg — The Univ. of Newcastle
Lovell, Nigel H — Univ. of New South Wales

16:30-17:30 ThP2D1.14

Neural Systems and Time Course of Proactive Interference in Working Memory, pp. 1136-1139.

Du, Yingchun — Shantou Univ.
Zhang, John Xuexin — The Chinese Univ. of Hong Kong
Xiao, Zhuangwei — Shantou Univ.
Wu, RenHua — Shantou Univ. Medical Coll.

ThP2D2 Forum 5&6
Novel Technologies for Bioinformatics II (Poster Session)

16:30-17:30 ThP2D2.1

The Role of Intracarotid Cold Saline Infusion on a Theoretical Brain Model Incorporating the Circle of Willis and Cerebral Venous Return, pp. 1140-1143.

Neimark, Matthew — Columbia Univ.
Konstas, Angelos-Aristeidis — Columbia Univ.
Choi, Jae H. — Columbia Univ.
Laine, Andrew — Columbia Univ.
Pile-Spellman, John — Columbia Univ.

16:30-17:30 ThP2D2.2

Acceleration of Sensitivity Analysis by Distributed Computation, pp. 1144-1147.

Sarai, Nobuaki — Graduate School of Medicine, Kyoto Univ.

16:30-17:30 ThP2D2.3

Genes Expression Level Quantification Using a Spot-Based Algorithmic Pipeline, pp. 1148-1151.

Daskalakis, Antonis — Medical Image Processing and Analysis (M.I.P.A) Group,Lab.
Cavouras, Dionysios — Tech. Educational Inst. of Athens
Bougioukos, Panagiotis — Medical Image Processing and Analysis (M.I.P.A) Group,Lab.
Kostopoulos, Spiros — Medical Image Processing and Analysis (M.I.P.A)
Georgiadis, Pantelis — Univ. of Patras
Kalatzis, Ioannis — Tech. Educational Inst. of Athens
Kagadis, George — Univ. of Patras
Nikiforidis, George — Medical School, Univ. of Patras

16:30-17:30 ThP2D2.4

Numerical Modeling of Injection Flow of Drug Agents for Controlled Drug Delivery, pp. 1152-1155.

Liu, Moubin — Nanyang Tech. Univ.
Chang, Jianzhong — North Univ. of China
Li, Huiqi — Inst. for Infocomm Res.

16:30-17:30 ThP2D2.5

A Non-Linear Model of the Neural Integrator in Oculomotor Control, pp. 1156-1159.

Chan, Wilbur — McGill Univ.
Galiana, Henrietta L. — McGill Univ.

16:30-17:30 ThP2D2.6

Determination of the Optimal Heating Pattern Obtained with External Planar Applicators Used for 915 MHz Microwave Hyperthermia, pp. 1160-1163.

CRESSON, PIERRE-YVES — IEMN - Univ. of Lille
DUBOIS, LUC — IEMN - Univ. of Lille
PRIBETICH, JOSEPH — IEMN - Univ. of Lille

16:30-17:30 ThP2D2.7

FDTD Computation of Temperature Elevation in Human Body for RF Far-Field Exposure, pp. 1164-1167.

Hirata, Akimasa — Nagoya Inst. of Tech.
Asano, Takayuki — Nagoya Inst. of Tech.
Fujiwara, Osamu — Nagoya Inst. of Tech.

16:30-17:30 ThP2D2.8

A Numerical Simulation of Peristaltic Motion in the Ureter Using Fluid Structure Interactions, pp. 1168-1171.

Vahidi, Bahman — Amirkabir Univ. of Tech. (Tehran Pol.
Fatouraee, Nasser — Amirkabir Univ. of Tech.

16:30-17:30 ThP2D2.9

A Tissue-Level Model of the Left Ventricle for the Analysis of Regional Myocardial Function, pp. 1172-1175.

Le Rolle, Virginie — Univ. of Rennes 1
Hernández, Alfredo I — INSERM U642 LTSI.
Richard, Pierre-Yves — Supélec
Donal, Erwan — INSERM U642 LTSI.
Carrault, Guy — Univ. de Rennes 1

16:30-17:30 ThP2D2.10

Microarray Image Compression Using a Variation of Singular Value Decomposition, pp. 1176-1179.

Peters, Thomas — Nipissing Univ.
Smolikova-Wachowiak, Renata — Nipissing Univ.
Wachowiak, Mark Paul — Nipissing Univ.

16:30-17:30 ThP2D2.11
Material Removal Mechanisms in Monopolar Electrosurgery, pp. 1180-1183.
Ward, Arlen — Colorado State Univ.
Ladtkow, Casey — Valleylab
collins, george — coloradostate Univ.

16:30-17:30 ThP2D2.12
Variation of Radiation Effects and Signal Efficiency with Distance between Electromagnetic Source and Trunk Model, pp. 1184-1187.
Xu, Lisheng — The Chinese Univ. of Hong Kong
Meng, Max Q.-H. — The Chinese Univ. of Hong Kong
Wei, Dacheng — The Chinese Univ. of Hong Kong
Ren, HongLiang — The Chinese Univ. of Hong Kong

16:30-17:30 ThP2D2.13
Constructing Human Brain-Function Association Models from Fmri Literature, pp. 1188-1191.
Hsiao, Mei-Yu — National Taiwan Univ.
Chen, Der-Yow — National Taiwan Univ.
Chen, Jyh-Horng — National Taiwan Univ.

16:30-17:30 ThP2D2.14
A New Architecture for Supporting Medical Decision Making for Different Data Types Based on Fuzzy Cognitive Map Framework, pp. 1192-1195.
Papageorgiou, Elpiniki — Univ. of Patras
Stylios, Chrysostomos — Tech. Educational Inst. of Epirus
Groumpos, Peter — Univ. of Patras

16:30-17:30 ThP2D2.15
Numerical Study of the SNR and SAR of MRI Coil Arrays, pp. 1196-1199.
Rojas, Rafael — UAM, Iztapalapa.
Rodriguez, Alfredo O — UAM, Iztapalapa

16:30-17:30 ThP2D2.16
Full Analogue Electronic Realisation of the Hodgkin-Huxley Neuronal Dynamics in Weak-Inversion CMOS, pp. 1200-1203.
Lazaridis, Evangelos — Imperial Coll. London
Drakakis, Emmanuel M. — Imperial Coll.
Barahona, Mauricio — Imperial Coll. London

ThP2D3 Forum 5&6
Structural Bioinformatics and Computational Proteomics II (Poster Session)

16:30-17:30 ThP2D3.1
Exploring Protein Architecture Using 3D Shape-Based Signatures, pp. 1204-1208.
Paquet, Eric — National Res. Council
Viktor, Herna Lydia — Univ. of Ottawa

16:30-17:30 ThP2D3.2
Charge Distributions That Cause Current to Enter a Pore in a Biological Membrane, pp. 1209-1212.
Klee, Maurice — -

16:30-17:30 ThP2D3.3
Computer Simulation of I27 Translocation through ClpY Reveal the Critical Role of Protein Mechanical Strength and Local Stability, pp. 1213-1216.
Feng, Gang — Univ. of Illinois at Chicago
Lu, Hui — Univ. of Illinois at Chicago

16:30-17:30 ThP2D3.4
A Hub-Protein Based Visualization of Large Protein-Protein Interaction Networks, pp. 1217-1220.
Bang, SunLee — Electronics and Telecommunications Res. Inst.
Choi, Jaehun — Electronics and Telecommunications Res. Inst.
Park, Jongmin — Chonbuk National Univ.
Park, Soo-Jun — Electr & Telecomm Res. Inst.

16:30-17:30 ThP2D3.5
Quantification of Uncertainty of Peptide Retention Time Predictions from a Sequence-Based Model in LC-MS/MS Proteomics Experiments, pp. 1221-1224.
Yanofsky, Corey — McGill Univ.
Kearney, Robert Edward — McGill Univ.
Lesimple, Souad — McGill Univ.
Bergeron, John — McGill Univ.
Boismenu, Daniel — McGill Univ.
Carrillo, Brian — McGill Univ.
Bell, Alexander — McGill Univ.

16:30-17:30 ThP2D3.6
Classification of Transmembrane Segments in Human Proteins Using Wavelet-Based Energy, pp. 1225-1228.
Kitsas, Ilias — Aristotle Univ. of Thessaloniki
Hadjileontiadis, Leontios — Aristotle Univ. of Thessaloniki
Panas, Stavros — Aristotle Univ. of Thessaloniki

ThP2D4 Forum 5&6
Surgical Robotics II (Poster Session)

16:30-17:30 ThP2D4.1
A Surgical Robot for Cochleostomy, pp. 1229-1232.
Ma, Xianghong — Aston Univ.
Brett, Peter — Aston Univ.

16:30-17:30 ThP2D4.2

Multi-Channel Robotic System for Prostate Brachytherapy, pp. 1233-1236.

Podder, Tarun — Thomas Jefferson Univ.
Ng, Wan-Sing — Nanyang Tech. Univ.
Yu, Yan — Univ. of Rochester Medical Center

16:30-17:30 ThP2D4.3

Real-Time Simulation for Intra-Operative Navigation in Robotic Surgery -Using a Mass Spring System for a Basic Study of Organ Deformation, pp. 1237-1241.

Kawamura, Kazuya — Waseda Univ.
Kobayashi, Yo — Waseda Univ.
Fujie, Masakatsu G. — Waseda Univ.

16:30-17:30 ThP2D4.4

Viscoelastic and Nonlinear Organ Model for Control of Needle Insertion Manipulator, pp. 1242-1248.

Kobayashi, Yo — Waseda Univ.
Onishi, Akinori — Waseda Univ.
Hoshi, Takeharu — Waseda Univ.
Kawamura, Kazuya — Waseda Univ.
Fujie, Masakatsu G. — Waseda Univ.

16:30-17:30 ThP2D4.5

Hazard Analysis of EUCLIDIAN: An Image-Guided Robotic Brachytherapy System, pp. 1249-1252.

Hu, Yida — Thomas Jefferson Univ.
Podder, Tarun — Thomas Jefferson Univ.
Buzurovic, Ivan — Thomas Jefferson Univ.
Yan, Kaiguo — Thomas Jefferson Univ.
Ng, Wan-Sing — Nanyang Tech. Univ.
Yu, Yan — Thomas Jefferson Univ. Hospital

16:30-17:30 ThP2D4.6

Improved Haptic Interface for Colonoscopy Simulation, pp. 1253-1256.

Woo, Hyun Soo — KAIST
Kim, Woo Seok — KAIST
Ahn, Woojin — KAIST
Lee, Doo Yong — KAIST
Yi, Sun Young — Ewha Womans Univ.

16:30-17:30 ThP2D4.7

Human Factors Design for Intuitive Operation of a Low-Cost, Image Guided, Tele-Robotic Biopsy Assistant, pp. 1257-1260.

Hanumara, Nevan — Massachusetts Inst. of Tech.
Walsh, Conor — MIT
Slocum, Alexander — MIT
Gupta, Rajiv — Massachusetts General Hospital
Shepard, Jo-Anne — Massachusetts General Hospital

ThD01 — Gratte Ciel 1

Time-Frequency and Time-Scale Analysis III (Oral Session)

Co-Chair: Jané, Raimon — Univ. Pol. de Catalunya

17:30-17:45 ThD01.1

R-Peak Detection and Signal Averaging for Simulated Stress ECG Using EMD, pp. 1261-1264.

Nimunkar, Amit — Univ. of Wisconsin-Madison
Tompkins, Willis J. — Univ. of Wisconsin - Madison

17:45-18:00 ThD01.2

Multichannel-Based Newborn EEG Seizure Detection Using Time-Frequency Matched Filter, pp. 1265-1268.

khlif, Mohamed Salah — Univ. of Queensland
Mesbah, Mostefa — Univ. of Queensland
Boashash, Boualem — Univ. of Queensland
Colditz, Paul — Univ. of Queensland

18:00-18:15 ThD01.3

Optimizing High-Frequency-Oscillation Using Acoustic Parameters of the Newborn Lung: A Feasibility Study, pp. 1269-1272.

Luria, Oded — Tel-Aviv Univ.
Barnea, Ofer — Tel Aviv Univ.
Kohelet, David — Edit Wolfsom Medical Center

18:15-18:30 ThD01.4

Analysis of Echo Signal from Single Ultrasound Contrast Microbubble Using a Reversible Jump MCMC Algorithm, pp. 1273-1276.

Yan, Yan — Univ. of Edinburgh
Hopgood, James — The Univ. of Edinburgh
Sboros, Vassilis — Univ. of Edinburgh

18:30-18:45 ThD01.5

Third Heart Sound Detection Using Wavelet Transform–Simplicity Filter, pp. 1277-1281.

Kumar, Dinesh — Univ. of Coimbra
Carvalho, Paulo — Univ. of Coimbra
Antunes, Manual — Univ. of Coimbra
Henriques, Jorge — Univ. of Coimbra
Sa e Melo, Antonio — Univ. Hospital
Schmidt, Ralf — Philips Res.
Habetha, Joerg — Philips Res. Lab.

ThD02 Gratte Ciel 2

Signal Processing and Physiological System Modeling III (Oral Session)

Co-Chair: Reni, Gianluigi — IRCCS

17:30-17:45 ThD02.1

An Efficient Algorithm for Current Source Localization with Tetrodes, pp. 1282-1285.

Lee, Chang Won — Univ. of California, Irvine
Dang, Hieu — Univ. of California, Irvine
Nenadic, Zoran — UC Irvine

17:45-18:00 ThD02.2

Improving the Dynamics of Responses to Amplitude Modulated Stimuli by Modeling Inhibitory Interneurons in Cochlear Nucleus, pp. 1286-1289.

Dugué, Pierre — LTSI
Le Bouquin Jeannes, Regine — INSERM U642 - Univ. de Rennes 1
Faucon, Gerard — INSERM U642 - Univ. de Rennes 1

18:00-18:15 ThD02.3

Analysis of Instantaneous Amplitude and Frequency of Intracranial EEG Signal to Characterize Epileptic Seizure Stages, pp. 1290-1293.

Diaz, Mary — Univ. Simon Bolivar
Viola, Julio Cesar — Univ. Simon Bolivar
Esteller, Rosana — NeuroPace, Inc.

18:15-18:30 ThD02.4

Delta Waves Differently Modulate High Frequency Components of EEG Oscillations in Various Unconsciousness Levels, pp. 1294-1297.

Molaee Ardekani, Behnam — Univ. of Rennes 1
Senhadji, Lotfi — Univ. of Rennes 1; INSERM
Shamsollahi, Mohammad Bagher — Sharif Univ. of Tech.
Vosoughi Vahdat, Bijan — Sharif Univ. of Tech.
Wodey, Eric — Univ. of Rennes 1

18:30-18:45 ThD02.5

Analysis of the Dynamical Behaviour of the EEG Rhythms During a Test of Sustained Attention, pp. 1298-1301.

Molteni, Erika — IRCCS E. Medea - Associazione La Nostra Famiglia
Bianchi, Anna Maria — Pol. di Milano
Butti, Michele — Pol. Univ.
Reni, Gianluigi — IRCCS
Zucca, Claudio — IRCCS “E. Medea”

18:45-19:00 ThD02.6

Time-Domain Analysis of EEG During Guilty Knowledge Test: Investigation of Epoching Criteria, pp. 1302-1305.

Merzagora, Anna Caterina — Drexel Univ.
Izzetoglu, Meltem — Drexel Univ.
Bunce, Scott — Drexel Univ. Coll. of Medicine
Onaral, Banu — Drexel Univ.

ThD03 Bellecour 1

MR Image Processing and Analysis I (Oral Session)

Chair: Lin, Ching-Po — National Yang-Ming Univ.
Co-Chair: Klemer, David — Univ. of Wisconsin - Milwaukee

17:30-17:45 ThD03.1

Fractal Analysis of Tumoral Lesions in Brain, pp. 1306-1309.

Martin-Landrove, Miguel — Univ. Central de Venezuela
Pereira, Demian — Facultad de Ingenieria, Univ. Central de Venezuela
Caldeira, Maria E. — Ministerio de Energia y Petroleo
Itriago, Salvador — Inst. de Res. Magnética
Juliac, Maria — Hospital Vargas

17:45-18:00 ThD03.2

Morphological Atlases of Knee Cartilage: Shape Indices to Analyze Cartilage Degradation in Osteoarthritic and Non-Osteoarthritic Population, pp. 1310-1313.

Tameem, Hussain — Univ. of California Los Angeles
Selva, Luis — Univ. of California Los Angeles
Sinha, Usha — UCLA

18:00-18:15 ThD03.3

A Gabor-Based Technique for Bias Removal in MR Images, pp. 1314-1317.

Ardizzone, Edoardo — Univ. degli studi di Palermo
Pirrone, Roberto — Univ. degli studi di Palermo
Mastrella, Mario — Univ. degli studi di Palermo
Gambino, Orazio — Univ. degli Studi di Palermo

18:15-18:30 ThD03.4

A Quasi-Analytical Method for Relaxation Rate Distribution Determination of T2-Weighted MRI in Brain, pp. 1318-1321.

Martin-Landrove, Miguel — Univ. Central de Venezuela
Figueroa, Giovanni — Facultad de Ciencias, Univ. Central de Venezuela
Paluszny, Marco — Facultad de Ciencias, Univ. Central de Venezuela
Torres, Wuilian — Inst. de Ingeniería

18:30-18:45 ThD03.5

Invariant SPHARM Shape Descriptors for Complex Geometry in MR Region of Interest Analysis, pp. 1322-1325.

Uthama, Ashish — Univ. of British Columbia
Abugharbieh, Rafeef — Univ. of British Columbia
Traboulsee, Anthony — Univ. of British Columbia, Multiple Sclerosis/Magnetic Res.
McKeown, Martin — Univ. of British Columbia

18:45-19:00 ThD03.6

DTI-Based Virtual Reality System for Neurosurgery, pp. 1326-1329.

Lo, Chun-Yi — Chung Yuan Christian Univ.
Chao, Yi-Ping — National Taiwan Univ.
Chou, Kun-Hsien — National Yang-Ming Univ.
Guo, Wan-Yuo — Taipei Veterans General Hospital
Su, Jenn-Lung — Chun Yuan Univ.
Lin, Ching-Po — National Yang-Ming Univ.

ThD04 — Bellecour 3

Ultrasonic Signal and Image Processing (Oral Session)

Co-Chair: Saijo, Yoshifumi — Inst. of Development Aging and Cancer, TohokuUniversity

17:30-17:45 ThD04.1

Automated Discrimination of Tissue Boundaries Using Ultrasound Images of "Ubiquitous Echo", pp. 1330-1334.

Inoue, Masahiro — Saga Univ.
Bu, Nan — National Inst. of Advanced Industrial Science and Tech.
Fukuda, Osamu — National Inst. of AIST
Okumura, Hiroshi — Saga Univ.

17:45-18:00 ThD04.2

Multi-Modality 3D Breast Imaging with X-Ray Tomosynthesis and Automated Ultrasound, pp. 1335-1338.

Sinha, Sumedha — Univ. of Michigan
Roubidoux, Marilyn — Univ. of michigan
Helvie, Mark — Univ. of Michigan Medical School
Nees, Alexis — Univ. of Michigan Medical School
Goodsitt, Mitchell — Univ. of Michigan
LeCarpentier, Gerald — Univ. of Michigan
Fowlkes, Brian — Univ. of Michigan
Chalek, Carl — GE Global Res.
Carson, Paul L. — Univ. of Michigan

18:00-18:15 ThD04.3

Discrete Fourier Analysis of Ultrasound RF Time Series for Detection of Prostate Cancer, pp. 1339-1342.

Moradi, Mehdi — Queen's Univ.
Mousavi, parvin — Queen's Univ.
Siemens, Robert — Kingston General Hospital
Sauerbrei, Eric — Kingston General Hospital
Isotalo, Phil — Kingston General Hospital
Boag, Alexandre — Queen's Univ.
Abolmaesumi, Purang — Queen's Univ.

18:15-18:30 ThD04.4

The Echotextural Characteristics for the Diagnosis of the Liver Cirrhosis Using the Sonographic Images, pp. 1343-1345.

Jeong, Ji-Wook — Electronics and Telecommunications Res. Inst.
Lee, Sooyeul — Electronics & Telecom Res. Inst.
Lee, Jeong Won — Electronics & Telecom Res. Inst.
Yoo, Done-Sik — ETRI (Electronics & Telecom Res. Inst.
Kim, Seunghwan — Electronics & Telecom Res. Inst.

18:30-18:45 ThD04.5

A System for Analyzing Intraoperative B-Mode Ultrasound Scans of the Liver, pp. 1346-1349.

Nowatschin, Stephan — Tech. Univ. Munich
Markert, Mathias — Tech. Univ. Munich
Weber, Stefan — Tech. Univ. of Munich
Lueth, Tim — Tech. Univ. of Munich

18:45-19:00 ThD04.6

Ultrasound Speed and Impedance Microscopy for in Vivo Imaging, pp. 1350-1353.

Saijo, Yoshifumi — Inst. of Development Aging and Cancer, TohokuUniversity
Hozumi, Naohiro — Aichi Inst. of Tech.
Kobayashi, Kazuto — Honda Electronics Co., Ltd.
Okada, Nagaya — HONDA ELECTRONICS CO., LTD.
Ishiguro, Toshimichi — HONDA ELECTORONICS
Hagiwara, Yoshihiro — Tohoku Univ. Graduate School of Medicine
Santos Filho, Esmeraldo dos — Tohoku Univ.
Yambe, Tomoyuki — Tohoku Univ.

ThD05 Tęte d'Or Lounge

Sensor Based Systems for Monitoring II (Oral Session)

Co-Chair: Zhang, Yuan-Ting — The Chinese Univ. of Hong Kong

17:30-17:45 ThD05.1

Measurement System of Finger-Tapping Contact Force for Quantitative Diagnosis of Parkinson's Disease, pp. 1354-1357.

Okuno, Ryuhei — Osaka Univ.
Yokoe, Masaru — Osaka Univ.
Fukawa, Kenichi — Osaka Univ.
Sakoda, Saburo — Osaka Univ.
Akazawa, Kenzo — Osaka Inst. of Tech.

17:45-18:00 ThD05.2

MAPI: Active Interface Pressure Sensor Integrated into a Seat, pp. 1358-1361.

Meffre, Richard — INSA Lyon
Gehin, Claudine — INSA Lyon
Dittmar, Andre — INSA Lyon

18:00-18:15 ThD05.3

Monitoring of Respiration and Heartbeat During Sleep Using a Flexible Piezoelectric Film Sensor and Empirical Mode Decomposition, pp. 1362-1366.

Bu, Nan — National Inst. of Advanced Industrial Science andTechnology
Ueno, Naohiro — National Inst. of Advanced Industrial Science and Tech.
Fukuda, Osamu — National Inst. of AIST

18:15-18:30 ThD05.4

Determination of Simple Thresholds for Accelerometry-Based Parameters for Fall Detection, pp. 1367-1370.

Kangas, Maarit — Univ. of Oulu
Konttila, Antti — Univ. of Oulu
Winblad, Ilkka — Univ. of Oulu
Jämsä, Timo — Univ. of Oulu

18:30-18:45 ThD05.5

Modified Pendulum Model for Mean Step Length Estimation, pp. 1371-1374.

Gonzalez, Rafael C. — Univ. de Oviedo
Álvarez Prieto, Diego — Univ. de Oviedo
Lopez, Antonio M. — Univ. de Oviedo
Alvarez, Juan Carlos — Univ. de Oviedo

18:45-19:00 ThD05.6

In-Ear Heart Rate Monitoring Using a Micro-Optic Reflective Sensor, pp. 1375-1378.

Vogel, Stefan — RWTH Aachen Univ.
Huelsbusch, Markus — RWTH Aachen Univ.
Starke, Dietmar — CiS Inst. fuer Mikrosensorik GmbH
Leonhardt, Steffen — RWTH Aachen Univ.

19:00-19:15 ThD05.7

Towards Automatic Detection of Falls Using Wireless Sensors, pp. 1379-1382.

Srinivasan, Soundararajan — Robert Bosch LLC
Han, Jun — Carnegie Mellon Univ.
Lal, Dhananjay — Robert Bosch LLC
Gacic, Aca — Robert Bosch LLC

ThD06 Tęte d'Or 2

Genetic Regulatory Networks (Oral Session)

Co-Chair: Wang, May Dongmei — Georgia Tech. and Emory Univ.

17:30-17:45 ThD06.1

Is Dna Code Periodicity Only Due to Cuf – Codons Usage Frequency?, pp. 1383-1386.

Zoltowski, Mariusz, Leslaw — Coll. Medicum of L.Rydygier in Bydgoszcz, NicolausCopernicus U

17:45-18:00 ThD06.2

Stability Analysis of Genetic Regulatory Networks with Multiple Time Delays, pp. 1387-1390.

Wu, FangXiang — Univ. of Saskatchewan

18:00-18:15 ThD06.3

Mechanism of Permeation in Calcium Channels Activation by Applied Magnetic Fields, pp. 1391-1393.

Zhang, Yuhong — Hebei Univ. of Tech.
ZHAN, Yong — Hebei Univ. of Tech.
Zhao, Tongjun — Hebei Uniersity of Tech.
Han, Yingrong — Hebei Univ. of Tech.
Liu, Hui — Hebei Univ. of Tech.

18:15-18:30 ThD06.4

A Platform for in Silico Modeling of Physiological Systems, pp. 1394-1397.

Kawazu, Toshihiro — Osaka Univ.
Nomura, Taishin — Osaka Univ.
Nakanishi, Masao — Osaka Univ.
Suzuki, Yasuyuki — Osaka Univ.

18:30-18:45 ThD06.5

Modeling of Multiple Valued Gene Regulatory Networks, pp. 1398-1404.

Garg, Abhishek — Ec. Pol. Federal de Laisannem Switzerland
Mendoza, Luis — Univ. Nacional Autónoma de México
XENARIOS, IOANNIS — Merck Serono
De Micheli, Giovanni — EPFL

18:45-19:00 ThD06.6

Computational Modeling of a Metabolic Pathway in Ceramide De Novo Synthesis, pp. 1405-1408.

Dhingra, Shobhika — Georgia Inst. of Tech.
Freedenberg, Melissa — Georgia Inst. of Tech.
Quo, Chang Feng — Georgia Inst. of Tech.
Merrill, Alfred — Georgia Inst. of Tech.
Wang, May Dongmei — Georgia Tech. and Emory Univ.

ThD07 — Bellecour 2

Forward-Inverse Problems (Oral Session)

Chair: MacLeod, Rob — Univ. of Utah

17:30-17:45 ThD07.1

Images of Electrocardiographic Imaging, pp. 1409-1409.

van Oosterom, Adriaan — Univ. of Lausanne

18:00-18:15 ThD07.3

Computer Based Modeling of the Congenital Long-Qt 2 Syndrome in the Visible Man Torso: From Genes to ECG, pp. 1410-1413.

Keller, David Urs Josef — Univ. Karlsruhe (TH)
Seemann, Gunnar — Univ. Karlsruhe (TH)
Weiss, Daniel L. — Univ. Karlsruhe (TH)
Farina, Dmytro — Univ. of Karlsruhe
Zehelein, Joerg — Univ. Hospital Heidelberg
Doessel, Olaf — Univ. of Karlsruhe

18:15-18:30 ThD07.4

Influence of Size and Location of Myocardial Infarction on TCRT Parameter: A Computer Simulation Study, pp. 1414-1417.

Karsikas, Mari — Univ. of Oulu
Perkiömäki, Juha S. — Univ. of Oulu
Huikuri, Heikki — Univ. of Oulu
Seppänen, Tapio — Univ. of Oulu

18:30-18:45 ThD07.5

Computer Based Optimization of Biventricular Pacing According to the Left Ventricular 17 Myocardial Segments, pp. 1418-1421.

Miri, Raz — Univ. of Karlsruhe
Reumann, Matthias — Univ. Karlsruhe (TH)
Keller, David Urs Josef — Univ. Karlsruhe (TH)
Farina, Dmytro — Univ. of Karlsruhe
Doessel, Olaf — Univ. of Karlsruhe

18:45-19:00 ThD07.6

Evaluation of Different Meshing Algorithms in the Computation of Defibrillation Thresholds in Children, pp. 1422-1425.

Stinstra, Jeroen — Univ. of Utah
Jolley, Matthew — Boston Children's Hospital
Weinstein, David — Univ. of Utah
Cole, Martin — Univ. of Utah
Brooks, Dana — Northeastern Univ.
Triedman, John — Children's Hospital Boston
MacLeod, Rob — Univ. of Utah

ThD08 — Gratte Ciel Lounge

Advanced Neural Signal Processing Methods I (Oral Session)

Chair: Lipping, Tarmo — Tampere Univ. of Tech.
Co-Chair: Thakor, Nitish — Johns Hopkins Univ.

17:30-17:45 ThD08.1

Detection and Assessment of Spinal Cord Injury Using Spectral Coherence, pp. 1426-1429.

Fatoo, Noreen — American Univ. of Sharjah
Mirza, Nabil — American Univ. of Sharjah
Ahmed, Rabi — American Univ. of Sharjah
Al-Nashash, Hasan — American Univ. of Sharjah
All, Angelo — Johns Hopkins Univ.
Thakor, Nitish — Johns Hopkins Univ.

17:45-18:00 ThD08.2

Comparison of Three Spike Detectors Dedicated to Single Unit Action Potentials of the Auditory Nerve, pp. 1430-1433.

Bourien, Jerome — UFR Pharmacie - Univ. Montpellier1
Ruel, Jerome — INSERM-U583
Senhadji, Lotfi — Univ. of Rennes 1; INSERM
Puel, Jean-Luc — INSERM-U583, Univ. Montpellier1

18:00-18:15 ThD08.3

Toward Filtering of Athetoid Motion with Neural Networks, pp. 1434-1436.

Vázquez López, Juan José — Carnegie Mellon Univ.
Sibenaller, Sara — Univ. of Pittsburgh
Ding, Dan — Univ. of Pittsburgh
Riviere, Cameron — Carnegie Mellon Univ.

18:15-18:30 ThD08.4

Comparisons of FIR and IIR Implementations of a Subtraction-Based Stimulus Artifact Rejection Algorithm, pp. 1437-1440.

Azin, Meysam — Case Western Res. Univ.
Chiel, Hillel — Case Western Res. Univ.
Mohseni, Pedram — Case Western Res. Univ.

18:30-18:45 ThD08.5

Detection and Classification of Motor Nerve Late-Wave Activity, pp. 1441-1444.

Krishnamachari, Srivathsan — Optimal Systems Lab. Inc.
Tracey, Brian — Neurometrix, Inc
Iyer, Darshan — NEUROMetrix, Inc.

18:45-19:00 ThD08.6

Clustering Synaptically-Coupled Neuronal Populations under Systematic Variations in Temporal Dependence, pp. 1445-1448.

El Dawlatly, Seif — Michigan State Univ.
Oweiss, Karim — Michigan State Univ.

ThD09 — Gratte Ciel 3

Bio-Robotics (Oral Session)

Chair: Micera, Silvestro — Scuola Superiore Sant'Anna
Co-Chair: Martel, Sylvain — Ec. Pol. de Montreal

17:30-17:45 ThD09.1

Position Control Using 2D-To-2D Feature Correspondences in Vision Guided Cell Micromanipulation, pp. 1449-1452.

Zhang, Yanliang — Nanyang Tech. Univ.
Ang, Wei Tech — Nanyang Tech. Univ.
Shee, Chengyap — Nanyang Tech. Univ.
Han, Mingli — Nanyang Tech. Univ.

17:45-18:00 ThD09.2

Prototyping Artificial Jaws for the Bristol Dento-Munch Robo-Simulator 'A Parallel Robot to Test Dental Components and Materials', pp. 1453-1456.

Raabe, Daniel — Univ. of Bristol
Alemzadeh, Kazem — Univ. of Bristol

18:00-18:15 ThD09.3

Mucoadhesive Micropatterns for Enhanced Grip, pp. 1457-1462.

Dodou, Dimitra — Delft Univ. of Tech.
Del Campo, Aránzazu — Max-Planck-Inst. für Metallforschung
Arzt, Eduard — Max-Planck-Inst. für Metallforschung

18:15-18:30 ThD09.4

Magnetic Resonance Imaging of Fe3O4 Nanoparticles Embedded in Living Magnetotactic Bacteria for Potential Use As Carriers for in Vivo Applications, pp. 1463-1466.

Felfoul, Ouajdi — École Pol. de Montréal
Mohammadi, Mahmood — École Pol. de Montréal
Martel, Sylvain — Ec. Pol. de Montreal

18:30-18:45 ThD09.5

Surgical Cartographic Navigation System for Endoscopic Bypass Grafting, pp. 1467-1470.

Voruganti, Arun Kumar Raj — Innovation Center Computer Assisted Surgery (ICCAS)
Mayoral, Rafael — Innovation Center Computer Assisted Surgery (ICCAS)
Jacobs, Stephan — ICCAS
Grunert, Ronny — Univ. of Leipzig
Moeckel, Hendrik — Univ. of Leipzig
Korb, Werner — Univ. of Leipzig

18:45-19:00 ThD09.6

Biorobotic Investigation on the Muscle Structure of an Octopus Tentacle, pp. 1471-1474.

Mazzolai, Barbara — Scuola Superiore Sant'Anna
Laschi, Cecilia — Scuola Superiore Sant'Anna
Cianchetti, Matteo — Scuola Superiore Sant'Anna
Patane', Francesco — Scuola Superiore Sant'Anna
Bassi-Luciani, Lorenzo — Scuola Superiore Sant'Anna
Izzo, Ivano — Scuola Superiore Sant'Anna
Dario, Paolo — Scuola Superiore Sant'Anna

19:00-19:15 ThD09.7

Magnetic Resonance Propulsion, Control and Tracking at 24 Hz of an Untethered Device in the Carotid Artery of a Living Animal: An Important Step in the Development of Medical Micro and Nanorobots, pp. 1475-1478.

Martel, Sylvain — Ec. Pol. de Montreal

ThD10 — Rhône 1

Therapeutic Devices II (Oral Session)

17:30-17:45 ThD10.1

Clinical Effects of Far-Infrared Therapy in Patients with Allergic Rhinitis, pp. 1479-1482.

Hu, Ko-Hsin — Chung-Yuan Christian Univ.
Li, Wen-Tyng — Chung-Yuan Christian Univ.

17:45-18:00 ThD10.2

Hyperthermia System with Thermoseed Set in Abdominal Cavity and AC-Magnetic-Field, pp. 1483-1486.

Abe, Kaori — Ritsumeikan Univ.

18:00-18:15 ThD10.3

Noninvasive Thermometry in a Reentrant Resonant Cavity_; Applicator, pp. 1487-1490.

Ishihara, Yasutoshi — Nagaoka Univ. of Tech.
Endo, Yuichiro — Nagaoka Univ. of Tech.
Ohwada, Hiroshi — Niigata Sangyo Univ.
Wadamori, Naoki — Nagaoka Univ. of Tech.

18:15-18:30 ThD10.4

Immunological Response Induced by Alternated Cooling and Heating of Breast Tumor, pp. 1491-1494.

Dong, Jiaxiang — Shanghai Jiaotong Univ.
Liu, Ping — Shanghai Jiao Tong Univ.
Zhang, Aili — Shanghai Jiao Tong Univ.
Xu, Lisa Xuemin — Shanghai Jiaotong Univ.

18:30-18:45 ThD10.5

Heating Properties of Developed Needle Type Applicator Made of Shape Memory Alloy, pp. 1495-1498.

Kanazawa, Yoshihiro — Meiji Univ.
Kato, Kazuo — Meiji Univ.
Yabuhara, Tadao — Meiji Univ.

18:45-19:00 ThD10.6

Convective Cooling Affects Cardiac Catheter Cryoablation and Radiofrequency Ablation in Opposite Directions, pp. 1499-1502.

Haemmerich, Dieter — Medical Univ. of South Carolina
Pilcher, Thomas — Medical Univ. of South Carolina
Saul, J. Philip — Medical Univ. of South Carolina

ThD11 — Tęte d'Or 1

Personal Health Systems I (Oral Session)

Chair: Nugent, Chris — Univ. of Ulster

17:30-17:45 ThD11.1

A Novel Approach to Classify Significant ECG Data Based on Heart Instantaneous Frequency and ECG-Derived Respiration Using Conductive Textiles, pp. 1503-1506.

Noh, Yeon Sik — Yonsei Univ.
Park, Sung Jun — Yonsei Univ.
Park, Sung Bin — Yonsei Univ.
Yoon, Hyung Ro — Yonsei Univ.

17:45-18:00 ThD11.2

Roll-Over Detection and Sleep Quality Measurement Using a Wearable Sensor, pp. 1507-1510.

Miwa, Hiroyasu — National Inst. of Advanced Industrial Science andTechnology
SASAHARA, Shin-ichiro — Guraduate School of medicine, Univ. of Tsukuba
Matsui, Toshihiro — AIST

18:00-18:15 ThD11.3

Estimating Intensity of Physical Activity: A Comparison of Wearable Accelerometer and Gyro Sensors and 3 Sensor Locations, pp. 1511-1514.

Pärkkä, Juha — VTT
Ermes, Miikka — VTT Tech. Res. Centre
Antila, Kari — VTT
van Gils, Mark — VTT Tech. Res. Centre of Finland
Mänttäri, Ari — UKK Inst.
Nieminen, Heikki — Nokia

18:15-18:30 ThD11.4

A New Model for Programming Software in Body Sensor Networks, pp. 1515-1518.

Barbosa, Talles M. G. de A. — Catholic Univ. of Goiás
Sene Jr, Iwens G. — Catholic Univ. of Goiás
da Rocha, Adson F. — Univ. of Brasilia
Assis de Oliveira Nascimento, Francisco — Univ. of Brasilia
Carvalho, João Luiz Azevedo de — Univ. of Southern California
Carvalho, Hervaldo Sampaio — Univ. of Brasília

18:30-18:45 ThD11.5

A Study on the Implementation of a Portable U-Healthcare System Using SNMP and AODV, pp. 1519-1522.

Seo, Jungho — Sejong Univ.

18:45-19:00 ThD11.6

Development of Health Monitoring System Based on Three-Dimensional Imaging Using Bio-Signals and Motion Data, pp. 1523-1527.

Matsukawa, Tsuyoshi — Nagoya City Univ.
Umetani, Tomohiro — Nagoya City Univ.
Yokoyama, Kiyoko — Nagoya City Univ.

ThD12 — Rhône 2

Student Paper Competition III (Oral Session)

Chair: Monzon, Jorge E. — Univ. Nacional del Nordeste

17:30-17:45 ThD12.1

*A Gaussian Mixture Model for Time-Frequency Analysis of Atrial Fibrillation Electrocardiograms**.

Corino, Valentina — Pol. di Milano
Mainardi, Luca — Pol. di Milano
Bollmann, Andreas — Univ. Hospital Magdeburg
Husser, Daniela — Univ. Hospital Magdeburg
Stridh, Martin — Lund Univ.
Sornmo, Leif — Lund Univ.

17:45-18:00 ThD12.2

*Optical Imaging of Electrically Evoked Visual Signals in Cats: I. Responses to Corneal and Intravitreal Electrical Stimulation**.

Wong, Yan Tat	Univ. of New South Wales
Hallum, Luke E.	Univ. of New South Wales
Chen, Spencer Chin-Yu	Univ. of New South Wales
Dommel, Norbert Brian	Univ. of New South Wales
Cloherty, Shaun L	Univ. of New South Wales
Morley, John William	Univ. of Western Sydney
Suaning, Gregg	The Univ. of Newcastle
Lovell, Nigel H	Univ. of New South Wales

18:00-18:15 ThD12.3

*Modeling the Influence of Body Position in Bioimpedance Measurements**.

Medrano, Guillermo	Aachen Univ. Helmholtz-Inst. for Biomedical
Zhang, Peng	RWTH Aachen Univ.
Leonhardt, Steffen	RWTH Aachen Univ.

ThD13 Roseraie 1,2

Motion Artefact in Wearable Biomedical Sensor Systems (Invited Session)

Chair: Such, Olaf	Philips
Co-Chair: McAdams, Eric	Univ. of Ulster
Organizer: Such, Olaf	Philips

17:30-17:45 ThD13.1

A Comparative Evaluation of Adaptive Noise Cancellation Algorithms for Minimizing Motion Artifacts in a Forehead-Mounted Wearable Pulse Oximeter (I), pp. 1528-1531.

Comtois, Gary	WPI
Mendelson, Yitzhak	Worcester Pol. Inst.
Ramuka, Piyush	Worcester Pol. Inst.

17:45-18:00 ThD13.2

Reducing Motion Artefacts of Capacitive Sensors (I), pp. 1532-1532.

Feddes, Bas	Philips Res.
Gourmelon, Lena	Philips Res.
Meftah, Mohammed	Philips Res.
Ikkink, Ton	Philips Res.

18:00-18:15 ThD13.3

Quantification of Motion Artifact in ECG Electrode Design (I), pp. 1533-1536.

Kearney, Kenneth	Sensor Tech. & Devices Ltd
Thomas, Chris	Univ. of Ulster
McAdams, Eric	Univ. of Ulster

18:15-18:30 ThD13.4

On the Reliability of Pulse Oximetry at the Sternum (I), pp. 1537-1537.

Sola, Josep	Swiss Center for Electr & Micro
Olivier, Chételat	CSEM
Krauss, Jens	CSEM

18:30-18:45 ThD13.5

Development of Real-Time Motion Artifact Reduction Algorithm for a Wearable Photoplethysmography, pp. 1538-1541.

Han, Hyonyoung	Korea Advanced Inst. of Science and Tech.
Kim, Min-Joon	H3 System, Co. Ltd.
Kim, Jung	Korea Advanced Inst. of Science and Tech.

18:45-19:00 ThD13.6

Motion Tolerance in Wearable Sensors - the Challenge of Motion Artefact (I), pp. 1542-1545.

Such, Olaf — Philips

FrA01 Gratte Ciel 1

Time-Frequency and Time-Scale Analysis IV (Oral Session)

Chair: Duchęne, Jacques — UTT

08:30-08:45 FrA01.1

Modified Mixture of Experts for Analysis of EEG Signals, pp. 1546-1549.

Ubeyli, Elif Derya — TOBB Ec. and Tech. Univ.

08:45-09:00 FrA01.2

Influence of Small Eye Movement on Perceptual Filling-In Time, pp. 1550-1553.

Yokota, Masae	Nagoya Bunri Univ.
Yokota, Yasunari	Gifu Univ.

09:00-09:15 FrA01.3

A New Wavelet-Based Algorithm for Compression of Emg Signals, pp. 1554-1557.

Berger, Pedro	Univ. de Brasília
Assis de Oliveira Nascimento, Francisco	Univ. of Brasilia
da Rocha, Adson F.	Univ. of Brasilia
Carvalho, João Luiz Azevedo de	Univ. of Southern California

09:15-09:30 FrA01.4

Wavelet-Based Multiscale Analysis of Minimum Toe Clearance Variability in the Young and Elderly During Walking, pp. 1558-1561.

Khandoker, Ahsan Habib	The Univ. of Melbourne
Karmakar, Chandan Kumar	The Univ. of Melbourne
Begg, Rezaul	Victoria Univ.
Palaniswami, Marimuthu	The Univ. of Melbourne

09:30-09:45 FrA01.5

Hilbert-Huang Transformation: Application to Postural Stability Analysis, pp. 1562-1565.

Amoud, Hassan — UTT
Snoussi, Hichem — UTT
Hewson, David J — Univ. de Tech. de Troyes
Duchęne, Jacques — UTT

09:45-10:00 FrA01.6

Application of the Empirical Mode Decomposition Method to the Analysis of Respiratory Mechanomyographic Signals, pp. 1566-1569.

Torres, Abel — Univ. Pol. de Catalunya
Fiz Fernandez, José Antonio — Hospital Univ. Germans Trias i Pujol
Jané, Raimon — Univ. Pol. de Catalunya
Galdiz, Juan Bautista — Hospital Cruces
Gea, Joaquim — Hospital del Mar
Morera Prat, Jose — Hospital Univ. Germans Trias i Pujol

FrA02 — Gratte Ciel 2

Signal Processing and Physiological System Modeling IV (Oral Session)

Chair: Cluitmans, Pierre J.M. — Eindhoven Univ. of Tech.

08:30-08:45 FrA02.1

EEG Frequency Progression During Induction of Anesthesia: From Start of Infusion to Onset of Burst Suppression Pattern, pp. 1570-1573.

Kortelainen, Jukka Johannes — Univ. of Oulu
Koskinen, Miika Kimmo Juhani — Univ. of Oulu
Mustola, Seppo Tapani — South Karelia Central Hospital
Seppänen, Tapio — Univ. of Oulu

08:45-09:00 FrA02.2

Control of Depth of Anesthesia Using MUSMAR - Exploring Electromyography and the Analgesic Dose As Accessible Disturbances, pp. 1574-1577.

Nunes, Catarina S — Faculdade de Ciencias da Univ. do Porto
Mendonça, Teresa — Faculdade de Ciencias
Lemos, João — INESC
Amorim, Pedro — Hospital Geral de Santo António

09:00-09:15 FrA02.3

Model-Based Measurement of Epileptic Tissue Excitability, pp. 1578-1581.

Frogerais, Paul — INSERM - Univ. de Rennes 1
Bellanger, Jean-Jacques — LTSI-INSERM U642
WENDLING, Fabrice — INSERM - Univ. de Rennes 1

09:15-09:30 FrA02.4

Model for Arm Movements During Myoclonic Seizures, pp. 1582-1585.

Nijsen, Tamara M.E. — Epilepsy Center Kempenhaeghe
Aarts, Ronald — Philips
Arends, Johan B.A.M. — Epilepsy Center Kempenhaeghe
Cluitmans, Pierre J.M. — Eindhoven Univ. of Tech.

09:30-09:45 FrA02.5

The Pupil As a Possible Premonitor of Drowsiness, pp. 1586-1589.

Nishiyama, Junpei — Chubu Univ. Coll. of Engineering.
Tanida, Koji — Honda R&D Co.,Ltd
Kusumi, Masashi — Honda R&D Co.,Ltd.
Hirata, Yutaka — Chubu Univ. Coll. of Eng

09:45-10:00 FrA02.6

Correction for Desynchronization of EEG and Fmri Clocks through Data Interpolation Optimizes Artifact Reduction, pp. 1590-1594.

Goncalves-Verheij, Sonia I. — VU Univ. Medical Centre
Pouwels, P. J. W. — VU Univ. Medical Centre
Kuijer, J. P. A. — VU Univ. Medical Centre
Heethaar, R. M. — VU Univ. Medical Centre
de Munck, J. C. — VU Univ. Medical Centre

FrA03 — Bellecour 1

MR Image Processing and Analysis II (Oral Session)

Chair: Panahi, Issa — Univ. of Texas at Dallas
Co-Chair: Lam, Edmund Y. — Univ. of Hong Kong

08:30-08:45 FrA03.1

Multimodal MRI Segmentation of Ischemic Stroke Lesions, pp. 1595-1598.

Kabir, Yacine — INSERM U836 UJF-CEA-CHU (Grenoble Inst. of Neuroscience)
Dojat, Michel — INSERM U836 UJF-CEA-CHU (Grenoble Inst. of
Scherrer, Benoit — INSERM U836 UJF-CEA-CHU (Grenoble Inst. of
Forbes, Florence — INRIA- Jean Kuntzman Lab. , Grenoble Univ.
Garbay, Catherine — LIG CNRS UMR 5217 (MAGMA)

08:45-09:00 FrA03.2

Improvement of Automated Detection Method of Lacunar Infarcts in Brain MR Images, pp. 1599-1602.

Uchiyama, Yoshikazu — Gifu Univ.
Yokoyama, Ryujiro — Gifu Univ.
Ando, Hiromichi — Gifu Munucipal Hospital
Asano, Takahiko — Graduate School of Medicine, Gifu Univ.
Kato, Hiroki — Graduate School of Medicine, Gifu Univ.
Yamakawa, Hiroyasu — Chuno-Kousei Hospital
Yamakawa, Haruki — Graduate School of Medicine, Gifu Univ.
Hara, Takeshi — Gifu Univ. Graduate Sch of Medicine
Iwama, Toru — Graduate School of Medicine, Gufu Univ.
Hoshi, Hiroaki — Gifu Univ.
Fujita, Hiroshi — Gifu Univ.

09:00-09:15 FrA03.3

Volume Mesh Generation and Finite Element Analysis of Trabecular Bone Magnetic Resonance Images, pp. 1603-1606.

Alberich-Bayarri, Angel — Univ. Pol. de Valčncia
Moratal, David — Univ. Pol. de Valčncia
Martí-Bonmatí, Luis — Hospital Quirón-Valencia
Salmerón-Sánchez, Manuel — Univ. Pol. de Valčncia
Vallés-Lluch, Ana — Univ. Pol. de Valčncia
Nieto-Charques, Laura — Univ. Pol. de Valčncia
Rieta, J. J. — Valencia Univ. of Tech.

09:15-09:30 FrA03.4

Quantitative Study of Signal Decay Due to Magnetic Susceptibility Interfaces: MRI Simulations and Experiments, pp. 1607-1610.

DE GUIO, Francois — Cemagref
BENOIT-CATTIN, Hugues — INSA Lyon
DAVENEL, Armel — Cemagref

09:30-09:45 FrA03.5

ICA for Ovary Tissue Classification of Perfusion Magnetic Resonance Images, pp. 1611-1614.

Rieta, J. J. — Valencia Univ. of Tech.
Moratal, David — Univ. Pol. de Valčncia
Martí-Bonmatí, Luis — Hospital Quirón-Valencia
Molina, Raquel — EPSG
Vallés-Lluch, Ana — Univ. Pol. de Valčncia
Sanz-Requena, Roberto — Hospital Quirón-Valencia

09:45-10:00 FrA03.6

Neural Physiological Modeling towards a Hemodynamic Response Function for Fmri, pp. 1615-1618.

Afonso, David Miguel — Inst. Superior Técnico / Inst. de Sistemas e Robótica
Sanches, João — Inst. Superior Técnico / Inst. de SistemaseRobótica
Lauterbach, Martin Hagen — Univ. de Lisboa

FrA04 — Bellecour 3

Optical Imaging I (Oral Session)

08:30-08:45 FrA04.1

Backscattered Stokes Vectors of Turbid Media: Anisotropy Factor and Reduced Scattering Coefficient Estimation, pp. 1619-1622.

Falconet, Julie — Univ. de Lyon, Univ. Lyon1
Sablong, Raphaël — Univ. Claude Bernard Lyon 1
PERRIN, Emmanuel — Univ. Lyon 1
Jaillon, Franck — National Univ. of Singapore
Saint-Jalmes, Hervé — Univ. de Lyon, Univ. Lyon1

08:45-09:00 FrA04.2

Model-Based Detection of White Matter in Optical Coherence Tomography Data, pp. 1623-1626.

Gasca, Fernando — Univ. Iberoamericana, Mexico City
Ramrath, Lukas — Univ. of Lübeck

09:00-09:15 FrA04.3

Retinal Blood Oxygen Saturation Mapping by Multispectral Imaging and Morphological Angiography, pp. 1627-1630.

Arimoto, Hidenobu — Natl Inst. of Advd Industrial Sci & Tech.
Furukawa, Hiromitsu — National Inst. of Advanced Industrial Science and Tech.

09:15-09:30 FrA04.4

Cells Tracking in a Live Zebrafish Embryo, pp. 1631-1634.

Melani, Camilo — Univ. de Buenos Aires
Campana, Matteo — Bologna Univ.
lombardot, benoit — CNRS - Ec. Pol.
Rizzi, Barbara — Bologna Univ.
Veronesi, Federico — Univ. of Bologna
Zanella, Cecilia — Bologna Univ.
Bourgine, Paul — Ec. Pol.
Mikula, Karol — Slovak Univ. of Tech.
Peyrieras, Nadine — CNRS
Sarti, Alessandro — Univ. of Bologna

09:30-09:45 FrA04.5

Optical Imaging of Electrically Evoked Visual Signals in Cats: I. Responses to Corneal and Intravitreal Electrical Stimulation, pp. 1635-1638.

Wong, Yan Tat — Univ. of New South Wales
Hallum, Luke E. — Univ. of New South Wales
Chen, Spencer Chin-Yu — Univ. of New South Wales
Dommel, Norbert Brian — Univ. of New South Wales
Cloherty, Shaun L — Univ. of New South Wales
Morley, John William — Univ. of Western Sydney
Suaning, Gregg — The Univ. of Newcastle
Lovell, Nigel H — Univ. of New South Wales

09:45-10:00 FrA04.6

FDTD Simulation of Electromagnetic Wave Scattering from Retina Cells, pp. 1639-1642.

Abdallah, Samer — Univ. of Waterloo
Ramahi, Omar — Univ. of Waterloo
Bizheva, Kostadinka — Univ. of Waterloo

FrA05 — Tęte d'Or Lounge

Wireless Biomedical Sensors, Body Sensor Networks and Telemetric Systems I (Oral Session)

Chair: Noury, Norbert — Univ. Joseph Fourier Grenoble

08:30-08:45 FrA05.1

Feasibility of Heart Rate Variability Measurement from Quadrature Doppler Radar Using Arctangent Demodulation with DC Offset Compensation, pp. 1643-1646.

Massagram, Wansuree — Univ. of Hawaii
Hafner, Noah — Univ. of Hawaii
Park, Byung-Kwon — Univ. of Hawaii at Manoa
Lubecke, Victor — Univ. of Hawaii Manoa
Host-Madsen, Anders — Univ. of Hawaii
Boric-Lubecke, Olga — Univ. of Hawaii Manoa

08:45-09:00 FrA05.2

ZigBee-Based Wireless Intra-Oral Control System for Quadriplegic Patients, pp. 1647-1650.

Qiyu, Peng — Lawrence Berkeley National Lab. Univ. of California
Budinger, Thomas — Lawrence Berkeley National Lab. Univ. of California

09:00-09:15 FrA05.3

Design Guidelines for Radio Frequency Non-Contact Vital Sign Detection, pp. 1651-1654.

Li, Changzhi — Univ. of Florida
Xiao, Yanming — Univ. of Florida
Lin, Jenshan — Univ.

09:15-09:30 FrA05.4

Design of an Indoor Self-Positioning System for the Visually Impaired -Simulation with RFID and Bluetooth in a Visible Light Communication System, pp. 1655-1658.

Liu, Xiaohan — Niigata Univ.
Makino, Hideo — Niigata Univ.
Kobayashi, Suguru — Niigata Univ.
Maeda, Yoshinobu — Niigata Univ.

09:30-09:45 FrA05.5

A Reconfigurable, Wearable, Wireless ECG System, pp. 1659-1662.

Borromeo, Susana — Univ. Rey Juan Carlos
Rodriguez-Sanchez, Cristina — Univ. rey Juan Carlos
Machado, Felipe — Univ. Rey Juan Carlos
Hernandez-Tamames, Juan Antonio — Univ. Rey Juan Carlos
de la Prieta, Roberto — Univ. rey Juan Carlos

09:45-10:00 FrA05.6

Fall Detection – Principles and Methods, pp. 1663-1666.

Noury, Norbert — Univ. Joseph Fourier Grenoble
Fleury, Anthony — Univ. Joseph Fourier
Rumeau, Pierre — CHU Toulouse

10:00-10:15 FrA05.7

Noise Considerations for Remote Detection of Life Signs with Microwave Doppler Radar, pp. 1667-1670.

NGUYEN, DUNG — Univ. of Hawaii, Manoa
Yamada, Shuhei — Univ. of Hawaii, Manoa
Park, Byung-Kwon — Univ. of Hawaii at Manoa
Lubecke, Victor — Univ. of Hawaii Manoa
Boric-Lubecke, Olga — Univ. of Hawaii Manoa
Host-Madsen, Anders — Univ. of Hawaii

FrA06 — Tęte d'Or 2

New Transducer Technologies, Methods and Systems (Oral Session)

Chair: Guillemaud, Regis — CEA Léti MINATEC

08:30-08:45 FrA06.1

Mapping the Human Body for Vibrations Using an Accelerometer, pp. 1671-1674.

Barbosa Rendón, David — Univ. of Cádiz
Rojas Ojeda, Juan Luis — Univ. of Cádiz
Cresp Foix, Felipe — Univ. of Cádiz
Sánchez Morillo, Daniel — Univ. of Cádiz
Fernández Granero, Miguel Ángel — Univ. of Cádiz

08:45-09:00 FrA06.2

Modelling and Design of Extremely Low Frequency Uniform Magnetic Field Exposure Apparatus for in Vivo Bioelectromagnetic Studies, pp. 1675-1678.

Cvetkovic, Dean — RMIT Univ.
Cosic, Irena — RMIT Univ.

09:00-09:15 FrA06.3

An Ultrawideband Radar Based Pulse Sensor for Arterial Stiffness Measurement, pp. 1679-1682.

Tao, Teh-Ho — Industrial Tech. Res. Inst.
Hu, Shih Jen — ITRI
Kuo, Su-Chen — Industrial Tech. Res. Inst.
PENG, JIA-HUNG — ITRI

09:15-09:30 FrA06.4

Measurement of Heart Sounds with EMFi Transducer, pp. 1683-1686.

Kärki, Satu — Tampere Univ. of Tech.
Lekkala, Jukka — Tampere Univ. of Tech.
Kääriäinen, Minna — Tampere Univ. Hospital

09:30-09:45 FrA06.5

Direction Dependent Response of Human Skin, pp. 1687-1690.

Tanaka, Nobuyuki — Hiroshima Univ.
Kaneko, Makoto — Hiroshima Univ.

FrA07 — Bellecour 2

Vascular Hemodynamics (Oral Session)

Chair: Li, John K-J. — Rutgers Univ.
Co-Chair: Barnea, Ofer — Tel Aviv Univ.

08:30-08:45 FrA07.1

A Semi-Automatic Feature Detection Algorithm for Hemodynamic Signals Using Curvature-Based Feature Extraction, pp. 1691-1694.

Mynard, Jonathan — Murdoch Children's Res. Inst.
Penny, Daniel — Murdoch Children's Res. Inst.
Smolich, Joseph — Murdoch Children's Res. Inst.

08:45-09:00 FrA07.2

Energetics in Arterioles During Nitric Oxide Dependent and Independent Vasodilation, pp. 1695-1698.

Shibata, Masahiro — Univ. of Tokyo
Yamakoshi, Takehiro — Kanazawa Univ.
Yamakoshi, Ken-ichi — Kanazawa Univ.

09:00-09:15 FrA07.3

Simulation of the Interaction between Blood Flow and Atherosclerotic Plaque, pp. 1699-1702.

Li, Zhi-Yong — Univ. of Cambridge
Gillard, Jonathan H. — Univ. of Cambridge

09:15-09:30 FrA07.4

Assessment of Pulse Wave Velocity and Augmentation Index in Different Arteries in Patients with Severe Coronary Heart Disease, pp. 1703-1706.

Hlimonenko, Irina — Tallinn Univ. of Tech.
Meigas, Kalju — Tallinn Univ. of Tech.
Viigimaa, Margus — Tech. of the Tallinn Inst. of Tech.
Temitski, Kristina — Tallinn Univ. of Tech.

09:30-09:45 FrA07.5

Relationships between Blood Pressure and Systolic Time-Intervals: A Lumped-Model Simulation Study, pp. 1707-1710.

Aubert, Xavier — Philips Res. Lab. Aachen
Muehlsteff, Jens — Philips
Zhu, Cheng — RWTH Aachen Univ.

FrA08 — Gratte Ciel Lounge

Neural Stimulation I (Oral Session)

Chair: Veltink, Peter — Univ. of Twente
Co-Chair: Troyk, Philip — Illinois Inst. of Tech.

08:30-08:45 FrA08.1

Computation of the Electrical Potential Inside the Nerve Induced by an Electrical Stimulus, pp. 1711-1714.

Jacquir, Sabir — INRIA
Fruitet, Joan — ENS
Guiraud, David — INRIA
Clerc, Maureen — ENPC, ENS, INRIA

08:45-09:00 FrA08.2

The Role of Tissue Heterogeneity in Neural Stimulation by Applied Electric Fields, pp. 1715-1718.

Miranda, Pedro — Faculty of Science, Univ. of Lisbon
Correia, Ludovic — Faculdade de Ciencias, Univ. de Lisboa
Salvador, Ricardo — Faculty of Science, Univ. of Lisbon, Inst. of Biophysic
Basser, Peter — NIH

09:00-09:15 FrA08.3

Conduction Block Induced by High Frequency AC Stimulation in Unmyelinated Nerves, pp. 1719-1722.

Joseph, Laveeta — Georgia Inst. of Tech.
Haeffele, Benjamin David — Georgia Inst. of Tech.
Butera, Robert — Georgia Inst. of Tech.

09:15-09:30 FrA08.4
NIR Light Penetration in the Rat Peripheral Nerve and Brain Cortex, pp. 1723-1725.
Sahin, Mesut — New Jersey Inst. of Tech.

09:30-09:45 FrA08.5
Assessing Polarization of AIROF Microelectrodes, pp. 1726-1729.
Troyk, Philip — Illinois Inst. of Tech.
Hu, Zhe — Illinois Inst. of Tech.
Cogan, Stuart — EIC Lab. Inc.

09:45-10:00 FrA08.6
IMES: An Implantable Myoelectric Sensor, pp. 1730-1733.
Troyk, Philip — Illinois Inst. of Tech.
DeMichele, Glenn — Sigenics Inc.
Kerns, Douglas — Sigenics Inc.
Weir, Richard — Rehabilitation Inst. of Chicago

FrA09 — Gratte Ciel 3
Human-Robot Interactions I (Oral Session)
Chair: Alsaraira, Amer — Monash Univ.
Co-Chair: Sakai, Kensaku — AIST

08:30-08:45 FrA09.1
Tool/tissues Interaction Modeling for Transluminal Angioplasty Simulation, pp. 1734-1737.
Le Fol, Tanguy — LTSI
Haigron, Pascal — Univ. of Rennes 1
Lucas, Antoine — CHU Rennes

08:45-09:00 FrA09.2
A New Method for Optimized Laser Treatment by Laser Focus Navigation and Distance Visualization, pp. 1738-1741.
Stopp, Sebastian — Tech. Univ. Munich
Svejdar, Daniel — Tech. Univ. München
Deppe, Herbert — Tech. Univ. München
Lueth, Tim — Tech. Univ. of Munich

09:00-09:15 FrA09.3
A Computer-Based Real-Time Simulation of Interventional Radiology, pp. 1742-1745.
Wang, Fei — Swiss Federal Inst. of Tech. Lausanne
Duratti, Lindo — Swiss Federal Inst. of Tech. Lausanne
Samur, Evren — Ec. Pol. Fédérale de Lausanne (EPFL)
Spaelter, Ulrich — Ec. Pol. Fédérale de Lausanne
Bleuler, Hannes — Ec. Pol. Fédérale de Lausanne, EPFL

09:15-09:30 FrA09.4
Design of a Medical Simulator for Subcutaneous Contraceptive Implant Insertion, pp. 1746-1749.
Jardin, Audrey — Inst. National des Sciences Appliquées (INSA de Lyon)
Moreau, Richard — INSA-Lyon
Pham, Minh Tu — Inst. National des Sciences Appliquées (INSA de Lyon)
Mallet, Aurelien — INSA de Lyon
Redarce, Tanneguy — Inst. National des Sciences Appliquées (INSA de Lyon)
Dupuis, Olivier — Hospices Civils de Lyon

09:30-09:45 FrA09.5
Mechatronic Resectoscope Emulator for a Surgery Simulation Training System of the Prostate, pp. 1750-1753.
Padilla Castañeda, Miguel Angel — Univ. Nacional Autonoma de Mexico
Altamirano del Monte, Felipe — UNAM
Arámbula Cosío, Fernando — National Autonomous Univ. of México
Marquez, Jorge Alberto — UNAM-CCADET

09:45-10:00 FrA09.6
Modeling of the Changes in Heart Rate and Blood Pressure with Characteristic Respiratory Waveform During Surgery under Local Anesthesia, pp. 1754-1757.
Sakai, Kensaku — AIST
Matsui, Toshihiro — AIST

FrA10 — Rhône 1
Clinical Engineering I (Oral Session)
Chair: Sloane, Elliot B. — Villanova Univ.

08:30-08:45 FrA10.1
Health Technology Assessment on Reprocessing Single-Use Catheters for Cardiac Electrophysiology: Results of a Three-Years Study, pp. 1758-1761.
Tessarolo, Francesco — Univ. of Trento
Disertori, Marcello — Azienda Provinciale per i Servizi Sanitari
Caola, Iole — Azienda Provinciale per i Servizi Sanitari
Guarrera, Giovanni Maria — Azienda Provinciale per i Servizi Sanitari
Favaretti, Carlo — Azienda Provinciale per i Servizi Sanitari
Nollo, Giandomenico — Univ. of Trento

08:45-09:00 FrA10.2
Assessment of User Perspectives of Cardiac Point of Care Technologies in Chest Pain Diagnosis, pp. 1762-1765.
FitzGibbon, Francis — Univ. of Ulster
Brown, Alan — Univ. of Ulster
Meenan, Brian — Univ. of Ulster

09:00-09:15 FrA10.3

Cost-Return Prediction in Morbidly Obese Employees Following Weight Loss Interventions: A Study Framework, pp. 1766-1769.

Windyga, Piotr — Univ. of Central Florida
Keith, Kim — Florida Hospital Celebration Health
Vickie, White — Florida Hospital Celebration Health
Leon, Michael — Florida Hospital Celebration Health
Bag, Anirban — UCF
Chen, Wei — UCF

09:15-09:30 FrA10.4

Prediction of Glucose Excursions under Uncertain Parameters and Food Intake in Intensive Insulin Therapy for Type 1 Diabetes Mellitus, pp. 1770-1773.

Calm, Remei — Univ. de Girona
García Jaramillo, Maira Alejandra — Univ. of Girona
Vehi, Josep — Univ. of Girona
Bondia, Jorge — Tech. Univ. of Valencia
Tarín, Cristina — Tech. Univ. of Valencia
Garcia-Gabin, Winston — Univ. of Girona

09:30-09:45 FrA10.5

An Experimental Architecture for Observation of Triage Related Decision Making, pp. 1774-1777.

Farmer, Katherine — Dartmouth Coll.
McGrath, Susan — Dartmouth Coll.
Blike, George — Dartmouth Hitchcock Medical Center

09:45-10:00 FrA10.6

Management of Medical Technology - Case Study of a Major Acute Hospital, pp. 1778-1781.

Brown, Ian — Monash Univ.
Smale, Andrew — Monash Univ.

10:00-10:15 FrA10.7

The Role of the Clinical Engineer in the Design of New Hospitals, pp. 1782-1785.

DECOUVELAERE, MARTINE — HOSPICES CIVILS DE LYON
BERRARD, ERIC — HOSPICES CIVILS DE LYON
FABREGA, Danielle — HOPITAL EDOUARD HERRIOT

FrA11 — Tęte d'Or 1

Personal Health Systems II (Oral Session)

Chair: Tyrer, Harry — Univ. of Missouri - Columbia
Co-Chair: Celler, Branko George — Univ. of New South Wales

08:30-08:45 FrA11.1

A Concept for ICT Assisted Health Promotion in the Occupational Healthcare, pp. 1786-1789.

Mattila, Elina — VTT
Koskelo, Jukka — Finnish Inst. of Occupational Health
Lappalainen, Raimo — Univ. of Jyväskylä
Salminen, Jukka — Nokia
Nyman, Petri — Afetco Ltd.
Lähteenmäki, Jaakko, Johannes — VTT Tech. Res. Centre of Finland
Leino, Timo — Finnish Inst. of Occupational Health
Korhonen, Ilkka — VTT

08:45-09:00 FrA11.2

Biomedical Digital Assistant for Ubiquitous Healthcare, pp. 1790-1793.

Lee, Tae Soo — Chungbuk National Univ.
Hong, Joo Hyun — Chungbuk National Univ.
Cho, Myeong-Chan — Chungbuk National Univ.

09:00-09:15 FrA11.3

An M-Health Monitoring System for Children with Suspected Arrhythmias, pp. 1794-1797.

Kyriacou, Efthyvoulos — Univ. of Cyprus
Pattichis, Constantinos — Univ. of Cyprus
Pattichis, Marios — Univ. of New Mexico,
Jossif, Antonis — Makareios Hospital
Paraskeva, Loucas — Univ. of Cyprus
Constantinides, Angelos — Univ. of Cyprus
Vogiatzis, Dimitrios — Univ. of Cyprus

09:15-09:30 FrA11.4

Wireless Vital Sign Monitoring Using Ultra Wideband-Based Personal Area Networks, pp. 1798-1801.

Takizawa, Kenichi — National Inst. of Information andCommunicationsTechnology

09:30-09:45 FrA11.5

Ontology-Based Approach for Managing Personal Health and Wellness Information, pp. 1802-1805.

Sachinopoulou, Anna — VTT
Leppänen, Juha — VTT
Kaijanranta, Hannu Sakari — VTT
Lähteenmäki, Jaakko, Johannes — VTT Tech. Res. Centre of Finland

FrA12 Rhône 2

Health Technologies and Private Public Partnerships in Emerging Markets: Example Projects to Learn from I (Invited Session)

Chair: Roes, Jan — Pernosco
Organizer: Roes, Jan — Pernosco

08:30-08:45 FrA12.1

Private Public Collaborations in Emergent Innovation Programs (I), pp. 1806-1807.

Roes, Jan — Pernosco
Such, Olaf — Philips

FrA13 Roseraie 1,2

Gerotechnology (Invited Session)

Chair: Micera, Silvestro — Scuola Superiore Sant'Anna
Co-Chair: Tamura, Toshiyo — Chiba Univ. Gradute School of Engineering
Organizer: Micera, Silvestro — Scuola Superiore Sant'Anna

08:30-08:45 FrA13.1

PC-Based Rehabilitation Tool for the Elderly (I), pp. 1808-1809.

Tamura, Toshiyo — Chiba Univ. Gradute School of Engineering

08:45-09:00 FrA13.2

Older Adult Perceptions of Smart Home Technologies: Implications for Research, Policy & Market Innovations in Healthcare (I), pp. 1810-1815.

Coughlin, Joseph — Massachusetts Inst. of Tech.
D'Ambrosio, Lisa — Massachusetts Inst. of Tech.
Reimer, Bryan — Massachusetts Inst. of Tech.
Pratt, Michelle — Massachusetts Inst. of Tech.

09:00-09:15 FrA13.3

Preliminary Experiments on the Acceptability of Animaloid Companion Robots by Older People with Early Dementia (I), pp. 1816-1819.

Odetti, Luca — Scuola Superiore Sant'Anna

09:15-09:30 FrA13.4

A Wearable Pelvic Sensor Design for Drop Foot Treatment in Post-Stroke Patients (I), pp. 1820-1823.

O'Keeffe, Derek — Univ. of Limerick
Gates, Deanna — Harvard Medical School
Bonato, Paolo — Harvard Medical School

09:30-09:45 FrA13.5

Body Surface Mounted Biomedical Monitoring System_; Using Bluetooth (I), pp. 1824-1825.

Nambu, Masayuki — Osaka Electro-Communication Univ.

09:45-10:00 FrA13.6

Development of a Fully Automated Network System for Long-Term Health-Care Monitoring at Home (I), pp. 1826-1829.

Motoi, Kosuke — Kanazawa Univ.
Kubota, Shinnosuke — Kanazawa Univ.
Ikarashi, Akira — Ishikawa Sunrise Industries Creation
Nogawa, Masamichi — Kanazawa Univ.
Tanaka, Shinobu — Kanazawa Univ.
Nemoto, Tetsu — Univ. of Kanazawa
Yamakoshi, Ken-ichi — Kanazawa Univ.

FrP1A1 Forum 5&6

Time-Frequency and Time-Scale Analysis V (Poster Session)

10:30-12:00 FrP1A1.1

Combined Method for Artifact Reduction in Surface Electroenterogram, pp. 1830-1833.

Ye, Yiyao — Univ. Pol. de Valencia
Garcia-Casado, Javier — Univ. Pol. de Valencia
Martinez-de-Juan, Jose Luis — Centro de investigación e Innovación
Álvarez Martínez, David — Hospital Univ. La Fe de Valencia
Prats-Boluda, Gema — Centro de investigación e Innovación en Bioingeniería
Ponce, Jose Luis — Hospital Univ. La Fe

10:30-12:00 FrP1A1.2

Migraine Detection through Spontaneous EEG Analysis, pp. 1834-1837.

Bellotti, Roberto — Univ. of Bari
De Carlo, Francesco — Univ. of Bari
de Tommaso, Marina — Univ. of Bari
Lucente, Mariangela — Univ. of Bari

10:30-12:00 FrP1A1.3

Wavelet Bidomain Regularity Analysis to Predict Spontaneous Termination of Atrial Fibrillation, pp. 1838-1841.

Alcaraz Martinez, Raul — Univ. of Castilla-La Mancha
Rieta, J. J. — Valencia Univ. of Tech.

10:30-12:00 FrP1A1.4

Alterations in Human ECG Due to the MagnetoHydroDynamic Effect: A Method for Accurate R Peak Detection in the Presence of High MHD Artifacts, pp. 1842-1845.

Abi-Abdallah, Dima — Univ. of Tech. of Compičgne
Robin, Vincent — UTC
Drochon, Agnčs — UTC
Fokapu, Odette — UTC

10:30-12:00 FrP1A1.5

Wavelet Analysis for Quantification of Mental Stress Stage by Finger-Tip Photo-Plethysmography, pp. 1846-1849.

Kageyama, Yu — Tokyo Denki Univ.

10:30-12:00 FrP1A1.6

An Analogue Bandpass Filter Realisation of the Continuous Wavelet Transform, pp. 1850-1854.

Casson, Alexander James — Imperial Coll. London
Yates, David — Imperial Coll. London
Patel, Shyam — Imperial Coll. London
Rodriguez-Villegas, Esther — Imperial Coll. London

10:30-12:00 FrP1A1.7

A Robust Method to Estimate Time Split in Second Heart Sound Using Instantaneous Frequency Analysis, pp. 1855-1858.

YILDIRIM, ISA — Univ. OF ILLINOIS AT CHICAGO
Ansari, Rashid — Univ. OF ILLINOIS AT CHICAGO

10:30-12:00 FrP1A1.8

Subband Features Based on Higher Order Statistics for ECG Beat Classification, pp. 1859-1862.

Chen, Ying-Hsiang — National Chung Cheng Univ.
Yu, Sung-Nien — National Chung Cheng Univ.

10:30-12:00 FrP1A1.9

ECG Data Compression Using Jacobi Polynomials, pp. 1863-1867.

TCHIOTSOP, Daniel — IUT FOTSO Victor - Univ. of Dschang
Wolf, Didier — Nancy-Univ.
Louis-Dorr, Valerie — Nancy-Univ.
Husson, Rene — Nancy-Univ.

10:30-12:00 FrP1A1.10

A Comparative Study of Wavelet Denoising of Surface Electromyographic Signals, pp. 1868-1871.

Jiang, Ching-Fen — I-Shou Univ.
Kuo, Shou-Long — I-Shou Univ.

10:30-12:00 FrP1A1.11

Spectral Characterization of Human EHG Frequency Components Based on the Extraction and Reconstruction of the Ridges in the Scalogram, pp. 1872-1875.

TERRIEN, Jeremy — Reykjavik Univ.
Marque, Catherine — Univ. of Tech. of compiegne
Karlsson, Brynjar — Reykjavik Univ.

10:30-12:00 FrP1A1.12

Wavelet Packet Decomposition of a New Filter -Based on Underlying Neural Activity for ERP Classification, pp. 1876-1879.

Raiesdana, Somayeh — Islamic Azad Univ. Qazvin Branch, Qazvin, IRAN
Shamsollahi, Mohammad Bagher — Sharif Univ. of Tech.
Hashemi, Mohammad Reza — Amir Kabir Univ. of Tech.
Mohammad Rezazadeh, Iman — Islamic Azad Univ.

10:30-12:00 FrP1A1.13

Analysis of Muscular Fatigue During Cyclic Dynamic Movement, pp. 1880-1883.

Cao, Hua — Univ. de Tech. de Compičgne
El Hajj Dib, Imad — Univ. of Tech. of Compičgne
Antoni, Jérôme — Univ. de Tech. de Compičgne
Marque, Catherine — Univ. of Tech. of compiegne

10:30-12:00 FrP1A1.14

Wavelet Based Approach for Posture Transition Estimation Using a Waist Worn Accelerometer, pp. 1884-1887.

Bidargaddi, Niranjan — CSIRO
Klingbeil, Lasse — CSIRO ICT Centre
sarela, antti ilmari — csiro
Boyle, Justin — CSIRO ICT Centre
Cheung, Vivian Hoi Yee — CSIRO ICT Centre
Yelland, Catherine — Princess Alexandra Hospital
Gray, Leonard Charles — Univ. of Queensland
Karunanithi, Mohan — CSIRO ICT Centre

10:30-12:00 FrP1A1.15

Wavelet-Based Scale-Dependent Detection of Neurological Action Potentials, pp. 1888-1891.

Escola, Ricardo — CEA Léti MINATEC
Bonnet, Stéphane — CEA Léti MINATEC
Magnin, Isabelle — INSA
Guillemaud, Regis — CEA Léti MINATEC

10:30-12:00 FrP1A1.16

Application of the Matching Pursuit Method in a Fetal Phonocardiographic Telemedicine System, pp. 1892-1895.

Horvath, Csaba — Budapest Univ. of Tech. & Ec.
Üveges, Bálint Áron — Peter Pazmany Catholic Univ.
Kovacs, Ferenc — Pazmany Peter Catholic Univ.
Hosszu, Gabor — Budapest Univ. of Tech. and Ec.

10:30-12:00 FrP1A1.17

BSeg++: A Modified Blind Segmentation Method for Ballistocardiogram Cycle Extraction, pp. 1896-1899.

Kaminska, Bozena — SIMON FRASER Univ.
Akhbardeh, Alireza — Tampere Univ. of Tech.
Tavakolian, Kouhyar — Simon Fraser Univ.

10:30-12:00 FrP1A1.18

Wavelet Filtering Based on Mellin Transform Dedicated to Biomedical Application, pp. 1900-1903.

Derbel, Amira — ENIS
KALLEL, Fathi — ENIS
Ben HAMIDA, Ahmed — ENIS
SAMET, Mounir — ENIS

10:30-12:00 FrP1A1.19

EMD-Based 60-Hz Noise Filtering of the ECG, pp. 1904-1907.

Nimunkar, Amit — Univ. of Wisconsin-Madison
Tompkins, Willis J. — Univ. of Wisconsin - Madison

10:30-12:00 FrP1A1.20

Analysis of Fetal Heart Rate in Healthy and Pathological Pregnancies Using Wavelet-Based Features, pp. 1908-1911.

Spyridou, Kyriaki — Aristotle Univ. of Thessaloniki
Hadjileontiadis, Leontios — Aristotle Univ. of Thessaloniki

10:30-12:00 FrP1A1.21

Wavelet-Based Analysis of Nocturnal Snoring in Apneic Patients Undergoing Polysomnography, pp. 1912-1915.

Matsiki, Dimitra — Aristotle Univ. of Thessaloniki
Deligianni, Xeni — Aristotle Univ. of Thessaloniki
Vlachogianni-Daskalopoulou, Efi — 'St. Paul' General Hospital
Hadjileontiadis, Leontios — Aristotle Univ. of Thessaloniki

10:30-12:00 FrP1A1.22

Electroconvulsive Therapy: A Model for Seizure Detection by a Wavelet Packet Algorithm, pp. 1916-1919.

Shahidi Zandi, Ali — The Univ. of British Columbia (UBC)
Tafreshi, Reza — Texas A&M Univ.
Dumont, Guy — Univ. of British Columbia
Ries, Craig — Univ. of British Columbia
MacLeod, Bernard — Univ. of British Columbia
Puil, Ernie — Univ. of British Columbia

10:30-12:00 FrP1A1.23

Automated Peak Decomposition of Evoked Potential Signals Using Wavelet Transform Singularity Detection, pp. 1920-1923.

McCooey, Conor — Royal Melbourne Intitute of Tech. (RMIT) Univ.
Kant Kumar, Dinesh — RMIT Univ.

10:30-12:00 FrP1A1.24

Introducing a New Multi-Wavelet Function Suitable for Semg Signal to Identify Hand Motion Commands, pp. 1924-1927.

khezri, mahdi — sharif Univ. of Tech.
Jahed, Mehran — Sharif Univ. of Tech.

FrP1A2 — Forum 5&6

Nonlinear Dynamic Analysis of Biomedical Signals IV (Poster Session)

10:30-12:00 FrP1A2.1

Automatic Identification of Spike-Wave Events and Non-Convulsive Seizures with a Reduced Set of Electrodes, pp. 1928-1931.

Jacquin, Arnaud — Brainscope Company, Inc.
Causevic, Elvir — Brainscope Company, Inc.
John, E. Roy — NYU

10:30-12:00 FrP1A2.2

Temporal Suppression of Long-Latency Click-Evoked Otoacoustic Emissions, pp. 1932-1936.

Verhulst, Sarah — Danish Tech. Univ.
Harte, James M. — Danish Tech. Univ.
Dau, Torsten — Danish Tech. Univ.

10:30-12:00 FrP1A2.3

Obstructive Sleep Apnea Detection Using Clustering Classification of Nonlinear Features from Nocturnal Oximetry, pp. 1937-1940.

Álvarez, Daniel — Univ. of Valladolid
Hornero, Roberto — Univ. of Valladolid
Marcos, J. Victor — Univ. de Valladolid
del Campo, Félix — Hospital del Río Hortega
López, Miguel — Univ. of Valladolid

10:30-12:00 FrP1A2.4

Feature Extraction of Mental Task in BCI Based on the Method of Approximate Entropy, pp. 1941-1944.

Wang, Lei — Hebei Univ. of Tech.
Xu, Guizhi — Hebei Univ. of Tech.
Wang, Jiang — TangShan Vocation and Tech. Coll.
Yang, Shuo — Hebei Univ. of Tech.
Yan, Weili — Hebei Univ. of Tech.

10:30-12:00 FrP1A2.5

Assessment of Suspected Aortic Stenosis by Auto Mutual Information Analysis of Murmurs, pp. 1945-1948.

Ahlstrom, Christer — Linköpings Univ.
Ask, Per — Linköpings Univ.
Rask, Peter — Örebro Univ. Hospital
Karlsson, Jan-Erik — County Hospital Ryhov, Jönköping
Nylander, Eva — Faculty of health sciences
Dahlström, Ulf — Faculty of health sciences, Linköpings Univ.
Hult, Peter — Linköpings Univ.

10:30-12:00 FrP1A2.6

Modeling State Entropy of the EEG and Auditory Evoked Potentials - Hypnotic and Analgesic Interactions, pp. 1949-1952.

Castro, Ana — Faculdade de Ciençias da Univ. do Porto
Amorim, Pedro — Hospital Geral de Santo António
Nunes, Catarina S — Faculdade de Ciencias da Univ. do Porto

10:30-12:00 FrP1A2.7

Non-Linear Analysis of Intracranial Electroencephalogram Recordings with Approximate Entropy and Lempel-Ziv Complexity for Epileptic Seizure Detection, pp. 1953-1956.

Abásolo, Daniel — Univ. of Valladolid
James, Christopher — Univ. of Southampton
Hornero, Roberto — Univ. of Valladolid

10:30-12:00 FrP1A2.8

Non-Linear Organization Analysis of Paroxysmal Atrial Fibrillation, pp. 1957-1960.

Alcaraz Martinez, Raul — Univ. of Castilla-La Mancha
Rieta, J. J. — Valencia Univ. of Tech.

10:30-12:00 FrP1A2.9

Fractal Based Modelling and Analysis of Electromyography (EMG) to Identify Subtle Actions, pp. 1961-1964.

Poosapadi Arjunan, Sridhar — RMIT Univ.
Kant Kumar, Dinesh — RMIT Univ.

10:30-12:00 FrP1A2.10

Understanding Ageing Effects by Approximate Entropy Analysis of Gait Variability, pp. 1965-1968.

Karmakar, Chandan Kumar — The Univ. of Melbourne
Khandoker, Ahsan Habib — The Univ. of Melbourne
Begg, Rezaul — Victoria Univ.
Palaniswami, Marimuthu — The Univ. of Melbourne
Taylor, Simon — Victoria Univ.

10:30-12:00 FrP1A2.11

Complementary Methods for Interpreting Brain Signals: Linear versus Nonlinear Techniques, pp. 1969-1972.

Bucolo, Maide — Univ. degli Studi di Catania
Di Grazia, Federica — Univ. of Catania
Fortuna, Luigi — Univ. of Catania
Frasca, Mattia — Univ. of Catania
Sapuppo, Francesca — Univ. degli Studi di Catania
Shannahoff-Khalsa, David — Univ. of California, San Diego

10:30-12:00 FrP1A2.12

Dynamics Analysis of Electrogastrography Using Double-Wayland Algorithm, pp. 1973-1976.

Matsuura, Yasuyuki — Nagoya City Univ.
Yokoyama, Kiyoko — Nagoya City Univ.
Takada, Hiroki — Gifu Univ. of Medical Science
Shimada, Katsuhiko — Nagoya City Univ.

10:30-12:00 FrP1A2.13

Rotation Algorithm for Determining Cycle Thresholds in Real-Time Polymerase Chain Reactions, pp. 1977-1980.

Kurnik, Ronald — Roche Molecular Systems

10:30-12:00 FrP1A2.14

Circular Correlation Methods for the Analysis of Oscillations in Dependent Time Series, pp. 1981-1984.

Jentsch, Uwe — Tech. Univ. Ilmenau
Ivanova, Galina — Tech. Univ. Ilmenau

10:30-12:00 FrP1A2.15

Analysis of the Phase Locking Index for Measuring of Interdependency of Cortical Signals Recorded in the EEG, pp. 1985-1991.

Sazonov, Andrei Vladimirovich — Eindhoven Univ. of Tech.
Ho, Chin Keong — Eindhoven Univ. of Tech.
Bergmans, Johannes Wilhelmus Maria — Eindhoven Univ. of Tech.
Arends, Johan B.A.M. — Epilepsy Center Kempenhaeghe
Griep, Paul — Epilepsy Centre Kempenhaeghe
Verbitskiy, Evgeny A. — Philips Res. Lab.
Cluitmans, Pierre J.M. — Eindhoven Univ. of Tech.
Boon, Paul — Univ. Hospital Ghent, Lab. for Clinical and Experimen

10:30-12:00 FrP1A2.16

Analysis of Correlations in Heart Dynamics in Wake and Sleep Phases, pp. 1992-1995.

Muńoz-Diosdado, Alejandro — Inst. Pol. Nacional México
Gálvez-Coyt, Gonzalo — UPIBI, Inst. Pol. Nacional MEXICO
Bueno-Hernández, Diana — UPIBI, Inst. Pol. Nacional, MEXICO
Reyes-Cruz, Héctor — UPIBI, Inst. Pol. Nacional, MEXICO

10:30-12:00 FrP1A2.17

Phase Space Analysis of Event Related Potential During Episodic Memory Retrieval, pp. 1996-1999.

Ghoshuni, Majid — Islamic Azad Univ. of Mashhad Branch
Motie Nasrabadi, Ali — Shahed Univ.
Khalilzadeh, Mohammad Ali — Islamic Azad Univ. of Mashhad Branch
Hashemi, Mohammad Reza — Amir Kabir Univ. of Tech.

10:30-12:00 FrP1A2.18

An Investigation on Chaotic Approach to Detect Functional Gastrointestinal Disorders, pp. 2000-2003.

Zandi Mehran, Yasaman — Islamic Azad Univ. Science and Res. Branch,
Motie Nasrabadi, Ali — Shahed Univ.
Hashemi Golpayegani, Mohammad Reza — Amirkabir Univ. of Tech. (Tehran Pol.

10:30-12:00 FrP1A2.19

An Algorithm for Phase-Space Detection of the P Characteristic Points, pp. 2004-2007.

Herreros López, Alberto — Univ. of Valladolid
Johansson, Rolf — Lund Univ.
Baeyens Lázaro, Enrique — Univ. of Valladolid
Carlson, Jonas — Lund Univ.
Olsson, Bertil — Lund Univ.
Perán, José Ramón — Univ. of Valladolid

10:30-12:00 FrP1A2.20

A Method for Detecting Nonlinear Determinism in Normal and Epileptic Brain EEG Signals, pp. 2008-2011.

Meghdadi, Amir Hossein — Univ. of Manitoba
Fazel-Rezai, Reza — Univ. of Manitoba
Aghakhani, Yahya — Univ. of Manitoba

10:30-12:00 FrP1A2.21

Shape-Based Matching of ECG Recordings, pp. 2012-2018.

Syeda-Mahmood, Tanveer — IBM Almaden Res. Center
Beymer, David — IBM Almaden Res. Center
Wang, Fei — IBM Almaden Res. Center

10:30-12:00 FrP1A2.22

A New Multi Criteria Classification Approach in a Multi Agent System Applied to SEEG Analysis, pp. 2019-2022.

kinie, abel — Univ. rennes 1, iut de saint malo
Ndiaye, mamadou — Univ. rennes 1, iut saint malo
MONTOIS, JEAN JACQUES — Univ. rennes 1, IUT de Saint Malo
Jacquelet, Yann — Univ. de Rennes 1, IUT de Saint Malo

FrP1B1 — Forum 5&6
MRI: Novel Applications II (Poster Session)

10:30-12:00 FrP1B1.1

Exploratory Analysis of Functional Connectivity Network in Acupuncture Study by a Graph Theory Mode, pp. 2023-2026.

Bai, Lijun — Life Science Res. Center, Xidian Univ.
Tian, Jie — Inst. of Automation,Chinese Acad. of Sciences
QIn, Wei — CASIA
Pan, Xiaohong — Beijing Normal Univ.

10:30-12:00 FrP1B1.2

Texture Measure from Low Resolution MR Images to Determine Trabecular Bone Integrity in Osteoporosis, pp. 2027-2030.

Tameem, Hussain — Univ. of California Los Angeles
Selva, Luis — Univ. of California Los Angeles
Sinha, Usha — UCLA

10:30-12:00 FrP1B1.3

Prognostic Value of Brain Tissue Pathological Changes in Patients with Clinically Isolated Syndromes (CIS) Suggestive of Multiple Sclerosis Using Magnetization Transfer Ratio (MTR), pp. 2031-2033.

fooladi, masumeh — medical sciences/Univ. tehran
Riyahi-Alam, Nader — School of Medicine, Medical Sciences/Univ. of Tehran
harirchian, mohammad hosein — medical sciences/Univ. tehran
firuznia, kavoos — medical sciences/Univ. tehran
Oghabian, Mohammad Ali — Tehran Univ. of Medical Sciences
shakiba, madjid — medical sciences/Univ. tehran
Rafie, Behrouz — Tehran Univ. of Medical Sciences
Bakhtiary, Morteza — Tehran Univ. of Medical Sciences (TUMS)

10:30-12:00 FrP1B1.4

A Study of Femoral Artery by Twin Drivers in Magnetic Resonance Interference Elastography, pp. 2034-2037.

Zheng, Ying — The Univ. of Hong Kong
Chan, Queenie C. C. — Philips Electronics Hong Kong Limited
Li, Geng — The Univ. of Hong Kong
Lam, Edmund Y. — Univ. of Hong Kong
Yang, Edward — Univ. of Hong Kong

10:30-12:00 FrP1B1.5

Fat-Saturated Diffusion-Weighted Imaging of the Rat Pelvis Using Three-Dimensional MP-RAGE MR Sequence, pp. 2038-2041.

NUMANO, Tomokazu — Tokyo Metropolitan Univ.

FrP1B2
Imaging Hardware (Poster Session)

10:30-12:00 FrP1B2.1

3D-Gradient Coil Structures for MRI Designed Using Fuzzy Membership Functions, pp. 2042-2045.

Sanchez Lopez, Hector — The Univ. of Queensland
Liu, Feng — The Univ. of Queensland
Trakic, Adnan — The Univ. of Queensland
Weber, Ewald — The Univ. of Queensland
Crozier, Stuart — The Univ. of Queensland

10:30-12:00 FrP1B2.2

Optical Cardiac and Respiratory Device for Synchronized MRI on Small Animal, pp. 2046-2049.

Rengle, Adrian — Univ. de Lyon, Univ. Lyon 1, INSA-Lyon
Baboi, Loredana Maria — Univ. de Lyon, Univ. Lyon 1, INSA-Lyon
Saint-Jalmes, Hervé — Univ. de Lyon, Univ. Lyon1
Sablong, Raphaël — Univ. Claude Bernard Lyon 1
BEUF, olivier — Univ. de Lyon, Univ. Lyon 1, INSA-Lyon

10:30-12:00 FrP1B2.3

Biopsy Needle As MRE Driver for Tumor Detection, pp. 2050-2052.

Zhao, Xiaoguang — The Univ. of Hong Kong.
Zheng, Ying — The Univ. of Hong Kong
Chan, Queenie C. C. — Philips Electronics Hong Kong Limited
Yang, Xifei — The Univ. of Hong Kong.
Li, Geng — The Univ. of Hong Kong
Yang, Edward — Univ. of Hong Kong

FrP1B3 — Forum 5&6
MR Image Reconstruction and Processing (Poster Session)

10:30-12:00 FrP1B3.1

A Modified View Ordering for Artifact Reduction in MRI, pp. 2053-2056.

Maclaren, Julian R. — Univ. of Canterbury
Bones, P. J. — Univ. of Canterbury
Millane, R. P. — Univ. of Canterbury
Watts, Richard — Univ. of Canterbury

10:30-12:00 FrP1B3.2

Cardiac Cine MR Reconstruction from Partial K-Space Using the Notion of Analytic Image, pp. 2057-2060.

YANKAM NJIWA, - — Univ.
HIBA, - — Univ.
ZHU, Yuemin — -

10:30-12:00 FrP1B3.3

Weighted Hinf Optimization Approach to Parallel MR Image Reconstruction, pp. 2061-2064.

CHEN, Zhaolin — Monash Univ.
Zhang, Jingxin — Monash Univ.
Chai, Li — Hangzhou Dianzi Univ.

10:30-12:00 FrP1B3.4

Determination of Fiber Orientation in MRI Diffusion Tensor Imaging Based on Higher-Order Tensor Decomposition, pp. 2065-2068.

Ying, Lei (Leslie) — Univ. of Wisconsin
Zou, Yi Ming — Univ. of Wisconsin - Milwaukee
Klemer, David — Univ. of Wisconsin - Milwaukee
Wang, Jiun-Jie — Chang Gung Univ.

FrP1B4 — Forum 5&6
MR Image Processing and Analysis III (Poster Session)

10:30-12:00 FrP1B4.1

An a Contrario Approach for Change Detection in 3D Multimodal Images: Application to Multiple Sclerosis in MRI, pp. 2069-2072.

Rousseau, François — CNRS - LSIIT
Faisan, Sylvain — LSIIT
Heitz, Fabrice — LSIIT
Armspach, Jean-Paul — LINC
Chevalier, Yves — Centre Hospitalier
Blanc, Frederic — LINC
de Seze, Jerome — LINC
Rumbach, Lucien — LINC

10:30-12:00 FrP1B4.2

Clinical Software for the Assessment of Trabecular Bone Disease in Distal Radius Based on a Magnetic Resonance Structural Analysis, pp. 2073-2076.

Alberich-Bayarri, Angel — Univ. Pol. de Valčncia
Nieto-Charques, Laura — Univ. Pol. de Valčncia
Moratal, David — Univ. Pol. de Valčncia
Martí-Bonmatí, Luis — Hospital Quirón-Valencia
Vallés-Lluch, Ana — Univ. Pol. de Valčncia
Rieta, J. J. — Valencia Univ. of Tech.

10:30-12:00 FrP1B4.3

Comparison of Two Strategies of Background-Accommodation: Influence on the Metabolite Concentration Estimation from in Vivo Magnetic Resonance Spectroscopy Data, pp. 2077-2080.

Cudalbu, Cristina — Univ. de Lyon, Univ. Claude Bernard Lyon1
Bucur, Adriana — Univ. de Lyon, Univ. Claude Bernard Lyon1
Graveron-Demilly, Danielle — Univ. de Lyon, Univ. Claude Bernard LYON1, CPE
BEUF, olivier — Univ. de Lyon, Univ. Lyon 1, INSA-Lyon
Cavassila, Sophie — Univ. Lyon; Univ. Lyon 1

10:30-12:00 FrP1B4.4

Elimination of RF Inhomogeneity Effects in Segmentation, pp. 2081-2084.

Agus, Onur — Bogazici Univ.
Ozkan, Mehmed — Bogazici Univ.
Aydin, Kubilay — Istanbul Univ.

10:30-12:00 FrP1B4.5

Segmentation of Brain Image Volumes Using the Data List Management Library, pp. 2085-2088.

Roman-Alonso, Graciela — Univ. Autónoma Metropolitana-Iztapalapa
Jimenez-Alaniz, Juan Ramon — Univ. Autonoma Metropolitana
Buenabad-Chavez, Jorge — Centro de Investigacion y de Estudios Avanzados del IPN
Castro-Garcia, Miguel Alfonso — Univ. Autonoma Metropolitana-Iztapalapa
Vargas-Rodriguez, Abraham H. — CINVESTAV-IPN

10:30-12:00 FrP1B4.6

Optimal Clustering of Kinetic Patterns on Malignant Breast Lesions: Quantitative Comparison between K-Means Clustering and Three-Time-Points Method in Dynamic Contrast-Enhanced MRI, pp. 2089-2093.

Lee, Sang Ho — Seoul National Univ. Coll. of Medicine
Kim, Jong Hyo — Seoul National Univ. Coll. of Medicine
Kim, Kwang Gi — Seoul National Univ. Coll. of Medicine
Park, Jung Sun — Seoul National Univ. Coll. of Medicine
Park, Sang Joon — Seoul National Univ. Coll. of Medicine
Moon, Woo Kyung — Seoul National Univ. Hospital

10:30-12:00 FrP1B4.7

The Development of Brain Connectivity Browser by Tractography of QBI, pp. 2094-2097.

Chao, Yi-Ping — National Taiwan Univ.
Yang, Chia-Yen — National Yang-Ming Univ.
Cho, Kuan-Hung — National Taiwan Univ.
Yeh, Chun-Hung — National Yang-Ming Univ.
Chou, Kun-Hsien — National Yang-Ming Univ.
Chen, Jyh-Horng — National Taiwan Univ.
Lin, Ching-Po — National Yang-Ming Univ.

10:30-12:00 FrP1B4.8

Robustness of Local Binary Patterns in Brain MR Image Analysis, pp. 2098-2101.

Unay, Devrim — Philips Res. Europe
Ekin, Ahmet — Philips Res. Europe
Cetin, Mujdat — Sabanci Univ.
Jasinschi, Radu — Philips Res. Europe
Ercil, Aytul — Sabanci Univ.

10:30-12:00 FrP1B4.9

Robust Nonparametric Segmentation of Infarct Lesion from Diffusion-Weighted MR Images, pp. 2102-2105.

Hevia-Montiel, Nidiyare — Ingeniería Eléctrica, Univ. Autónoma Metropolitana-Iztapal
Jimenez-Alaniz, Juan Ramon — Univ. Autonoma Metropolitana
Medina, Veronica — Univ. Autonoma Metropolitana
Yanez-Suarez, Oscar — Univ. Autonoma Metropolitana
Rosso, Charlotte — CNRS-UPR640 LENA
Samson, Yves — La Salpetriere Hospital
Baillet, Sylvain — CNRS UPR640--LENA

10:30-12:00 FrP1B4.10

Improved Bulk Rotation Detection and Correction in MRI, pp. 2106-2109.

Bones, P. J. — Univ. of Canterbury
Maclaren, Julian — Univ. of Canterbury

10:30-12:00 FrP1B4.11

Longitudinal, Regional and Deformation-Specific Corpus Callosum Shape Analysis for Multiple Sclerosis, pp. 2110-2113.

Ishaq, Omer — Simon Fraser Univ.
Hamarneh, Ghassan — Simon Fraser Univ.
Tam, Roger — Univ. of British Columbia
Traboulsee, Anthony — Univ. of British Columbia, Multiple Sclerosis/Magnetic Res.

10:30-12:00 FrP1B4.12

Voxelized Model of Interstitial Transport in Nervous Tissue Following Direct Infusion into White Matter, pp. 2114-2117.

Kim, Jung Hwan — Univ. of Florida
Mareci, Thomas — Univ. of Florida
Sarntinoranont, Malisa — Univ. of Florida

10:30-12:00 FrP1B4.13

Evaluation of Alzheimer's Disease by Analysis of MR Images Using Multilayer Perceptrons and Kohonen SOM Classifiers As an Alternative to the ADC Maps, pp. 2118-2121.

dos Santos, Wellington — Univ. de Pernambuco
Souza, Ricardo — Univ. Federal de Pernambuco
Santos Filho, Plínio — North Carolina State Univ.

10:30-12:00 FrP1B4.14

Influence of Intermittent Compression Cuff Design on Interface Pressure and Calf Deformation: Experimental Results, pp. 2122-2125.

John, Gareth William — Cardiff Univ.
Narracott, Andrew James — Univ. of Sheffield
Morris, Rhys John — Univ. Hospital of Wales
Woodcock, John P — Cardiff Univ.
Lawford, Patricia Veronica — Univ. of Sheffield
Hose, David R. — Univ. of Sheffield

10:30-12:00 FrP1B4.15

Impact of Realignment on Spinal Functional MRI Time Series, pp. 2126-2129.

Cohen-Adad, Julien — Univ. of Montreal - INSERM
Piché, Mathieu — Univ. of Montreal
Rainville, Pierre — Univ. of Montreal
Benali, Habib — INSERM - Univ. Pierre et Marie Curie
Rossignol, Serge — Univ. of Montreal

FrP1B5 — Forum 5&6
Ultrasonic Image Processing (Poster Session)

10:30-12:00 FrP1B5.1

Ultrasound Monitoring of Temperature Changes in Liver Tissue During Laser Thermotherapy: 10'C Intervals, pp. 2130-2133.

Mokhtari-Dizaji, Manijhe — Tarbiat Modares Univ.
Gorjiara, Tina — Tarbiat Modares Univ. Medical Imaging Center, ImamKhomeini
Ganaeati, Hossein — Tehran Medical Sciences Univ. Emmam Khomaini Hospital
Kalbasi, Mehran — Tarbiat Modares Univ.

10:30-12:00 FrP1B5.2

Automatic Classification of Focal Lesions in Ultrasound Liver Images Using Principal Component Analysis and Neural Networks, pp. 2134-2137.

Balasubramanian, Deepalakshmi — Anna Univ.
srinivasan, poonguzhali — Anna Univ.
Gurubharan, Ravindaran — Anna Univ.

10:30-12:00 FrP1B5.3

Reduced Speckle Noise on Medical Ultrasound Images Using Cellular Neural Network, pp. 2138-2141.

Park, HyunKyung — Graduate school of Informaiton, ProductionandSystems,Waseda Univ.
Nishimura, Toshihiro — Waseda Univ.

10:30-12:00 FrP1B5.4

Suppression of Gradient across Seam Line Using a Smoothing Filter in Spatially Compounded Ultrasonic Diagnostic Images, pp. 2142-2145.

Choi, Myoung Hwan — Kangwon National Univ.

10:30-12:00 FrP1B5.5

Calibrating an Ultrasonic Computed Tomography System Using a Time-Of-Flight Based Positioning Algorithm, pp. 2146-2149.

Filipik, Adam — Brno Univ. of Tech.
Peterlik, Igor — Faculty of Informatics, Masaryk Univ. Brno
Hemzal, Dusan — Masaryk Univ. Brno
Jan, Jiri — Brno Univ. of Tech.
Jirik, Radovan — Brno Univ. of Tech.
zapf, michael — Forschungszentrum Karlsruhe
ruiter, nicole — Forschungszentrum Karlsruhe

10:30-12:00 FrP1B5.6

A Portable Measuring System for Cross-Sectional Ultrasound Images Using Spatial Compounding and Edge Sharpening, pp. 2150-2154.

Tsubai, Masayoshi — National Inst. of (AIST)
Fukumoto, Kiyotaka — Kyushu Univ.
Fukuda, Osamu — National Inst. of AIST
Muraki, Satoshi — Kyushu Univ.
Ueno, Naohiro — National Inst. of Advanced Industrial Science and Tech.

FrP1B6 — Forum 5&6
Tissue Motion and Vascular Ultrasound (Poster Session)

10:30-12:00 FrP1B6.1

Two-Dimensional Least-Squares Estimation for Motion Tracking in Ultrasound Elastography, pp. 2155-2158.

Basarab, Adrian — INSA-Lyon
Gueth, Pierre — INSA-Lyon
Liebgott, Hervé — Univ. Lyon 1
Delachartre, Philippe — INSA-Lyon

10:30-12:00 FrP1B6.2

Simulation of Ultrasound Radio-Frequency Signals in Deformed Tissue for Validation of 2D Motion Estimation with Sub-Sample Accuracy, pp. 2159-2162.

Goksel, Orcun — Univ. of British Columbia
Zahiri-Azar, Reza — Univ. of British Columbia
Salcudean, Septimiu E. — Univ. of British Columbia

10:30-12:00 FrP1B6.3

A Mathematical Model of the Mechanical Deformation of the Carotid Artery Wall and Its Application to Clinical Data, pp. 2163-2166.

Stoitsis, John — Inst. of Communication
Golemati, Spyretta — National Tech. Univ. of Athens
Bastouni, Efi — National Tech. Univ. of Athens
Nikita, Konstantina — National Tech. Univ. of Athens

10:30-12:00 FrP1B6.4

Using Reconstructed IVUS Images for Coronary Plaque Classification, pp. 2167-2170.

Caballero Espinosa, Karla Lizbeth — Autonomous Univ. of Barcelona
Barajas Zamora, Joel — Autonomous Univ. of Barcelona
Radeva, Petia — Autonomous Univ. of Barcelona

10:30-12:00 FrP1B6.5

Media Thickness Measurement of the Common Carotid Artery, pp. 2171-2174.

Loizou, Christos — Intercollege
Pattichis, Constantinos — Univ. of Cyprus
Pantziaris, Marios — The Cyprus Inst. of Neurology and Genetics
Nicolaides, Andrew — Imperial Coll.
Georgiou, Niki — Vascular Screening and Diagnostic Center
Kyriacou, Efthyvoulos — Univ. of Cyprus

10:30-12:00 FrP1B6.6

Design of a High Frequency Array Based Photoacoustic Microscopy System for Micro-Vascular Imaging, pp. 2175-2178.

Bitton, Rachel — Univ. of Southern California
Zemp, Roger — Washington Univ.
Yen, Jesse — Univ. of Southern California
Wang, LiHong — Washington Univ.
Shung, K. Kirk — Univ. of Southern California

FrP1B7 — Forum 5&6

Ultrasonography : Miscellaneous (Poster Session)

Chair: Saijo, Yoshifumi — Inst. of Development Aging and Cancer, TohokuUniversity

10:30-12:00 FrP1B7.1

Preliminary Investigation of Nonlinear Dual Frequency Mixing Technique for the Estimation of the Nonlinear Parameter B/A, pp. 2179-2182.

Pasovic, Mirza — Univ. Medical Center Rotterdam
Cachard, Christian — Univ. Lyon 1
Basset, Olivier — Univ. Lyon1, INSA-Lyon, CNRS UMR 5220, INSERM U630.

10:30-12:00 FrP1B7.2

A Non-Linear Ultrasonic Scattering Approach for Micro Bubble Concentration Quantification, pp. 2183-2186.

Mari, Jean Martial — Univ. of Oxford
Hibbs, Kathryn — Univ. of Oxford
Tang, Mengxing — Imperial Coll. London

10:30-12:00 FrP1B7.3

Ultrasonic Renal-Stone Tracking with Mesh Regularization, pp. 2187-2190.

Tsao, Jenho — National Taiwan Univ.
He, Jia-Hong — National Taiwain Univ.

FrP1C1 — Forum 5&6

Instrumentation and Systems for Diagnosis and Clinical Management II (Poster Session)

Chair: SCHURR, MARC O. — NOVINEON

10:30-12:00 FrP1C1.1

Study of the Ballistocardiogram Signal in Life Detection System Based on Radar, pp. 2191-2194.

Lu, Guohua — Fourth Military Medical Univ.
Wang, Jianqi — Fourth Military Medical Univ.
Yue, Yu — Fourth Military Medical Univ.
Jing, Xijing — Fourth Military Medical Univ.

10:30-12:00 FrP1C1.2

Investigation of Catheter Curvature and Genetic Algorithms in Conductance Catheter Optimization, pp. 2195-2198.

Thaijiam, Chanchai — Univ. of Tasmania
Gale, Timothy John — Univ. of Tasmania

10:30-12:00 FrP1C1.3

Evaluation of Novel ECG Signal Processing on Quantification of Transient Ischemia and Baseline Wander Suppression, pp. 2199-2202.

Kostic, Marko — Signalife, Inc.
Fakhar, Sina — Signalife, Inc.
Foxall, Tom — Signalife, Inc.
Drakulic, Budimir — Signalife, Inc.
Krucoff, Mitchell — Duke Univ. School of Medicine

10:30-12:00 FrP1C1.4

Computer Simulation Tool for Predicting Sound Propagation in Air-Filled Tubes with Acoustic Impedance Discontinuities, pp. 2203-2206.

Albors, Gabriel O. — Univ. of Puerto Rico - Mayagüez
Kyle, Aaron M. — Purdue Univ.
Wodicka, George R. — Purdue Univ.
Juan, Eduardo J. — Univ. of Puerto Rico - Mayagüez

10:30-12:00 FrP1C1.5

Nadi Tarangini: A Pulse Based Diagnostic System, pp. 2207-2210.

Joshi, Aniruddha — IIT Bombay
kulkarni, Anand — Inst. of Chemical Tech.
Chandran, Sharat — IIT Bombay
jayaraman, Valadi — National Chemical Lab.
Kulkarni, Bhaskar — National Chemical Lab.

10:30-12:00 FrP1C1.6

Detection of Diabetic Neuropathy Using Blood Volume Ratio of Finger and Toe by PPG, pp. 2211-2214.

Kim, Deok Won — Yonsei Univ. Coll. of Medicine
Kim, Sung Woo — Yonsei Univ. Coll. of Medicine
Kim, Soo chan — Hankyong National Univ.
Nam, Ki Chang — National Inst. of Advanced Industrial Science and Tech.
Kang, Eun Seok — Yonsei Univ. Coll. of Medicine
Im, Jae Jung — Chonbuk National Univ.

10:30-12:00 FrP1C1.7

A Novel Biomagnetic Instrumentation with Four Magnetoresistive Sensors to Evaluate Gastric Motility, pp. 2215-2218.

Paixão, Fabiano Carlos — Univ. Estadual Paulista - UNESP
Moraes, Rogério — Univ. Estadual Paulista - Unesp
Stelzer, Murilo — Unesp
Corá, Luciana — IBB - Univ. Estadual Paulista
Américo, Madileine — FMRP - Univ. of Sao Paulo
Andreis, Uilian — Unesp
Oliveira, Ricardo Brandt — Univ. de São Paulo (USP)
Baffa, Oswaldo — FFCLRP-Univ. of Sao Paulo
Miranda, José Ricardo A — IBB - Univ. Estadual Paulista

10:30-12:00 FrP1C1.8

Development of Cold Light Indirect Ophthalmoscopic Video System for Sharing Stereopsis, pp. 2219-2222.

Kong, Hyoun-Joong — Seoul National Univ.
Cha, Jae Pyeong — Graduate school, Seoul National Univ.
Seo, Jong Mo — Dongguk Univ. Ilsan Hospital
Hwang, Jeong Min — Seoul National Univ. School of Medicine
Kim, Hee Chan — Seoul National Univ.

10:30-12:00 FrP1C1.9

Development of Lead-Free (Bi1/2Na1/2)BaTiO3 Piezoelectric Ceramics for Clinical Applications, pp. 2223-2226.

Rodriguez-Ruiz, Roberto — Centro de Investigacion y de Estudios Avanzados del IPN
Suaste-Gomez, Ernesto — Centro de Investigacion y de Estudios Avanzados del IPN

10:30-12:00 FrP1C1.10

A Novel Ultrasonic Thermotherapy Instrument, pp. 2227-2229.

zhang, zi — Guilin Univ. of Electronic Tech.
Huang, Tinglei — Guilin Univ. of Electronic Tech.

10:30-12:00 FrP1C1.11

Real-Time Detection of Respiratory Activity Using an Inertial Measurement Unit, pp. 2230-2233.

Gollee, Henrik — Univ. of Glasgow
Chen, Wei — Univ. of Glasgow

10:30-12:00 FrP1C1.12

A Programmable System of Functional Electrical Stimulation (FES), pp. 2234-2237.

Velloso, José Braconnot — Rio de Janeiro Federal Univ.
Souza, Marcio N. — Federal Univ. of Rio de Janeiro

10:30-12:00 FrP1C1.13

Monitoring Cole-Cole Parameters During Haemodialysis (hd), pp. 2238-2241.

Surkhi, Omar — Tech. Univ. of Catalonia

10:30-12:00 FrP1C1.14

Acid Deprotection of Covalently Immobilized Peptide Probes on Glass Slides for Peptide Microarrays, pp. 2242-2246.

EL KHOURY, Graziella — Ec. Centrale de Lyon - Lyon Nanotechnology Inst.
Laurenceau, Emmanuelle — Ec. Centrale de Lyon
Dugas, Vincent — Ec. Normale Supérieure de Lyon
Chevolot, Yann — Ec. Centrale de Lyon
Mérieux, Yves — Etablissement Français du Sang - EFS
Duclos, Marie-Christine — Univ. Claude Bernard-Lyon1
Souteyrand, Eliane — Ec. Centrale de Lyon
Rigal, Dominique — Etablissement Français du Sang - EFS
Wallach, Jean — Univ. Claude Bernard-Lyon1
Cloarec, Jean-Pierre — Ec. centrale de Lyon / CNRS

FrP1C2 — Forum 5&6

Biological and Biochemical Sensors, Materials II (Poster Session)

Co-Chair: Laureyn, Wim — IMEC

10:30-12:00 FrP1C2.1

Screening for the Effects of Antiepileptic Drugs on Short Term Plasticity Using a Time Efficient Bioassay, pp. 2247-2252.

Gholmieh, Ghassan — CHLA
Courellis, Spiros — Univ. of Southern California
Chen, Lan, Lan S. Chen — Childrens Hospital Los Angeles

10:30-12:00 FrP1C2.2

Nano Fabrication of Conducting Polymers for NO Gas by Dip Pen Nanolithography, pp. 2253-2256.

Lu, Hui-Hsin — National Taiwan Univ.
Lin, Chii-Wann — National Taiwan Univ.
Hsiao, Tzu-Chien — National Chiao Tung Univ.

10:30-12:00 FrP1C2.3

Nanostructured Thin Films for the Development of Piezoelectric Immunosensors, pp. 2257-2260.

Pastorino, Laura — Univ. of Genova
Caneva Soumetz, Federico — Univ. of Genova
Ruggiero, Carmelina — Univ. of Genova

10:30-12:00 FrP1C2.4

Improving Bioassay Sensitivity for Neurotoxins Detection Using Volterra Based Third Order Nonlinear Analysis, pp. 2261-2264.

Gholmieh, Ghassan — CHLA
Courellis, Spiros — Univ. of Southern California
Marmarelis, Vasilis — Univ. of Southern California
Baudry, Michel — Univ. of Southern California
Berger, Theodore — Univ. of Southern California
Chen, Lan, Lan S. Chen — Childrens Hospital Los Angeles

10:30-12:00 FrP1C2.5

Investigating New BioMEMS Techniques for Early Detection of Osteoporosis, pp. 2265-2268.

Singh, Kanika — Indian Inst. of Tech. Delhi &PusanNationalUniversity,
Kim, Kyung Chun — MEMS/NANO Fabrication Center, Pusan National Univ.

FrP1C3 Forum 5&6

Wireless Biomedical Sensors, Body Sensor Networks and Telemetric Systems II (Poster Session)

Chair: Noury, Norbert — Univ. Joseph Fourier Grenoble

10:30-12:00 FrP1C3.1

Data Acquisition System for Doppler Radar Vital-Sign Monitor, pp. 2269-2272.

Vergara, Alexander — Univ. of Hawaii at Manoa
Lubecke, Victor — Univ. of Hawaii Manoa

10:30-12:00 FrP1C3.2

A 13.56MHz Short Range Telemetry Link for the Monitoring of Incubated Cell Cultures, pp. 2273-2276.

Walia, Anoop — Imperial Coll. London
Drakakis, Emmanuel M. — Imperial Coll.

10:30-12:00 FrP1C3.3

Indoor Patient Position Estimation Using Particle Filtering and Wireless Body Area Networks, pp. 2277-2280.

Ren, HongLiang — The Chinese Univ. of Hong Kong
Meng, Max Q.-H. — The Chinese Univ. of Hong Kong
Xu, Lisheng — The Chinese Univ. of Hong Kong

10:30-12:00 FrP1C3.4

Measurement of Vibrations & Evaluation of Protective Gloves for Work with Hand-Held Power Tools in Industrial Settings, pp. 2281-2284.

Milosevic, Matija — Ryerson Univ.
Valter McConville, Kristiina M. — Ryerson Univ.

10:30-12:00 FrP1C3.5

Activity Energy Expenditure Assessment System Based on Activity Classification Using Multi-Site Triaxial Accelerometers, pp. 2285-2287.

Kim, Dongwoo — Graduate School, Seoul National Univ. Seoul, Korea
Kim, Hee Chan — Seoul National Univ.

10:30-12:00 FrP1C3.6

Wearable FPGA Based Wireless Sensor Platform, pp. 2288-2291.

Ahola, Tom M. — Nokia Res. Center
Korpinen, Pekka — Nokia Res. Center
Rakkola, Juha — Nokia Res. Center
Ramo, Teemu — Nokia
Salminen, Jukka — Nokia
Savolainen, Jari — Nokia Res. Center

10:30-12:00 FrP1C3.7

Energy-Efficient Human Body Communication Receiver Chipset Using Wideband Signaling Scheme, pp. 2292-2295.

Song, Seong-Jun — KAIST

FrP1C4 Forum 5&6

Sensor Based Systems for Monitoring III (Poster Session)

10:30-12:00 FrP1C4.1

LED Power Reduction Trade-Offs for Ambulatory Pulse Oximetry, pp. 2296-2299.

Aguilar Pelaez, Eduardo — Imperial Coll. London
Rodriguez-Villegas, Esther — Imperial Coll. London

10:30-12:00 FrP1C4.2

Non-Contact Cardiopulmonary Sensing with a Baby Monitor, pp. 2300-2302.

Hafner, Noah — Univ. of Hawaii
Mostafanezhad, Isar — Univ. of Hawaii at Manoa
Lubecke, Victor — Univ. of Hawaii Manoa
Boric-Lubecke, Olga — Univ. of Hawaii Manoa
Host-Madsen, Anders — Univ. of Hawaii

10:30-12:00 FrP1C4.3

Nonintrusive Biosignal Measurement System in a Vehicle, pp. 2303-2306.

Lee, Haet Bit — Seoul National Univ.
Choi, Jong Min — Seoul National Univ.
Kim, Jung Soo — Seoul National Univ.
Kim, Yun Seong — Seoul National Univ.
Baek, Hyun Jae — Seoul National Univ.
Ryu, Myung Suk — ABRC
Son, Ryang Hee — Yun Sei Univ.
Park, Kwang S. — Seoul National Univ.

10:30-12:00 FrP1C4.4

A New Venous Infusion Pathway Monitoring System, pp. 2307-2310.

Maki, Hiromichi — International Trinity Coll.
Yonezawa, Yoshiharu — Hiroshima Inst. of Tech.
Ogawa, Hidekuni — Hiroshima Inst. of Tech.
Ninomiya, Ishio — Hiroshima International Univ.
Sata, Koji — Shakaihoken Shimonoseki Kousei Hospital
Hamada, Shingo — Shakaihoken Shimonoseki Kousei Hospital
Caldwell, Morton — Caldwell Biomedical Electronics

10:30-12:00 FrP1C4.5

A Fast Algorithm to Track Changes of Direction of a Person Using Magnetometers, pp. 2311-2314.

Fleury, Anthony — Univ. Joseph Fourier
Noury, Norbert — Univ. Joseph Fourier Grenoble
Vuillerme, Nicolas — UMR CNRS 5525

10:30-12:00 FrP1C4.6

Implementation of Accelerometer Sensor Module and Fall Detection Monitoring System Based on Wireless Sensor Network, pp. 2315-2318.

lee, youngbum — Yonsei Univ.
Kim, Jinkwon — Yonsei Univ.
son, muntak — edigitalmed
Lee, Myoungho — Yonsei Univ.

10:30-12:00 FrP1C4.7

Personal, Non-Invasive Dosimetry for Radio-Frequency Human Exposure Assessment, pp. 2319-2322.

ISKRA, STEVE — RMIT Univ.
McKenzie, Ray — RMIT Univ.
Cosic, Irena — RMIT Univ.

10:30-12:00 FrP1C4.8

ENDOCOM: Abdominal Aortic Aneurysm Test Bench for in Vitro Simulation, pp. 2323-2326.

Mazeyrat, Johan — Univ. Pierre et Marie Curie - ParisVI - france
ROMAIN, Olivier — UPMC
Garda, Patrick — Univ. Pierre et Marie Curie - Paris 6
Lagrée, Pierre-Yves — UPMC
Destrade, Michel — CNRS / Univ. Pierre et Marie Curie
KAROUIA, Mourad — Inst. de Cardiologie Pitié-Salpętričre, APHP
LEPRINCE, PASCAL — Univ. PIERRE ET MARIE CURIE, AP-HP, HOPITAL PITIE-SALPETRIE

10:30-12:00 FrP1C4.9

A Clinical Evaluation of a Remote Mobility Monitoring System Based on SMS Messaging, pp. 2327-2330.

Dalton, Anthony — National Univ. of Galway
Ni Scanaill, Cliodhna — Department of Electronic and Computer Engineering
Carew, Sheila — TBA
Lyons, Declan — Mid-Western Regional Hospital, Limerick
ÓLaighin, Gearóid — National Univ. of Ireland, Galway

10:30-12:00 FrP1C4.10

Powering Implantable Telemetry Devices from Localized Magnetic Fields, pp. 2331-2335.

McCormick, Daniel — Uninversity of Auckland
Hu, Aiguo Patrick — Uninversity of Auckland
Nielsen, Poul — Univ. of Auckland
Malpas, Simon — Uninversity of Auckland
Budgett, David — Auckland Univ.

10:30-12:00 FrP1C4.11

Using the Changes in Hydrostatic Pressure and Pulse Transit Time to Measure Arterial Blood Pressure, pp. 2336-2337.

Poon, Carmen CY — The Chinese Univ. of Hong Kong
Zhang, Yuan-Ting — The Chinese Univ. of Hong Kong

10:30-12:00 FrP1C4.12

Low Profile Harmonic Radar Transponder for Tracking Small Endangered Species, pp. 2338-2341.

Kiriazi, John — Univ. of Hawaii at Manoa
Nakakura, Jayson — Univ. of Hawaii
Hall, Kevin — Univ. of Hawaii
Hafner, Noah — Univ. of Hawaii
Lubecke, Victor — Univ. of Hawaii Manoa

10:30-12:00 FrP1C4.13

Guidlines for Calibration and Drift Compensation of a Wearable Device with Rate-Gyroscopes and Accelerometers, pp. 2342-2345.

Giansanti, Daniele — Istituto Superiore di Sanitŕ
Maccioni, Giovanni — Istituto Superiore di Sanitŕ
Macellari, Velio — Istituto Superiore di Sanitŕ

10:30-12:00 FrP1C4.14

Inductive Phase Shift Spectroscopy for Volumetric Brain Edema Detection: An Experimental Simulation, pp. 2346-2349.

González, César A — Univ. del Ejército y Fuerza Aérea
Rojas, Rafael — UAM, Iztapalapa.
Villanueva, Cleva — Intituto Pol. Nacional
Rubinsky, Boris — Univ. of California at Berkeley

10:30-12:00 FrP1C4.15

A Novel Photodiode for Reflectance Pulse Oximetry in Low-Power Applications, pp. 2350-2353.

Haahr, Rasmus G — Tech. Univ. of Denmark
Duun, Sune — Tech. Univ. of Denmark
Thomsen, Erik V — Tech. Univ. of Denmark
Birkelund, Karen — Tech. Univ. of Denmark

10:30-12:00 FrP1C4.16

A New Method for Determining the Servo Reference Value (Vo) of the Volume-Compensation Method, pp. 2354-2356.

Tanaka, Shinobu — Kanazawa Univ.
Nogawa, Masamichi — Kanazawa Univ.
Sawanoi, Yukiya — Kanazawa Univ.
Yamakoshi, Takehiro — Kanazawa Univ.
Yamakoshi, Ken-ichi — Kanazawa Univ.

10:30-12:00 FrP1C4.17

Noninvasive Heart Rate Variability Analysis Using Loadcell-Installed-Bed During Sleep, pp. 2357-2360.

Chung, Gih Sung — Seoul National Univ.
Choi, Byoung Hoon — Seoul National Univ.
Jeong, Do-Un — Seoul National Univ. Hospital
Park, Kwang S. — Seoul National Univ.

FrP1D1 — Forum 5&6

Neural Recording Systems and Instrumentation II (Poster Session)

Co-Chair: Butera, Robert — Georgia Inst. of Tech.

10:30-12:00 FrP1D1.1

Virtual Hospital _; a Computer-Aided Platform to Evaluate the Sense of Direction, pp. 2361-2364.

Jiang, Ching-Fen — I-Shou Univ.
Li, Yuan Shyi — No.1, Sec. 1, Syuecheng Rd., Dashu Township, Kaohsiung County 84

10:30-12:00 FrP1D1.2

CMOS-Micromachined, Two-Dimenisional Transistor Arrays for Neural Recording and Stimulation, pp. 2365-2368.

Lin, Jia Shian — National Tsing Hua Univ.
Chang, Sheng Ren — National Tsing Hua Univ.
Chang, Chin Hsiang — National Tsing Hua Univ.
Lu, S.C — National Tsing Hua Univ.
Chen, Hsin — National Tsing-Hua Univ.

10:30-12:00 FrP1D1.3

The Electrophysiological and Functional Effect of Shock Wave on Peripheral Nerves, pp. 2369-2372.

Wu, Yi-Hui — National Taiwan Univ.
Luh, Jer-Junn — National Taiwan Univ.
Chen, Wen-Shiang — National Taiwan Univ. Hospital
Chong, Fok-Ching — National Taiwan Univ.

10:30-12:00 FrP1D1.4

Low-Power High-Resolution 32-Channel Neural Recording System, pp. 2373-2376.

Yun, Xiao — Stony Brook Univ.
Kim, Donghwi — Stony Brook Univ.
Stanacevic, Milutin — Johns Hopkins Univ.
Mainen, Zachary — Cold Spring Harbor Lab.

FrP1D2 — Forum 5&6

Advanced Neural Signal Processing Methods II (Poster Session)

Chair: Senhadji, Lotfi — Univ. of Rennes 1; INSERM
Co-Chair: Lipping, Tarmo — Tampere Univ. of Tech.

10:30-12:00 FrP1D2.1

The Relationship between Electrovestibulography and Parkinson's Disease Severity, pp. 2377-2380.

Shoushtarian, Mehrnaz — Monash Univ.
Lithgow, Brian John — Monash Univ.

10:30-12:00 FrP1D2.2

Electrovestibulography (EvestG): The "DC" Potential Used to Separate Meniere's Disease and BPPV, pp. 2381-2384.

Garrett, Amber — Monash
Heibert, Daniel — Monash Univ.
Lithgow, Brian John — Monash Univ.

10:30-12:00 FrP1D2.3

Classification of Afferent Signals Recorded with a Single Cuff Electrode, pp. 2385-2388.

Choi, Changmok — Korea Advanced Inst. of Science and Tech.
Carpaneto, Jacopo — Scuola Superiore Sant'Anna
Lago, Natalia — Univ. Autňnoma de Barcelona
Kim, Jung — Korea Advanced Inst. of Science and Tech.
Dario, Paolo — Scuola Superiore Sant'Anna
Navarro, Xavier — Univ. Autňnoma de Barcelona
Micera, Silvestro — Scuola Superiore Sant'Anna

10:30-12:00 FrP1D2.4

The Roles of CPG Phase Modulation and Reflexive Muscular Patterns in Balance Recovery Reflexive Responses to Perturbation During Walking, pp. 2389-2392.

Ikemoto, Yu, - Chiba Univ. Chiba, Japan
Yu, Wenwei Univ. of Chiba

FrP1D3 Forum 5&6
Modeling and Simulation of Neural Systems II (Poster Session)

Chair: Magosso, Elisa Univ. of Bologna
Co-Chair: WENDLING, Fabrice INSERM - Univ. de Rennes 1

10:30-12:00 FrP1D3.1

Behavioral Study of Calorie-Restricted Rat from Early Old Age, pp. 2393-2395.

Geng, Yi-qun Medical Coll. of Shantou Univ.
Guan, Jitian Shantou Univ. Medical Coll.
Xu, Mingyan Medical Coll.
Xu, Xiaohu Medical Coll. of Shantou Univ.
Fu, Yucai Medical Coll. of Shantou Univ.

10:30-12:00 FrP1D3.2

Simulation Study on the Effect of Fiber Loss to the Compound Action Potential of a Sural Nerve, pp. 2396-2399.

Hayami, Takehito Kyushu Univ.
Iramina, Keiji Kyushu Univ.
Chen, Xian Kyushu Univ.
Sunagawa, Kenji Kyushu Univ.

10:30-12:00 FrP1D3.3

A Neuromusculoskeletal Model of the Elbow Joint for Pre-Clinical Testing of Total Elbow Replacement, pp. 2400-2403.

Doheny, Emer Univ. Coll. Dublin
Lowery, Madeleine Northwestern Univ.
FitzPatrick, David Univ. Coll. Dublin
O'Malley, Mark Univ. Coll. Dublin

10:30-12:00 FrP1D3.4

Effects of an Exogenous Noise on a Realistic Network Model: Encoding of an EM Signal, pp. 2404-2407.

Paffi, Alessandra ICEmB@La Sapienza Univ. Rome
Gianni, Matteo ICEMB at Univ. of Rome
Maggio, Fernando ICEMB@La Sapienza Univ. Rome
Liberti, Micaela ICEMB@La Sapienza Univ. Rome
Apollonio, Francesca ICEmB@La Sapienza Univ. Rome
D'Inzeo, Guglielmo ICEmB@"La Sapienza" Univ.

10:30-12:00 FrP1D3.5

Dynamical Properties of a Plastic Neural Network Model for Tinnitus Therapy and Inhibition of Oscillation Using Noise Stimulus, pp. 2408-2411.

Fujimoto, Ken-ichi The Univ. of Tokushima
Nagashino, Hirofumi The Univ. of Tokushima
Kinouchi, Yohsuke The Univ. of Tokushima
Danesh, Ali A. Florida Atlantic Univ.
Pandya, Abhijit S. Florida Atlantic Univ.

10:30-12:00 FrP1D3.6

Parsimonious Design Principles for Motor Unit Models, pp. 2412-2415.

Ban, Lan Georgia Inst. of Tech.
Shapiro, Nicholas Georgia Inst. of Tech.
Lee, Robert Emory Univ.

FrP1D4 Forum 5&6
Neural Stimulation II - FES (Poster Session)

Co-Chair: Veltink, Peter Univ. of Twente

10:30-12:00 FrP1D4.1

A Programmable and Portable NMES Device for Drop Foot Correction and Blood Flow Assist Applications, pp. 2416-2419.

Breen, Paul National Univ. of Ireland Galway
Corley, Gavin National Univ. of Ireland Galway
OKeeffe, Derek Univ. of Limerick
Conway, Richard Univ. of Limerick
ÓLaighin, Gearóid National Univ. of Ireland, Galway

10:30-12:00 FrP1D4.2

Locomotion Assistance for the Person with Mobility Impairment: Fuzzy Control of Cycling Movement by Means of Surface Electrical-Stimulation, pp. 2420-2423.

Ogawa, Yohei Kyushu Inst. of Tech.

10:30-12:00 FrP1D4.3

Neuro-Sliding Mode Control with Modular Models for Control of Knee-Joint Angle Using Quadriceps Electrical Stimulation, pp. 2424-2427.

Ajoudani, Arash Iran Univ. of Science and Tech.
Erfanian, Abbas Iran Univ. of Science and Tech.

10:30-12:00 FrP1D4.4

What Are the Electrical Stimulation Design Parameters for Maximum VO2 Aimed at Cardio-Pulmonary Rehabilitation?, pp. 2428-2431.

Minogue, Conor M Biomedical Res. Ltd
caulfield, brian UCD
Reilly, Richard Univ. Coll. Dublin

10:30-12:00 FrP1D4.5

EMG-Based Control for a C5/C6 Spinal Cord Injury Upper Extremity Neuroprosthesis, pp. 2432-2435.

Hincapie, Juan Gabriel — Case Western Res. Univ.
Kirsch, Robert — Case Western Res. Univ.

10:30-12:00 FrP1D4.6

Constant-Current Adjustable-Waveform Microstimulator for an Implantable Hybrid Neural Prosthesis, pp. 2436-2439.

Hassell, Travis — Purdue Univ.
Jedlicka, Sabrina — Purdue Univ.
Rickus, Jenna — Purdue Univ.
Irazoqui, Pedro — Purdue Univ.

10:30-12:00 FrP1D4.7

Contributions to the Study of Optimal Biphasic Pulse Shapes for Functional Electric Stimulation: An Analytical Approach Using the Excitation Functional, pp. 2440-2443.

Suarez-Antola, Roberto — Catholic Univ. of Uruguay

FrP1D5 Forum 5&6

EEG and EP Analysis II (Poster Session)

Chair: Ktonas, Periklis — Univ. of Athens

10:30-12:00 FrP1D5.1

Methodology to Estimate the Transient Evoked Responses for the Generation of Steady State Responses, pp. 2444-2447.

Bohorquez, Jorge — Univ. of Miami
Ozdamar, Ozcan — Univ. of Miami
Acikgoz, Nuri — Univ. of Miami
Yavuz, Erdem — Intelligent Hearing Systems

10:30-12:00 FrP1D5.2

Time-Frequency Feature of Intraoperative Somatosensory Evoked Potential Signals, pp. 2448-2451.

Hu, Yong — The Univ. of Hong Kong
Fan, Jiang — Chinese Acad. of Medical Sciences & PekingUnionMedicalCollege
Luk, KDK — Department of Orthopaedics and Traumatology, The Univ. of H

10:30-12:00 FrP1D5.3

A System to Generate Patient-Specific Stimuli for Use with the Auditory Brainstem Response Test, pp. 2452-2455.

Petoe, Matthew Alexander — Univ. of Queensland
Bradley, Andrew Peter — Univ. of Queensland
Wilson, Wayne — Univ. of Queensland

10:30-12:00 FrP1D5.4

Algorithm for AEEG Data Selection Leading to Wireless and Long Term Epilepsy Monitoring, pp. 2456-2459.

Casson, Alexander James — Imperial Coll. London
Yates, David — Imperial Coll. London
Patel, Shyam — Imperial Coll. London
Rodriguez-Villegas, Esther — Imperial Coll. London

10:30-12:00 FrP1D5.5

Realistic Synthetic Background Neuronal Activity for the Analysis of MEG Probe Configurations, pp. 2460-2463.

Badier, Jean-Michel — Aix Marseille Univ.
COSANDIER-RIMELE, Delphine — INSERM - Univ. de Rennes 1
Bénar, Christian G. — INSERM
Schwartz, Denis Pierre Olivier — UPMC / CNRS / INSERM
Chauvel, Patrick — Faculté de Médecine (Aix-Marseille Univ. & Hôpital de la T
WENDLING, Fabrice — INSERM - Univ. de Rennes 1

10:30-12:00 FrP1D5.6

Potential Dementia Biomarkers Based on the Time-Varying Microstructure of Sleep Eeg Spindles, pp. 2464-2467.

Ktonas, Periklis — Univ. of Athens
Golemati, Spyretta — National Tech. Univ. of Athens
Xanthopoulos, Petros — Tech. Univ. of Crete
Sakkalis, Vangelis — FORTH and Tech. Univ. of Crete
Ortigueira, Manuel Duarte — UNINOVA
Tsekou, Hara — Medical School, Univ. of Athens
Zervakis, Michalis — Tech. Univ. of Crete, Greece
Paparrigopoulos, Thomas — Medical School, Univ. of Athens
Soldatos, Constantin — Medical School, Univ. of Athens

10:30-12:00 FrP1D5.7

An Embedded EEG Analyzing System Based on L; C/os-II, pp. 2468-2471.

Liu, Boqiang — Shandong Univ.
Zhang, Yanyan — Shandong Univ.
Liu, Zhongguo — Shandong Univ.
Yin, Cong — Shandong Univ.

10:30-12:00 FrP1D5.8

Evaluating the Event-Related Synchronization and Desynchronization by Means of a Statistical Frequency Test, pp. 2472-2475.

Miranda de Sá, Antonio Mauricio — Federal Univ. of Rio de Janeiro
Infantosi, Antonio Fernando — Federal Univ. of Rio de Janeiro
Lazarev, Vladimir — Fernandes Figueira Inst.

10:30-12:00 FrP1D5.9

Ultra–Fast Quantification of Hearing Loss by Neural Synchronization Stabilities of Auditory Evoked Brainstem Activity, pp. 2476-2479.

Corona-Strauss, Farah I. — Saarland Univ. Hospital
Delb, Wolfgang — Saarland Univ. Hosptal
Bloching, Marc — Saarland Univ. Hospital
Strauss, Daniel J. — Computl Diagnostics & Biocybernetics

10:30-12:00 FrP1D5.10

Analysis of the Actions of Nucleus Reuniens and the Entorhinal Cortex on EEG and Evoked Population Behavior of the Hippocampus, pp. 2480-2484.

Morales, George Jason — Florida Atlantic Univ.
Ramcharan, Eion — Florida Atlantic Univ.
Sundararaman, Nithya — Florida Atlantic Univ.
Morgera, Salvatore — Florida Atlantic Univ.
Vertes, Robert — Florida Atlantic Univ.

10:30-12:00 FrP1D5.11

The Role of Attention in the Tinnitus Decompensation: Reinforcement of a Large--Scale Neural Decompensation Measure, pp. 2485-2488.

Low, Yin Fen — Computational Diagnostics
Trenado, Carlos — Computational Diagnostics and Biocybernetics Unit
Delb, Wolfgang — Saarland Univ. Hosptal
Corona-Strauss, Farah I. — Saarland Univ. Hospital
Strauss, Daniel J. — Computl Diagnostics & Biocybernetics

10:30-12:00 FrP1D5.12

A High Resolution EEG Study of Dynamic Brain Activity During Video Game Play, pp. 2489-2491.

Sheikholeslami, Cameron — Univ. of Minnesota
Yuan, Han — Tsinghua Univ.
He, Eric J. — Univ. of Minnesota
Bai, Xiaoxiao — Univ. of Minnesota
Yang, Lin — Univ. of Minnesota
He, Bin — Univ. of Minnesota

10:30-12:00 FrP1D5.13

NIRS Measurement of Hemodynamic Evoked Responses in the Primary Sensorimotor Cortex, pp. 2492-2495.

XU, Mingdi — Kyushu Univ.
Takata, Hirotsugu — Kyushu Univ.
Ge, Sheng — Kyushu Univ.
Hayami, Takehito — Kyushu Univ.
YAMASAKI, Takao — Kyushus Univ.
TOBIMATSU, Shozo — Kyushu Univ.
Iramina, Keiji — Kyushu Univ.

10:30-12:00 FrP1D5.14

Spatial-Temporal Analysis of Face Processing Using an ERP Study of the Thatcher Illusion, pp. 2496-2499.

Gu, Xiaohui — Shanghai Univ.
Li, YingJie — Shanghai Univ.
Yang, Xiaoli — Purdue Univ. Calumet
Zhu, Yisheng — Shanghai Jiaotong Univ. Shanghai, China

10:30-12:00 FrP1D5.15

Stochastic Resonance Seen As Increase in Phase Synchrony or Power in Auditory Steady-State Responses in MEG, pp. 2500-2503.

Tanaka, Keita — Tokyo Denki Univ.
Nemoto, Iku — Tokyo Denki Univ.
Kawakatsu, Masaki — Tokyo Denki Univ.

10:30-12:00 FrP1D5.16

Comparison of Mismatch Fields in MEG Elicited by Changes in Tonal and Atonal Sequences in Music, pp. 2504-2507.

Maeshima, Katsuya — Tokyo Denki Univ.
Shiba, Reiko — RIKEN Brain Science Inst.
Nemoto, Iku — Tokyo Denki Univ.

FrP1D6 Forum 5&6

Brain-Computer Interfaces III (Poster Session)

10:30-12:00 FrP1D6.1

A Nad've and Fast Human Computer Interface Controllable for the Inexperienced, a Performance Study, pp. 2508-2511.

Krueger, Thilo B — Univ. of Freiburg
Stieglitz, Thomas — Univ. of Freiburg

10:30-12:00 FrP1D6.2

An Automated Method for Relevant Frequency Bands Identification Based on Genetic Algorithms and Dedicated to the Motor Imagery BCI Protocol, pp. 2512-2515.

Parini, Sergio — Pol. di Milano
Maggi, Luca — Pol. di Milano
Andreoni, Giuseppe — Pol. di Milano

10:30-12:00 FrP1D6.3

Human Error in P300 Speller Paradigm for Brain-Computer Interface, pp. 2516-2519.

Fazel-Rezai, Reza — Univ. of Manitoba

10:30-12:00 FrP1D6.4

Topographical Dynamics of Brain Connections for the Design of Asynchronous Brain-Computer Interfaces, pp. 2520-2523.

Gouy-Pailler, Cedric — GIPSA-Lab. UJF-CNRS
Achard, Sophie — Univ. of Cambridge
Jutten, Christian — Inst. National Pol. de Grenoble
Congedo, Marco — Nova Tech. EEG
Rivet, Bertrand — Commissariat ŕ l'Energie Atomique
Souloumiac, Antoine — Commissariat ŕ l'Energie Atomique
MABY, Emmanuel — INSERM

10:30-12:00 FrP1D6.5

A 3-Class Asynchronous BCI Controlling a Simulated Mobile Robot, pp. 2524-2527.

Geng, Tao — Univ. of Essex
Gan, John Q. — Univ. of Essex, UK

10:30-12:00 FrP1D6.6

Robustness of the Farwell & Donchin BCI Protocol to Visual Stimulus Parameter Changes, pp. 2528-2531.

Salvaris, Mathew — Univ. of Essex
Sepulveda, Francisco — Univ. of Essex

10:30-12:00 FrP1D6.7

Non Invasive Brain-Computer Interface System to Operate Assistive Devices, pp. 2532-2535.

Cincotti, Febo — Fondazione Santa Lucia IRCCS
Aloise, Fabio — Fondazione Santa Lucia IRCCS
Bufalari, Simona — Fondazione Santa Lucia IRCCS
Schalk, Gerwin — Wadsworth Center, New York State Department of Health
Oriolo, Giuseppe — Univ. La Sapienza
Cherubini, Andrea — Univ. La Sapienza
Davide, Fabrizio — Telecom Italia Learning Services
Babiloni, Fabio — Univ. of Rome
Marciani, Maria Grazia — Tor Vergata Univ.
Mattia, Donatella — Fondazione Santa Lucia IRCCS

10:30-12:00 FrP1D6.8

Adaptive Classification for Brain Computer Interfaces, pp. 2536-2539.

Blumberg, Julie — Albert-Ludwigs-Univ. of Freiburg
Rickert, Joern — Univ. of Freiburg
Waldert, Stephan — Univ. of Tübingen
Schulze-Bonhage, Andreas — Univ. Hospital Freiburg
Aertsen, Ad — Albert-Ludwigs-Univ.
Mehring, Carsten — Albert-Ludwigs-Univ.

10:30-12:00 FrP1D6.9

Comparison of EEG Pattern Classification Methods for Brain-Computer Interfaces, pp. 2540-2543.

Dias, Nuno S. — Univ. of Minho
Kamrunnahar, Mst (Kamrun) — The Pennsylvania State Univ.
Mendes, Paulo M. — Univ. of Minho
Schiff, Steven — Pennsylvania State Univ.
Correia, Higino — Univ. of Minho

10:30-12:00 FrP1D6.10

Adaptive EEG Thought Pattern Classifier for Advanced Wheelchair Control, pp. 2544-2547.

Craig, Daniel Ashley — Univ. of Tech. Sydney
Nguyen, Hung — Univ. of Tech. Sydney

FrB01 — Gratte Ciel 1

Adaptive and Parametric Filtering in Biomedical Signals I (Oral Session)

Chair: Bianchi, Anna Maria — Pol. di Milano
Co-Chair: Kahya, Yasemin P. — Bogazici Univ.

12:45-13:00 FrB01.1

ECG Denoising Using Parameters of ECG Dynamical Model As the States of an Extended Kalman Filter, pp. 2548-2551.

Sayadi, Omid — Sharif Univ. of Tech.
Sameni, Reza — Sharif Univ. of Tech.
Shamsollahi, Mohammad Bagher — Sharif Univ. of Tech.

13:00-13:15 FrB01.2

Cancellation of Artifacts in ECG Signals Using a Normalized Adaptive Neural Filter, pp. 2552-2555.

Wu, Yunfeng — Beijing Univ. of Posts & Telecom
Rangayyan, Raj — Univ. of Calgary
NG, Sin Chun — The Open Univ. of Hong Kong

13:15-13:30 FrB01.3

Lung Model Parameter Estimation by Unscented Kalman Filter, pp. 2556-2559.

Saatç1;, Esra — Istanbul Kultur Univ.
Akan, Ayd1;n — Istanbul Univ.

13:30-13:45 FrB01.4

Sleep Monitoring through a Textile Recording System, pp. 2560-2563.

Devot, Sandrine — Philips Res. Europe
Bianchi, Anna Maria — Pol. di Milano
Naujokat, Elke — Philips Res. Europe Lab.
Mendez, Martin — Pol. di Milano
Brauers, Andreas — Philips Res. Europe Lab.
Cerutti, Sergio — Pol. Univ. of Milan

13:45-14:00 FrB01.5

Adaptive Noise Cancellation Using Accelerometers for the PPG Signal from Forehead, pp. 2564-2567.

Kim, Sang Hyun — Korea Univ. of Science and Tech.
Ryoo, Dong Wan — ETRI
Bae, Chang Seok — ETRI

14:00-14:15 FrB01.6

A Robust Tool to Compare Pre and Post-Surgical Voice Quality, pp. 2568-2571.

Manfredi, Claudia — Univ. degli Studi di Firenze
Canalicchio, Riccardo — Univ. degli Studi di Firenze
Cecconi, Giulio — Univ. degli Studi di Firenze
Cantarella, Giovanna — Ospedale Maggiore IRCCS

14:15-14:30 FrB01.7

A New Acupuncture Point Detection Using the Impedance Measurement System Based on ANF and Phase-Space-Method, pp. 2572-2574.

Park, Ho Dong — Yonsei Univ.
Song, Mi Hye — Yonsei Univ.
Choi, Hyun Seok — Yonsei Univ.
Myoung, Hyoun Seok — Yonsei Univ.
Lee, Kyoung Joung — Yonsei Univ.

FrB02 — Gratte Ciel 2

Signal Processing and Physiological System Modeling V (Oral Session)

Chair: Baselli, Giuseppe — Pol. di Milano
Co-Chair: Mukkamala, Ramakrishna — Michigan State Univ.

12:45-13:00 FrB02.1

Detection and Prediction of Sudden Cardiac Death (SCD) for Personal Healthcare, pp. 2575-2578.

Shen, Tsu-Wang (David) — Tzu Chi Univ.
Shan, Hsiao-Ping — TZU CHI Univ.
Lin, Ching Heng — TZU CHI Univ.
Ou, Yi-Ling — TZU CHI Univ.

13:00-13:15 FrB02.2

Discrimination between Demand and Supply Ischemia Episodes in Holter Recordings, pp. 2579-2582.

Mincholé, Ana — Univ. of Zaragoza
Jager, Franc — Univ. of Ljubljana
Laguna, Pablo — Zaragoza Univ.

13:15-13:30 FrB02.3

T-Wave Vector Alternans Detection Based on Holter ECG Recordings, pp. 2583-2586.

Satoh, Toshihisa — Hosei Univ.
Yana, Kazuo — Hosei Univ.
shichiku, hiroyuki — Univ.
Mizuta, Hirohisa — Josai Univ.
Ono, Takuya — Nippon Medical School

13:30-13:45 FrB02.4

Impact of Sampling Rate Reduction on Automatic ECG Delineation, pp. 2587-2590.

Simón, Fernando — Univ. de Zaragoza
Martínez, Juan Pablo — Univ. of Zaragoza
Laguna, Pablo — Zaragoza Univ.
Houben, Richard — Advanced Concepts
van Grinsven, Bart — Biomedical Sciences
Rutten, Cyril — Univ. of Hasselt

13:45-14:00 FrB02.5

The Effect of Internal DC Shocks on the Atrial Fibrillation Frequency, pp. 2591-2594.

Diaz, Jose David — Univ. Nacional Experimental Francisco de Miranda
Castro, Noel Camilo — Univ. Simón Bolivar
Escalona, Omar Jacinto — Univ. of Ulster
Anderson, John McCune — Univ. of Ulster
GLOVER, BEN — RVH
Adgey, Jennifer — Royal Victoria Hospital

14:00-14:15 FrB02.6

Estimation of the Scope of Transvenous Lead Systems in Implantable Cardioverter Defibrillators, pp. 2595-2598.

Requena Carrion, Jesus — Univ. Rey Juan Carlos, Fuenlabrada, Madrid
Väisänen, Juho — Tampere Univ. of Tech.
Alonso Atienza, Felipe — Univ. Rey Juan Carlos
Rojo Alvarez, Jose Luis — Univ. Rey Juan Carlos
hyttinen, jari — Tampere Univ. of Tech.
Garcia Alberola, Arcadio — no se

FrB03 Bellecour 1

Novel Imaging Methods (Oral Session)

Chair: Golay, Xavier — Singapore Bioimaging Consortium

12:45-13:00 FrB03.1

Magnetic Resonance Elastography to Observe Deep Areas: Comparison of External Vibration Systems, pp. 2599-2602.

Suga, Mikio — Chiba Univ.
Obata, Takayuki — National Inst. of Radiological Sciences
Hirano, Masaya — GE Yokogawa Medical Systems, ltd
Tanaka, Takashi — Chiba Univ.
Ikehira, Hiroo — National Inst. of Radiological Sciences

13:00-13:15 FrB03.2

Multi-Modal Imaging: Simultaneous MRI and Ultrasound Imaging for Carotid Arteries Visualization, pp. 2603-2606.

TANG, Annie M. — The Univ. of Hong Kong
Kacher, Daniel F. — Brigham and Women's Hospital / Harvard Medical School
Lam, Edmund Y. — Univ. of Hong Kong
Brodsky, Michael — Terason Ultrasound, Div. of Teratech Corp.
Jolesz, Ferenc A. — Brigham and Women's Hospital / Harvard Medical School
Yang, Edward — Univ. of Hong Kong

13:15-13:30 FrB03.3

A Magnetic Resonance Elastography (MRE) Approach for Liver Investigation, pp. 2607-2610.

grenier, denis — Univ. claude bernard Lyon 1, Insa Lyon, CNRS, INSERM
MILOT, Laurent — Univ. de Lyon, Univ. Lyon 1, INSA-Lyon
peng, xian — Creatis LRMN, UMR CNRS 5220, U 630 INSERM, INSA, UCBL1
PILLEUL, Frank — Univ. de Lyon, Univ. Lyon 1, INSA-Lyon
BEUF, olivier — Univ. de Lyon, Univ. Lyon 1, INSA-Lyon

13:30-13:45 FrB03.4

Magnetic Resonance Elastography with Twin Pneumatic Drivers for Wave Compensation, pp. 2611-2613.

Zheng, Ying — The Univ. of Hong Kong
Li, Geng — The Univ. of Hong Kong
Chen, Min — Beijing Hospital
Chan, Queenie C. C. — Philips Electronics Hong Kong Limited
Hu, Shu-Guang — Philips
Zhao, Xu-Na — Philips Medical Systems, Philips Electronics China Limited
Ehman, L. Richard — Mayo Clinic
Lam, Edmund Y. — Univ. of Hong Kong
Yang, Edward — Univ. of Hong Kong

13:45-14:00 FrB03.5

Method for Target Tracking in Focused Ultrasound Surgery of Liver Using Magnetic Resonance Filtered Venography, pp. 2614-2617.

Kokuryo, Daisuke — Kobe Univ.
Kaihara, Toshiya — Faculty of Engineering, Kobe Univ.
Kumamoto, Etsuko — Kobe Univ.
Fujii, Susumu — Faculty of Science and Tech. Sophia Univ.
Kuroda, Kagayaki — School of Information Science and Tech. TokaiUniversity

14:00-14:15 FrB03.6

Ultra-Fast Brain MR Imaging Using Simultaneous Multi-Slice Acquisition (SMA) Technique, pp. 2618-2621.

Wu, Edzer — National Taiwan Univ.
Kuo, Li-Wei — National Taiwan Univ.
Wu, Fu-Hsing — National Taiwan Univ.
Hsu, Chien-Fang — NTU
Hsieh, Chang-Wei — National Taiwan Univ.
Chen, Jyh-Horng — National Taiwan Univ.
Chiueh, Tzi-Dar — National Taiwan Univ.

FrB04 Bellecour 3

Optical Imaging II (Oral Session)

Chair: Gandjbakhche, Amir — National Inst. of Health

12:45-13:00 FrB04.1

Differential Optical Spectroscopy for Absorption Characterization of Mono & Two-Layered Scattering Media, pp. 2622-2625.

Billet, Cyril — Univ. Claude Bernard Lyon 1
Sablong, Raphaël — Univ. Claude Bernard Lyon 1

13:00-13:15 FrB04.2

Fluorescence Diffuse Optical Tomographic (fDOT) System for Small Animal Studies, pp. 2626-2629.

Koenig, Anne — CEA-LETI Minatec
Boutet, Jérôme — CEA-LETI Minatec
Hervé, Lionel — CEA-LETI Minatec
Berger, Michel — CEA-LETI Minatec
dinten, jean-marc — CEA-LETI, MINATEC
da silva, anabela — CEA-LETI, MINATEC
peltié, philippe — CEA-LETI, MINATEC
rizo, philippe — CEA-LETI, MINATEC

13:15-13:30 FrB04.3

Combined Thermal and Laser Doppler Imaging in the Assessment of Cutaneous Tissue Perfusion, pp. 2630-2633.

Merla, Arcangelo — ITAB - Inst. of Advanced Biomedical Tech. - Foundation
Di Romualdo, Sandro — Univ. of Chieti-Pescara
Di Donato, Luigino — ITAB- Inst. for Advanced Biomedical Tech. -
Proietti, Michele — Univ. of Rome La Sapienza
Salsano, Felice — Univ. of Rome La Sapienza
Romani, Gian Luca — Univ. of Chieti-Pescara

13:30-13:45 FrB04.4

Using FMRI and FNIRS for Localization and Monitoring of Visual Cortex Activities, pp. 2634-2638.

Kashou, Nasser — The Ohio State Univ.
Xu, Ronald — The Ohio State Univ.
roberts, cynthia — Ohio State Univ.
Leguire, Lawrence — Childrens Hospital

13:45-14:00 FrB04.5

A Simulation-Based Study of Reconstruction in Time-Resolved Fluorescence Diffuse Optical Tomography in Cylindrical Geometry, pp. 2639-2642.

Ducros, Nicolas — CEA-LETI, MINATEC
da silva, anabela — CEA-LETI, MINATEC
dinten, jean-marc — CEA-LETI, MINATEC
PEYRIN, Francoise — UMR CNRS 5220; Inserm U630; INSA-Lyon; ESRF

14:00-14:15 FrB04.6

Fourier Domain - Optical Coherence Tomography Based on a Quadrature Mach-Zehnder Interferometer, pp. 2643-2646.

Flueraru, Costel — National Res. Council of Canada
Mao, Linda — National Res. Council of Canada
Sherif, Sherif — National Res. Council of Canada
Chang, Shoude — National Res. Council of Canada

FrB05 — Tęte d'Or Lounge

Integrated Wearable Systems towards Biomedical Applications I (Oral Session)

Chair: Tamura, Toshiyo — Chiba Univ. Gradute School of Engineering
Co-Chair: Di Rienzo, Marco — Fondazione Don Carlo Gnocchi

12:45-13:00 FrB05.1

Electrocardiogram Measurement During Sleep with Wearing Clothes Using Capacitively-Coupled Electrodes, pp. 2647-2650.

Ishida, Shuhei — Ritsumeikan Univ.

13:00-13:15 FrB05.2

Wearable System-On-A-Chip UWB Radar for Health Care and Its Application to the Safety Improvement of Emergency Operators, pp. 2651-2654.

Zito, Domenico — Univ. of Pisa
Pepe, Domenico — Univ. of Pisa
Neri, Bruno — Univ. of Pisa
De Rossi, Danilo — Univ. of Pisa
Lanata', Antonio — Univ. of Pisa
tognetti, alessandro — Univ. of Pisa
Scilingo, Enzo Pasquale — Univ. of Pisa

13:15-13:30 FrB05.3

Electrostatic Interference in Contactless Biopotential Measurements, pp. 2655-2658.

Casas, Oscar — Tech. Univ. of Catalonia
Pallŕs-Areny, Ramon — Univ. Pol. de Catalunya

13:30-13:45 FrB05.4

Design of Posture and Activity Detector (PAD), pp. 2659-2663.

Bliley, Kara — Mayo Clinic Coll. of Medicine
Schwab, Daniel — Mayo Clinic Coll. of Medicine
Zahn, Sharon — Mayo Clinic Coll. of Medicine
Rowley, Katharine — Mayo Clinic Coll. of Medicine
Kane, Paul — Mayo Clinic Coll. of Medicine
Levine, James — Mayo Clinic Coll. of Medicine
Daniel, Erik — Mayo Clinic Coll. of Medicine
Gilbert, Barry — Mayo Clinic Coll. of Medicine

13:45-14:00 FrB05.5

An Evaluation of a Non-Contact Biomotion Sensor with Actimetry, pp. 2664-2668.

Fox, Niall — BiancaMed
Heneghan, Conor — Univ. Coll. Dublin
Gonzalez, Monica — Hospital Univ. Marques de Valdecilla
Shouldice, Redmond — BiancaMed Ltd
de Chazal, Philip — BiancaMed Ltd

14:00-14:15 FrB05.6

Detecting Motion Artifact ECG Noise During Sleeping by Means of a Tri-Axis Accelerometer, pp. 2669-2672.

Kishimoto, Yoshifumi — Aichi Prefectural Univ.
Kutsuna, Yasunari — Aichi Prefectural Univ.
Oguri, Koji — Aichi Prefectural Univ.

FrB06 Tęte d'Or 2

Biological and Biochemical Sensors, Materials I (Oral Session)

Chair: Laureyn, Wim — IMEC
Co-Chair: Diamond, Dermot — Dublin City Univ.

12:45-13:00 FrB06.1

A Low-Power Wide Range Transimpedance Amplifier for Biochemical Sensing, pp. 2673-2676.
Rodriguez-Villegas, Esther — Imperial Coll. London

13:00-13:15 FrB06.2

Effect of Self-Assembled Monolayers (SAMs) in Binding Glucose Oxidase for Electro-Enzymatic Glucose Sensor with Gold Electrodes, pp. 2677-2680.
Patel, Jasbir N. — Simon Fraser Univ.
Kaminska, Bozena — SIMON FRASER Univ.
Gray, Bonnie L. — Simon Fraser Univ.
Gates, Byron — Simon Fraser Univ.

13:15-13:30 FrB06.3

Chromium Hexacyanoferrate Modified Biosensor Based on PQQ-Dependent Glucose Dehydrogenase, pp. 2681-2684.
Tseng, Ta-Feng — Chung Yuan Christian Univ.
Yang, Yang Li — Chung Yuan Christan Unviersity
Lou, Shyhliang — Chung Yuan Christian Univ.

13:30-13:45 FrB06.4

Optimal Electrode Placement and Frequency Range Selection for the Detection of Lung Water Using Bioimpedance Spectroscopy, pp. 2685-2688.
Beckmann, Lisa — RWTH Aachen Univ.
van Riesen, Dirk — RWTH Aachen
Leonhardt, Steffen — RWTH Aachen Univ.

13:45-14:00 FrB06.5

Developing a Tissue Perfusion Sensor, pp. 2689-2692.
harvey, severin — Imperial Coll.
Parker, Kim H. — Imperial Coll. London
O'hare, Danny — Imperial Coll.

FrB07 Bellecour 2

Ventricular Mechanics and Coronary Circulation (Oral Session)

Chair: Li, John K-J. — Rutgers Univ.

12:45-13:00 FrB07.1

Pressure Reservoir-Wave Separation Applied to Coronary Arterial Data, pp. 2693-2696.
Aguado-Sierra, Jazmin — Imperial Coll. London
Parker, Kim H. — Imperial Coll. London
Davies, Justin E. — St. Mary's Hospital, Imperial Coll. London
Francis, Darrel — St. Mary's Hospital, Imperial Coll. London
Mayet, Jamil — St. Mary's Hospital, Imperial Coll. London
Hadjiloizou, Nearchos — St. Mary's Hospital, Imperial Coll. London

13:00-13:15 FrB07.2

A Three Dimensional Heart Model Based on Anatomically Aligned Trusses, pp. 2697-2700.
Witman, Sima — Tel Aviv Univ.
Gefen, Amit — Tel Aviv Univ.
Barnea, Ofer — Tel Aviv Univ.

13:15-13:30 FrB07.3

Computational Study of Blood Flow in an Aorto-Coronary Bypass Model Using Single versus Sequential Grafting Technique, pp. 2701-2704.
Sankaranarayanan, Meena — Inst. for Infocomm Res.
Chen, Xiang — Inst. for Infocomm Res.

13:30-13:45 FrB07.4

Quantitative Evaluation for Anastomotic Technique of Coronary Artery Bypass Grafting by Using In-Vitro Mock Circulatory System, pp. 2705-2708.
Park, Young Kwang — Waseda Univ.
Mita, Yutaka — Waseda Univ.
Oki, Eriko — Waseda Univ.
Kanemitsu, Naohiko — Waseda Univ.
Shiraishi, Yasuyuki — Inst. of Development, Aging andCancer, TohokuUniversity
Azuma, Takashi — Tokyo Women's Medical Univ.
Ochi, Masami — Nippon Medical School
Umezu, Mitsuo — Waseda Univ. Graduate School

13:45-14:00 FrB07.5

Assessment of Training-Dependent Changes in the Left Ventricle Torsion Dynamics of Professional Soccer Players Using Speckle-Tracking Echocardiography, pp. 2709-2712.
Zócalo, Yanina — School of Medicine, Republic Univ.
Bia, Daniel — School of Medicine, Republic Univ.
Armentano, Ricardo Luis — Favaloro Univ.
Arias, Laura — Fundación Favaloro
Lopez, Claudio — Fundación Favaloro
Etchart, Carolina — School of Medicine, Republic Univ.
Guevara, Eduardo — Fundación Favaloro

FrB08 Gratte Ciel Lounge

Modeling and Simulation of Neural Systems I (Oral Session)

Chair: WENDLING, Fabrice — INSERM - Univ. de Rennes 1
Co-Chair: Magosso, Elisa — Univ. of Bologna

12:45-13:00 FrB08.1

H-Reflex Depression Simulated by a Biologically Realistic Motoneuron Network, pp. 2713-2716.

Cisi, Rogerio Rodrigues Lima — Univ. of Sao Paulo
Kohn, Andre — Univ. of Sao Paulo

13:00-13:15 FrB08.2

Modeling and Identifying the Somatic Reflex Network of the Human Neuromuscular System, pp. 2717-2721.

Murai, Akihiko — The Univ. of Tokyo
Katsu, Yamane — Univ. of Tokyo
Nakamura, Yoshihiko — Univ. of Tokyo

13:15-13:30 FrB08.3

Smooth Muscle Model for Functional Electrical Stimulation Applications, pp. 2722-2725.

Guiraud, David — INRIA
Laforet, Jeremy — Univ. Montpellier 2

13:30-13:45 FrB08.4

The Effect of Extracellular Potassium Concentration on Muscle Fiber Conduction Velocity Examined Using Model Simulation, pp. 2726-2729.

Fortune, Emma — Univ. Coll. Dublin
Lowery, Madeleine — Northwestern Univ.

13:45-14:00 FrB08.5

An in Computo Investigation of the Landau-Kleffner Syndrome, pp. 2730-2734.

Bonjean, Maxime — Univ. of Ličge

14:00-14:15 FrB08.6

A Neural Network Model of Multisensory Representation of Peripersonal Space: Effect of Tool Use, pp. 2735-2739.

Ursino, Mauro — Univ. of Bologna
Zavaglia, Melissa — Univ. of Bologna
Magosso, Elisa — Univ. of Bologna
Serino, Andrea — Univ. of Bologna
di Pellegrino, Giuseppe — Univ. of Bologna

FrB09 Gratte Ciel 3

Human-Robot Interactions II (Oral Session)

Chair: Laschi, Cecilia — Scuola Superiore Sant'Anna

12:45-13:00 FrB09.1

Monitoring Patient Respiration Using a Single Optical Camera, pp. 2740-2743.

Wiesner, Stefan — TU Munich
Yaniv, Ziv — Georgetown Univ.

13:00-13:15 FrB09.2

Goodness-Of-Fit Determination of Femoral Knee Prosthesis Using Computer Segmentation, pp. 2744-2747.

Van Schalkwyk, Etienne Pierre — Stellenbosch Univ.
Scheffer, Cornie — Stellenbosch Univ.
Dillon, Edwin — Stellenbosch Medi-clinic
Erasmus, PJ — Stellenbosch Medi-clinic

13:15-13:30 FrB09.3

Needle Positioning in Interventional MRI Procedure: Real Time Optical Localisation and Accordance with the Roadmap, pp. 2748-2751.

Viard, Romain — CHRU Lille
Betrouni, Nacim — Inst. de Tech. Médicale
Rousseau, Jean — INSERM - Univ. de Lille 2
Mordon, Serge — Lille Univ. Hospital
Ernst, Olivier — CHRU Lille
MAOUCHE, Salah — UST Lille

13:30-13:45 FrB09.4

Toward the Simulation of the Strain of Female Pelvic Organs, pp. 2752-2755.

Bellemare, Marc-Emmanuel — Univ. Paul Cezanne
Pirró, Nicolas — Univ. de la méditérannée, Assistance Publique deshôpitaux d
Marsac, Laurent — Supersonic Imagine
Durieux, Olivier — Assistance Publique des Hôpitaux de Marseille, Hôpital Ste Margu

13:45-14:00 FrB09.5

Modeling of Needle Steering Via Duty-Cycled Spinning, pp. 2756-2759.

Minhas, Davneet — Carnegie Mellon Univ.
Engh, Johnathan — Univ. of Pittsburgh
Fenske, Michele — Cleveland State Univ.
Riviere, Cameron — Carnegie Mellon Univ.

14:00-14:15 FrB09.6

Instrument-Tissue Segment Interaction Using Finite Element Modeling, pp. 2760-2763.

Alsaraira, Amer — Monash Univ.
Brown, Ian — Monash Univ.
McColl, Ryan — Monash Univ.
Lim, Fabian — Monash Univ.

FrB10 Rhône 1

Clinical Engineering II (Oral Session)

Chair: Langevin, François — Compiegne Univ. of Tech.

12:45-13:00 FrB10.1

Novel Lead Configurations for Robust Bio-Impedance Acquisition, pp. 2764-2767.

Ironstone, Joel — Z-Tech. (Canada) Inc.
Graovac, Milan — Univ. of Toronto
Martens, James — Univ. of Waterloo
Rozee, Martin — Z-Tech. (Canada) Inc.
Smith, Kenneth C. — Univ. of Toronto

13:00-13:15 FrB10.2

Development of FES-Rowing Machine, pp. 2768-2771.

MIYAWAKI, KAZUTO — AKITA R&D CENTER
IWAMI, TAKEHIRO — Akita Univ.
Obinata, Goro — Nagoya Univ.
SHIMADA, YOICHI — Akita Univ. Hospital
MATSUNAGA, TOSHIKI — Akita Univ. Hospital
SATO, MINEYOSHI — Akita Univ. Hospital

13:15-13:30 FrB10.3

Clinical Engineering in France: State and Trends for the Future, pp. 2772-2774.

DECOUVELAERE, MARTINE — HOSPICES CIVILS DE LYON
MACQUET, PIERRE — Centre Hospitalier
VOGT, ARNAUD — Centre hospitalier Univ. Saint-Antoine

13:30-13:45 FrB10.4

Collection and Exploratory Analysis of Attitude Sensor Data in an Epilepsy Monitoring Unit, pp. 2775-2778.

Becq, Guillaume — INSERM
Bonnet, Stéphane — CEA Léti MINATEC
Minotti, Lorella — INSERM
Antonakios, Michel — CEA Léti Minatec
Guillemaud, Regis — CEA Léti MINATEC
Kahane, Philippe — INSERM

13:45-14:00 FrB10.5

Simultaneous Measurement of Eye Stiffness and Contact Area for Living Human Eyes, pp. 2779-2782.

Kurita, Yuichi — Nara Inst. of Science and Tech.
Iida, Yoshichika — Hiroshima Univ.
Kaneko, Makoto — Hiroshima Univ.
mishima, hiromu — Hiroshima General Hospital
katakura, seiki — Hiroshima Univ.
kiuchi, yoshiaki — Hiroshima Univ.

14:00-14:15 FrB10.6

Real-Time Evaluation of Patient Monitoring Algorithms for Critical Care at the Bedside, pp. 2783-2786.

Zhang, Ying — MIT, Harvard Medical School-MIT Div. of Health Science
Silvers, Christine Tsien — Caritas Good Samaritan Medical Center, Jordan Hospital, Massachu
Randolph, Adrienne G. — Harvard Medical School

FrB11 Tęte d'Or 1

Telemedicine I (Oral Session)

Chair: Fotiadis, Dimitrios I. — Univ. of Ioannina
Co-Chair: Pattichis, Constantinos — Univ. of Cyprus

12:45-13:00 FrB11.1

HomeCI - a Visual Editor for Healthcare Professionals in the Design of Home Based Care, pp. 2787-2790.

Nugent, Chris — Univ. of Ulster
Davies, Richard John — Univ. of Ulster
Hallberg, Josef — Luleĺ Univ. of Tech.
Donnelly, Mark — Univ. of Ulster
Synnes, KÍre — Univ.
Poland, Michael — Univ. of Ulster
Wallace, Jonathan Graeme — Univ. of Ulster
Finlay, Dewar — Univ. of Ulster
Mulvenna, Maurice — Univ. of Ulster
CRAIG, David — Queen's Univ. Belfast

13:00-13:15 FrB11.2

J2ME and Smart Phones As Platform for a Bluetooth Body Area Network for Patient-Telemonitoring, pp. 2791-2794.

Moron, Maria J. — Univ. de Málaga
Luque, J. Rafael — Univ. de Málaga
Cuberos, Emilio J. — Univ. de Málaga
Botella, Antonio A. — Univ. de Málaga
Casilari, Eduardo — Univ. de Málaga
Diaz Estrella, Antonio — Univ. de Málaga

13:15-13:30 FrB11.3

An Analysis for Specifications of Medical Use RFID System As a Wireless Communication, pp. 2795-2798.

HOSAKA, Ryosuke — Shonan Inst. of Tech.

13:30-13:45 FrB11.4

Automatic Mobile Device Synchronization and Remote Control System for High-Performance Medical Applications, pp. 2799-2802.

Constantinescu, Liviu — Univ. of Sydney
Kim, Jinman — Univ. of Sydney
Chan, Chung — Univ. of Sydney
Feng, Dagan — The Univ. of Sydney

13:45-14:00 FrB11.5

Experience at Italian National Institute of Health in the Quality Control in Telemedicine: Tools for Gathering Data Information and Quality Assessing, pp. 2803-2806.

Giansanti, Daniele — Istituto Superiore di Sanitŕ
Morelli, Sandra — Istituto Superiore di Sanitŕ
Macellari, Velio — Istituto Superiore di Sanitŕ

FrB12 — Rhône 2

Health Technologies and Private Public Partnerships in Emerging Markets: Example Projects to Learn from II (Invited Session)

Chair: Roes, Jan — Pernosco
Organizer: Roes, Jan — Pernosco

12:45-13:00 FrB12.1

Optical Screening of Oral Cancer: Technology for Emerging Markets (I), pp. 2807-2810.

Naik, Sarif Kumar — Philips Electronics India Ltd
Gupta, Lalit — Philips Electronics India Ltd.
Mittal, Chetan — Philips Electronics India Ltd.
Balakrishnan, Srinivasan — Philips Electronics India Ltd.
Rath, Satish prasad — Philips Res.
C, Santhosh — Manipal Univ.
Pai, Keerthilatha — Manipal Univ.

FrB13 — Roseraie 1,2

Capsular Endoscopy (Invited Session)

Chair: Dario, Paolo — Scuola Superiore Sant'Anna
Co-Chair: Menciassi, Arianna — Scuola Superiore Sant'Anna
Organizer: Menciassi, Arianna — Scuola Superiore Sant'Anna
Organizer: Dario, Paolo — Scuola Superiore Sant'Anna

12:45-13:00 FrB13.1

A Magnetic Stereo-Actuation Mechanism for Active Capsule Endoscope (I), pp. 2811-2814.

Meng, Max Q.-H. — The Chinese Univ. of Hong Kong
Wang, Xiaona — Chinese Univ. of Hong Kong

13:00-13:15 FrB13.2

Data Processing Tasks in Wireless GI Endoscopy: Image-Based Capsule Localization & Navigation and Video Compression (I), pp. 2815-2818.

Bulat, Jaroslaw — AGH Univ. of Science and Tech.
Duda, Krzysztof — AGH Univ. of Science and Tech.
Duplaga, Mariusz — Jagiellonian Univ. Medical Coll.
Fraczek, Rafal — AGH Univ. of Science and Tech.
Skalski, Andrzej — AGH Univ. of Science and Tech.
Socha, Miroslaw — AGH Univ. of Science and Tech.
Turcza, Pawel — AGH Univ. of Science and Tech.
Zielinski, Tomasz — AGH Univ. of Science and Tech.

13:15-13:30 FrB13.3

High Dynamic Range CMOS Image Sensors in Biomedical Applications (I), pp. 2819-2822.

Vatteroni, Monica — Neuricam
Covi, Daniele — Neuricam
Crespi, Bruno — Neuricam
Sartori, Alvise — Neuricam
Stoppa, David — FBK-IRST Res. Inst.

13:30-13:45 FrB13.4

Micro Capsule Endoscope for Gastro Intestinal Tract (I), pp. 2823-2826.

Kim, Tae Song — Korea Inst. of Science andTechnology
Song, Si Young — Inst. of Gastroenterology, Yonsei Univ. of Coll. of M
Jung, Han — I3system. Co.
Kim, Jinseok — Korea Inst. of Science and Tech.
Yoon, Eui-Sung — Korea Inst. of Science and Tech.

13:45-14:00 FrB13.5

An Approach to Capsular Endoscopy with Active Motion (I), pp. 2827-2830.

Quirini, Marco — Pol. Sant'Anna Valdera - Scuola Superiore Sant'Anna
Scapellato, Sergio — Scuola Superiore di Studi Univ. e PerfezionamentoSant'Ann
Valdastri, Pietro — Scuola Superiore Sant'Anna
Menciassi, Arianna — Scuola Superiore Sant'Anna
Dario, Paolo — Scuola Superiore Sant'Anna

FrC01 Gratte Ciel 1

Adaptive and Parametric Filtering in Biomedical Signals II (Oral Session)

Chair: Carrault, Guy — Univ. de Rennes 1

14:30-14:45 FrC01.1

Blind Dereverberation for Fmri Noise Based on SIMO Linear Prediction Method, pp. 2831-2834.

Bao, Hua — Univ. of Texas at Dallas
Panahi, Issa — Univ. of Texas at Dallas
briggs, richard — UT southwestern

14:45-15:00 FrC01.2

Adaptive Time-Scale Feature Extraction in Electroencephalographic Responses to Transcranial Magnetic Stimulation, pp. 2835-2838.

Harris, Arief R. — Univ. of Saarland
Schwerdtfeger, Karsten — Saarland Univ. Hospital
Luszpinski, Marie-Anne — Saarland Univ. Hospital
Sandvoss, Gisela — Saarland Univ. Hospital
Strauss, Daniel J. — Computl Diagnostics & Biocybernetics

15:00-15:15 FrC01.3

Inter and Intra-Hemispheric EEG Coherence Responses to Visual Stimulations, pp. 2839-2842.

Cvetkovic, Dean — RMIT Univ.
Cosic, Irena — RMIT Univ.

15:15-15:30 FrC01.4

Experimental Testing of a Method for On-Line Identification of the Cerebrospinal Fluid System, pp. 2843-2846.

Manchester, Ian — Umeĺ Univ.
Andersson, Kennet — Umeĺ Univ.
Eklund, Anders — Umeĺ Univ.
Shiriaev, Anton — Umeĺ Univ.

15:30-15:45 FrC01.5

Bandlimited Multiple Fourier Linear Combiner for Real-Time Tremor Compensation, pp. 2847-2850.

Veluvolu, Kalyana C. — Nanyang Tech. Univ.
Tan, U-Xuan — Nanyang Tech. Univ. Singapore
Tun Latt, Win — Nanyang Tech. Univ.
Shee, Chengyap — Nanyang Tech. Univ.
Ang, Wei Tech — Nanyang Tech. Univ.

15:45-16:00 FrC01.6

An Automated Ocular Microtremor Feature Extraction Using the Gabor Thresholding Technique, pp. 2851-2854.

Al-Kalbani, Mohammed — St.James's Hospital
Collins, Niamh — Trinity Coll. Dublin
Boyle, Gerard — St. James's Hospital
Hegarty, Fran — St.James's Hospital
Foran, Tim — St.James's Hospital
Sheahan, Noirin — St.James's Hospital
Coakley, Davis — Trinity Coll. Dublin

FrC02 Gratte Ciel 2

Signal Processing and Physiological System Modeling VI (Oral Session)

Chair: Doessel, Olaf — Univ. of Karlsruhe
Co-Chair: Humeau, Anne — Groupe ISAIP-ESAIP and Univ. d'Angers

14:30-14:45 FrC02.1

Nonlinear, Multiple-Input Modeling of Cerebral Hemodynamics During Baseline and Hypercapnia in Young and Post-Menopausal Women, pp. 2855-2858.

Mitsis, Georgios D. — National Tech. Univ. of Athens
Debert, Chantel T. — Univ. of Calgary
Hajo, Mahmoud I. — National Inst.
Marmarelis, Vasilis — Univ. of Southern California
Poulin, Marc J. — Univ. of Calgary

14:45-15:00 FrC02.2

Analysis of Hemodynamics of Intracranial Saccular Aneurysms, pp. 2859-2862.

Szafrański, Krzysztof — Szczecin Univ. of Tech.

15:00-15:15 FrC02.3

Analysis of Pulse Waves in Intracranial Pressure, pp. 2863-2866.

Jetzki, Stefanie — RWTH Aachen Univ.
Kiefer, Michael — Saarland Univ. Medical School
Eymann, Regina — Saarland Univ. medical school
Walter, Marian — RWTH Aachen Univ.
Leonhardt, Steffen — RWTH Aachen Univ.

15:15-15:30 FrC02.4

Ultrasound Emitter Localization in Heterogeneous Media, pp. 2867-2870.

Flueckiger, Michael — ETH Zurich
Nelson, Bradley — ETH Zurich

15:30-15:45 FrC02.5

A New Noninvasive Approach to Detect the Artery's Pulsating Properties Via Tissue Control Method, pp. 2871-2874.

Lin, Albert Chin-yuh — Feng Chia Univ.
Huang, Huang-Nan — Tunghai Univ.
Su, Yi-Chang — e-Med Biotech, Inc.
Shiu, Chih-Yuan — Feng Chia Univ.
Lin, Jui-Shan — China Medical Univ.

15:45-16:00 FrC02.6

Propagation Route Estimation of Heart Sound through Simultaneous Multi-Site Recording on the Chest Wall, pp. 2875-2878.

Kawamura, Yoko — Gifu Univ.
Yokota, Yasunari — Gifu Univ.
Nogata, Fumio — Gifu Univ.

FrC03 — Bellecour 1

MRI: Novel Applications I (Oral Session)

Chair: Shungu, Dikoma C. — Weill Medical Coll. of Cornell Univ.
Co-Chair: Kitney, Richard Ian — Imperial Coll. London

14:30-14:45 FrC03.1

Characterization of Neuro-Endocrine Tumors in an Athymic Nude Mouse Model Using Dedicated Synchronization Strategies for T2-Weigted MR Imaging at 7T, pp. 2879-2882.

Baboi, Loredana Maria — Univ. de Lyon, Univ. Lyon 1, INSA-Lyon
MILOT, Laurent — Univ. de Lyon, Univ. Lyon 1, INSA-Lyon
LARTIZIEN, Carole — Univ. de Lyon, Univ. Lyon 1, INSA-Lyon
ROCHE, Colette — Faculté de médecine RTH Laennec
SCOAZEC, Jean Yves — Faculté de médecine RTH Laennec
PILLEUL, Frank — Univ. de Lyon, Univ. Lyon 1, INSA-Lyon
BEUF, olivier — Univ. de Lyon, Univ. Lyon 1, INSA-Lyon

14:45-15:00 FrC03.2

Cartilage Thickness Visualization Using 2D WearMaps and TrackBack, pp. 2883-2886.

Poh, Chueh-Loo — Imperial Coll. London
Kitney, Richard Ian — Imperial Coll.

15:00-15:15 FrC03.3

Determination of Macromolecular Concentration Following Direct Infusion into Hydrogel Using Contrast-Enhanced MRI, pp. 2887-2890.

Chen, Xiaoming — Univ. of Florida
Astary, Garrett — Univ. of Florida
Mareci, Thomas — Univ. of Florida
Sarntinoranont, Malisa — Univ. of Florida

15:15-15:30 FrC03.4

Lung Liquid Clearance in Newborn Lamb: MRI Methods and Preliminary Results, pp. 2891-2894.

Viard, Romain — CHRU Lille
Vermandel, Maximilien — Univ. de Lille
Tourneux, Pierre — CHU Amiens
Storme, Laurent — CHRU Lille
Rousseau, Jean — INSERM - Univ. de Lille 2

15:30-15:45 FrC03.5

A Robust Method for Assessment of Iron Overload in Liver by Magnetic Resonance Imaging, pp. 2895-2898.

Positano, Vincenzo — CNR Inst. of Clinical Physiology
Salani, Benedetta — Univ. of Pisa
Scattini, Barbara — Inst. of Clinical Physiology
Santarelli, Maria Filomena — CNR
Ramazzotti, Anna — CNR Inst. of Clinical Physiology
Pepe, Alessia — CNR Inst. of Clinical Physiology
Lombardi, Massimo — CNR Inst. of Clinical Physiology
Landini, Luigi — Univ. of Pisa

15:45-16:00 FrC03.6

Evidence of Brain Mitochondrial Activities after Oxygen Inhalation by 31P Magnetic Resonance Spectroscopy at 3T, pp. 2899-2902.

Wu, RenHua — Shantou Univ. Medical Coll.
Julien, Poublanc — Univ. of Toronto
Danny, Mandell — Univ. of Toronto
Garry, Detzler — Univ. of Toronto
Adrian, Crawley — Univ. of Toronto
Qing-Chun, Qiu — Shantou Univ. Medical Coll.
terBrugge, Karel — Univ. of Toronto
Mikulis, David — The Toronto Western Hospital, Univ. of Toronto

FrC04 — Bellecour 3

CT : Sampling and Truncation (Oral Session)

Co-Chair: PEYRIN, Francoise — UMR CNRS 5220; Inserm U630; INSA-Lyon; ESRF

14:30-14:45 FrC04.1

Estimation of Missing Data Using Windowed Linear Prediction in Laterally Truncated Projections in Cone-Beam CT, pp. 2903-2906.

K. P., Anoop — Indian Inst. of Science
K., Rajgopal — Indian Inst. of Science

14:45-15:00 FrC04.2

CT Truncation Artifact Removal Using Water-Equivalent Thicknesses Derived from Truncated Projection Data, pp. 2907-2911.

Maltz, Jonathan S. — Siemens Medical & Berkeley Lab.
Bose, Supratik — Siemens Medical Solutions (USA), Inc.
Shukla, Himanshu — Siemens Medical Solutions (USA), Inc.
Bani-Hashemi, Ali — Siemens Medical Solutions USA, Inc

15:00-15:15 FrC04.3

Multiresolution Local Tomography in Dental Radiology Using Wavelets, pp. 2912-2915.

Niinimaki, Kati — Univ. of Kuopio
Siltanen, Samuli — Univ. of Tampere
Kolehmainen, Ville — Univ. of Kuopio

15:15-15:30 FrC04.4

Comparison of Analytical and Algebraic 2D Tomographic Reconstruction Approaches for Irregularly Sampled Microct Data, pp. 2916-2919.

valton, solene — INSA-Lyon
Berard, Philippe — Univ. Univ. de Sherbrooke
Riendeau, Joel — Univ. Univ. de Sherbrooke
thibaudeau, christian — Univ. Univ. de Sherbrooke
Lecomte, Roger — Univ. de Sherbrooke
SAPPEY-MARINIER, Dominique — Univ. Claude Bernard - Lyon1
PEYRIN, Francoise — UMR CNRS 5220; Inserm U630; INSA-Lyon; ESRF

15:30-15:45 FrC04.5

Monte Carlo Simulations Verifying Sampling Schemes in Multislice Mode PET, pp. 2920-2923.

grondin, yannick — Lab. TIMC/IMAG (Univ. Joseph Fourier - CNRS UMR 5525)
Desbat, Laurent — Grenoble Univ. (UJF)

15:45-16:00 FrC04.6

Influence of a Longitudinal Motion on Image Quality with a 64-Channel CT Scanner, pp. 2924-2927.

GROSJEAN, Romain — IADI, UHP-Inserm ERI 13
GUERRA, Rui Matias — IADI, UHP-Inserm ERI 13
SAUER, Benoit — IADI, UHP-Inserm ERI 13
BLUM, Alain — Hopital Central
HUBERT, Jacques — IADI, UHP-Inserm ERI 13 and Urology Department
FELBLINGER, Jacques — IADI, UHP-Inserm ERI 13

FrC05 — Tęte d'Or Lounge

Instrumentation and Systems for Diagnosis and Clinical Management I (Oral Session)

Co-Chair: SCHURR, MARC O. — NOVINEON

14:30-14:45 FrC05.1

First-Aid Sensor System: New Methods for Single-Point Detection and Analysis of Vital Parameters Such As Pulse and Respiration, pp. 2928-2931.

Jaeger, Marc — Univ. of Karlsruhe
Mueller, Marco — Univ. of Karlsruhe
Wettach, Daniel — Univ. of Karlsruhe
Oezkan, Timur — Univ. Hospital Heidelberg
Motsch, Johann — Univ. Hospital Heidelberg
Schauer, Thomas — Univ. of Berlin
Jaeger, Robert — Univ. of Karlsruhe
Bolz, Armin — Univ. of Karlsruhe

14:45-15:00 FrC05.2

Point-Of-Care Noninvasive Hemoglobin Determination Using Fiber Optic Reflectance Spectroscopy, pp. 2932-2935.

Jay, Gregory — Brown Univ.
Racht, Justin — Brown Univ.
McMurdy, John — Brown Univ.
Mathews, Zara — Brown Univ.
Hughes, Ashley — Brown Univ.
Suner, Selim — Brown Univ.
Crawford, Gregory — Brown Univ.

15:00-15:15 FrC05.3

A Modified Cardiac Stabilizer Used for Recording Electrograms, pp. 2936-2939.

Wtorek, Jerzy — Gdansk Univ. of Tech.
Bujnowski, Adam — Gdansk Univ. of Tech.
Nowakowski, Antoni Z. — Gdansk Univ. of Tech.

15:15-15:30 FrC05.4

A Portable Neurological Monitor for Use in Cognitive Function Studies, pp. 2940-2943.

Sobolewski, Rory — Univ. Coll. Dublin
OMullane, Brian — Univ. Coll. Dublin
Knapp, Ben — Univ. Coll. Dublin
Reilly, Richard — Univ. Coll. Dublin

15:30-15:45 FrC05.5

Implementation of Electrochemiluminescence Microanalysis in PCB Technology, pp. 2944-2947.

Pittet, Patrick — Univ. Claude Bernard Lyon 1
LU, Guo-Neng — Univ. Claude Bernard Lyon 1
Galvan, Jean-Marc — CPE
Ferrigno, Rosaria — Univ. Claude Bernard Lyon 1
STEPHAN, Khaled — Univ. Claude Bernard Lyon 1
BLUM, Loic — Univ. Claude Bernard Lyon 1
Leca-Bouvier, Béatrice — Univ. Claude Bernard Lyon 1

15:45-16:00 FrC05.6

Magnetoresistive Sensors in a New Biomagnetic Instrumentation for Applications in Gastroenterology, pp. 2948-2951.

Paixão, Fabiano Carlos — Univ. Estadual Paulista - UNESP
Miranda da Silva, Fabiano — Univ. de São Paulo
Miranda, José Ricardo A — IBB - Univ. Estadual Paulista
Baffa, Oswaldo — FFCLRP-Univ. of Sao Paulo

FrC06 — Tęte d'Or 2

Optical and Photonics Sensors and Systems (Oral Session)

Chair: Sadowski, Janusz — VTT Tech. Res. Centre
Co-Chair: Guillemaud, Regis — CEA Léti MINATEC

14:30-14:45 FrC06.1

Development of a New Splanchnic Perfusion Sensor, pp. 2952-2955.

Hickey, Michelle — City Univ.
Kyriacou, Panayiotis — City Univ.

14:45-15:00 FrC06.2

Identification of Cardiac Events by Optical Vibrocardiograpy: Comparison with Phonocardiography, pp. 2956-2959.

De Melis, Mirko — Univ. Pol. delle marche
morbiducci, umberto — Univ. Pol. delle marche
scalise, lorenzo — Univ. Pol. delle marche

15:00-15:15 FrC06.3

Optical Dialysis Adequacy Sensor: Wavelength Dependence of the Ultra Violet Absorbance in the Spent Dialysate to the Removed Solutes, pp. 2960-2963.

Jerotskaja, Jana — Tallinn Univ. of Tech.
Lauri, Kai — Tallinn Univ. of Tech.
Tanner, Risto — National Inst. of Chemical Physics and Biophysics
Luman, Merike — North-Estonian Regional Hospital
Fridolin, Ivo — Centre of Biomedical Engineering

15:15-15:30 FrC06.4

A New Non-Invasive Method for Measuring Blood Glucose Using Instantaneous Differential Near Infrared Spectrophotometry, pp. 2964-2967.

Yamakoshi, Yasuhiro — TYT Inst. of Tech. Co., Ltd.
Ogawa, Mitsuhiro — Kanazawa-Univ.
Yamakoshi, Takehiro — Kanazawa Univ.
Satoh, Makoto — Kanazawa-Univ.
Nogawa, Masamichi — Kanazawa Univ.
Tanaka, Shinobu — Kanazawa Univ.
Tamura, Toshiyo — Chiba Univ. Gradute School of Engineering
Rolfe, Peter — Oxford BioHorizons Ltd
Yamakoshi, Ken-ichi — Kanazawa Univ.

15:30-15:45 FrC06.5

PCB/Polymer Based Micro-Fluidic System for NMR Spectroscopy for Nanoliters Sample Volume, pp. 2968-2971.

Deman, Anne-Laure — Univ. Lyon1 Claude Bernard
Chateaux, Jean-François — Univ. Lyon1 Claude Bernard
Pasquet, Guillaume — Univ. Lyon1 Claude Bernard
Fenet, Bernard — Univ. Lyon1 Claude Bernard
Morin, Pierre — Univ. Lyon1 Claude Bernard

15:45-16:00 FrC06.6

Modeling of Selective Photon Capture for Collection of Fluorescence Emitted from Dermally-Implanted Microparticle Sensors, pp. 2972-2975.

McShane, Mike — Texas A&M Univ.
Long, Ruiqi — Texas A&M Univ.

FrC07 — Bellecour 2

Cardiovascular Models (Oral Session)

Chair: Chbat, Nicolas — Philips Res. North America
Co-Chair: Clark, John W. — Rice Univ.

14:30-14:45 FrC07.1

Study of Ventricular Interaction During Pulmonary Embolism Using Clinical Identification in a Minimum Cardiovascular System Model, pp. 2976-2979.

Desaive, Thomas — Univ. of Liege
Ghuysen, Alexandre — Univ. of Liege
Lambermont, Bernard — Univ. of Liege
Kolh, Philippe — Univ. of Liege
Dauby, Pierre — Univ. of Liege
Starfinger, Christina — Univ. of Canterbury
Hann, Christopher E — Univ. of Canterbury
Chase, J. Geoffrey — Univ. of Canterbury
Shaw, Geoffrey M — Christchurch Hospital

14:45-15:00 FrC07.2

Arterio-Venous Fistula: Two Cases Realistic Numerical Blood Flow Simulations, pp. 2980-2983.

KHARBOUTLY, Zaher — Univ. of Tech. of Compiĉgne - France
TREUTENAERE, Jean-Marc — Pol. Saint Côme
CLAUDE, Isabelle — Univ. of Tech. of Compiĉgne - France
LEGALLAIS, Cecile — Univ. of Tech. of Compiĉgne - France

15:00-15:15 FrC07.3

Nonparametric Hammerstein Model Based Model Predictive Control for Heart Rate Regulation, pp. 2984-2987.

Su, Steven Weidong — Univ. of Tech. Sydney
Huang, Shoudong — Univ. of Tech.
Wang, Lu — Univ. of New South Wales
Celler, Branko George — Univ. of New South Wales
Savkin, Andrey — Univ. of New South Wales
Guo, Ying — CSIRO
Cheng, Teddy Man Lai — The Univ. of New South Wales

15:15-15:30 FrC07.4

A Nonlinear Dynamic Model for Heart Rate Response to Treadmill Walking Exercise, pp. 2988-2991.

Cheng, Teddy Man Lai — The Univ. of New South Wales
Savkin, Andrey — Univ. of New South Wales
Celler, Branko George — Univ. of New South Wales
Wang, Lu — Univ. of New South Wales
Su, Steven Weidong — Univ. of Tech. Sydney

15:30-15:45 FrC07.5

Fluid Resuscitation: Computer Simulation and Animal Experiments, pp. 2992-2995.

Dagan, Inon — Tel Aviv Univ.
Gabay, Michal — Tel Aviv Univ.
Barnea, Ofer — Tel Aviv Univ.

FrC08 — Gratte Ciel Lounge

Cultured Neuronal Networks and Neurorobotics (Oral Session)

Chair: Rutten, Wim — Univ. of twente

14:30-14:45 FrC08.1

Embodying Cultured Networks with a Robotic Drawing Arm, pp. 2996-2999.

Bakkum, Douglas — Georgia Inst. of Tech.
Chao, Zenas — Georgia Inst. of Tech.
gamblen, philip — Univ. of Western Australia
Ben-Ary, Guy — Univ. of Western Australia
Shkolnik, Alexander — MIT
DeMarse, Thomas B. — Univ. of Florida
Potter, Steve — Georgia Inst. of Tech.

14:45-15:00 FrC08.2

Latency Dependent Development of Related Firing Patterns in Cultured Neuronal Networks, pp. 3000-3003.

le Feber, Joost — Univ. of Twente
Van Pelt, Jaap — Vrije Univ. Amsterdam
Rutten, Wim — Univ. of twente

15:00-15:15 FrC08.3

A Real-Time Closed-Loop Setup for Hybrid Neural Networks, pp. 3004-3007.

Bontorin, Guilherme — Univ. of Bordeaux1, IMS, Enseirb
Renaud, Sylvie — Univ. of Bordeaux1, IMS, Enseirb
Garenne, Andre — Univ. Bordeaux 2
Alvado, Ludovic — Univ. of Bordeaux1, IMS, Enseirb
Le Masson, Gwendal — Univ. of Bordeaux2, INSERM
Tomas, Jean — Univ. of Bordeaux1, IMS, Enseirb

15:15-15:30 FrC08.4

Activity Modulation Elicited by Electrical Stimulation in Networks of Dissociated Cortical Neurons, pp. 3008-3011.

Massobrio, Paolo — Univ. of Genova
Baljon, Pieter Laurens — Univ. of Genova
Maccione, Alessandro — Univ. of Genova
Chiappalone, Michela — Italian Inst. of Tech.
Martinoia, Sergio — Univ. of Genova

15:30-15:45 FrC08.5

How Do TTX and AP5 Affect the Post-Recovery Neuronal Network Activity Synchronization?, pp. 3012-3015.

Esposti, Federico — Pol. di Milano
Signorini, Maria G. — Pol. di Milano
Lamanna, Jacopo — Pol. di Milano
Gullo, Francesca — Univ. degli Studi di Milano-Bicocca
Wanke, Enzo — Univ. degli Studi di Milano-Bicocca

15:45-16:00 FrC08.6

A Biologically Inspired Modular Structure to Control the Sit-To-Stand Transfer of a Biped Robot, pp. 3016-3019.

Emadi Andani, Mehran — Univ. of Tehran
Bahrami, Fariba — Univ. of Tehran
Jabbedar, Parviz — Univ. of Tehran

FrC09 Gratte Ciel 3

Robotic Devices for Rehabilitation II (Oral Session)

Chair: Patton, James (Jim) — Rehab Inst. Chicago & Northwestern U.
Co-Chair: Reinkensmeyer, David — Univ. of California

14:30-14:45 FrC09.1

Powered Ankle-Foot Prosthesis for the Improvement of Amputee Ambulation, pp. 3020-3026.

Au, Samuel — MIT
Herr, Hugh — MIT
Weber, Jeff — MIT Biomechatronics Lab.
Martinez-Villalpando, Ernesto Carlos — Massachusetts Inst. of Tech.

14:45-15:00 FrC09.2

Development of Robot Hand with Pneumatic Actuator and Construct of Master-Slave System, pp. 3027-3030.

Nishino, Shinya — Doshisha Univ.
Tsujiuchi, Nobutaka — Doshisha Univ.
Koizumi, Takayuki — Doshisha Univ.
Komatsubara, Hiroyuki — Doshisha Univ.
Kudawara, Tatuwo — SQUSE Inc.
Shimizu, Mikio — SQUSE Inc.

15:00-15:15 FrC09.3

Simplified Analitical Dynamic Model for a Parallel Prosthetic Elbow, pp. 3031-3034.

Mendoza Vazquez, Jose Rafael — Inst. Nacional de Astrofisica Optica y Electronica
Escudero-Uribe, Apolo Z. — Inst. Nacional de Astrofísica
Fernandez-Mulia, Raul — Inst. Tecnologico y de Estudios Superiores de Monterrey

15:15-15:30 FrC09.4

Controlling a Prosthetic Arm with a Throat Microphone, pp. 3035-3039.

Mainardi, Elena — Univ. of Ferrara
Davalli, Angelo — INAIL Prosthesis Center

15:30-15:45 FrC09.5

EMG-Based Neuro-Fuzzy Control of a 4DOF Upper-Limb Power-Assist Exoskeleton, pp. 3040-3043.

Kiguchi, Kazuo — Saga Univ.
Imada, Yasunobu — Saga Univ.
Liyanage, Manoj — Saga Univ.

15:45-16:00 FrC09.6

A Preliminary Study of MR Sickness Evaluation Using Visual Motion Aftereffect for Advanced Driver Assistance Systems, pp. 3044-3047.

Nakajima, Sawako — The Univ. of Tokyo
Ino, Shuichi — The Univ. of Tokyo
Ifukube, Tohru — The Univ. of Tokyo

FrC10 Rhône 1

Clinical Engineering III (Oral Session)

Co-Chair: George, Hanna — Imperial Coll. London

14:30-14:45 FrC10.1

A New Optimization Approach for the Calibration of an Ultrasound Probe Using a 3D Optical Localizer, pp. 3048-3051.

Dardenne, Guillaume — Ec. Nationale Supérieure des Télécommunications de
Gil Cano, Julio Daniel — Ec. Nationale Supérieure des Télécommunications de Bretagne
Hamitouche, Chafiaâ — Ec. Nationale Supérieure des Télécommunications de Bretagne
Stindel, Eric — Univ. de Bretagne Occidentale
Roux, Christian — ENST Bretagne - INSERM

14:45-15:00 FrC10.2

Estimation of the Lactate Threshold Using Bioelectrical Impedance Spectroscopy: A New Noninvasive Method, pp. 3052-3055.

Alvarenga, Renato Luiz de — Federal Univ. of Rio de Janeiro
Souza, Marcio N. — Federal Univ. of Rio de Janeiro

15:00-15:15 FrC10.3

Prediction of Poor Outcome Using Detector of Epileptiform EEG in ICU Patients Resuscitated after Cardiac Arrest, pp. 3056-3059.

Ermes, Miikka — VTT Tech. Res. Centre
Särkelä, Mika — GE
van Gils, Mark — VTT Tech. Res. Centre of Finland
Wennervirta, Johanna — Helsinki Univ. hospital
Vakkuri, Anne — Helsinki Univ. hospital
Salmi, Tapani — Helsinki Univ. hospital

15:15-15:30 FrC10.4

Plugin for OsiriX: Mean Shift Segmentation, pp. 3060-3063.

Vides, Silvia — Univ. Autonoma Metropolitana
Azpiroz-leehan, Joaquin — Univ. Autonoma Metropolitana
Jimenez-Alaniz, Juan Ramon — Univ. Autonoma Metropolitana

15:30-15:45 FrC10.5

Employing Bending Beam Transducer Design and Statistical Algorithms to Develop a Clinical Real Time Tissue Compliance Mapping System, pp. 3064-3068.

Fakhry, Morkos — Imperial Coll. London
Bello, Fernando — Imperial Coll. London
George, Hanna — Imperial Coll. London

15:45-16:00 FrC10.6

Balloon Folding Affects the Symmetry of Stent Deployment: Experimental and Computational Evidence, pp. 3069-3073.

Narracott, Andrew James — Univ. of Sheffield
Lawford, Patricia Veronica — Univ. of Sheffield
Gunn, Julian — Univ. of Sheffield
Hose, David R. — Univ. of Sheffield

FrC11 — Tęte d'Or 1

Telemedicine II (Oral Session)

Co-Chair: Pattichis, Constantinos — Univ. of Cyprus

14:30-14:45 FrC11.1

Advanced Medical Video Services through Context-Aware Medical Networks, pp. 3074-3077.

Doukas, Charalampos — Univ. of the Aegean
Maglogiannis, Ilias — Univ. of the Aegean
Pliakas, Thomas — Univ. of the Aegean

14:45-15:00 FrC11.2

Image Processing Based Auto Focus System for Remote Eye Diagnostics, pp. 3078-3081.

Gierl, Christian — Univ. of Applied Sciences Ravensburg-Weingarten
Voos, Holger — HS Ravensburg-Weingarten
Toshiaki, Kondo — Sirindhorn International Inst. of Tech.
Kongprawechnon, Waree — Sirindhorn International Inst. of Tech.
Phoojaruenchanachai, Suthee — National Electronics and Computer Tech. Center

15:00-15:15 FrC11.3

A Cross-Layer Approach for Wireless Medical Video Streaming in Robotic Teleultrasonography, pp. 3082-3085.

Martini, Maria — Univ. of Bologna
Istepanian, Robert — Kingston Univ.
Mazzotti, Matteo — Univ. of Bologna
Philip, Nada — Kingston Univ.

15:15-15:30 FrC11.4

Human Perception Based Video Preprocessing for Telesurgery, pp. 3086-3089.

Xu, Jian — Univ. of Pittsburgh
Sclabassi, Robert — Univ. of Pittsburgh
Liu, Qiang — Univ. of Pittsburgh
Sun, Mingui — Univ. of Pittsburgh

15:30-15:45 FrC11.5

PDA-Based System with Teleradiology and Image Analysis Capabilities, pp. 3090-3093.

Georgiadis, Pantelis — Univ. of Patras
Cavouras, Dionysios — Tech. Educational Inst. of Athens
Daskalakis, Antonis — Medical Image Processing and Analysis (M.I.P.A) Group,Lab.
Koralia, Sifaki — 251 General Hellenic Airforce Hospital
Malamas, Menelaos — 251 General Hellenic Airforce Hospital
Nikiforidis, George — Medical School, Univ. of Patras
Solomou, Ekaterini — School of Medicine, Univ. of Patras

15:45-16:00 FrC11.6

A Tele-Ultrasound System for Real-Time Medical Imaging in Resource-Limited Settings, pp. 3094-3097.

Pyke, Josh — Dartmouth Coll.
Hart, Michael — Dartmouth Coll.
Popov, Veljko — Dartmouth Coll.
Harris, Robert D. — Dartmouth-Hitchcock Medical Center
McGrath, Susan — Dartmouth Coll.

FrC12 — Rhône 2

Education for Biomedical Engineering Professionals – Crossing Boundaries between Disciplines I (Minisymposium)

Chair: Blagosklonov, Oleg — CHU Jean Minjoz
Co-Chair: Reumann, Matthias — Univ. Karlsruhe (TH)
Organizer: Blagosklonov, Oleg — CHU Jean Minjoz

14:30-14:45 FrC12.1

ISIFC – Dual Biomedical Engineering School (I), pp. 3098-3101.

Butterlin, Nadia — Univ. of Franche-Comte
Duffaud, Jacques — Univ. of Franche-Comte
Soto-Romero, Georges — FEMTO-ST
Blagosklonov, Oleg — CHU Jean Minjoz

14:45-15:00 FrC12.2

Clinical Engineering Education in France Situation in 2007 and Evolution, pp. 3102-3105.

Donadey, Alain — Compiegne Univ. of Tech.
Hadjes, Pierre — Compiegne Univ. of Tech.
Langevin, François — Compiegne Univ. of Tech.

15:00-15:15 FrC12.3

How to Become a Graduate Biomedical Engineer in France (I), pp. 3106-3108.

Rieu, Regis — ESIL
Plihon, Barbara — ESIL

15:15-15:30 FrC12.4

Biomedical Engineer: An International Job (I), pp. 3109-3111.

Crolet, Jean-Marie — Univ. of Franche-Comte

15:30-15:45 FrC12.5

A Comprehensive Training Approach for Biomedical Engineers in Biochemistry and in Vitro Diagnostics Technology, pp. 3112-3115.

Spyropoulos, Vasileios — Tech. Education Inst. of Athens
Tzavaras, Aris — Tech. Educational Inst. of Athens

15:45-16:00 FrC12.6

European Virtual Campus for Biomedical Engineering EVICAB, pp. 3116-3118.

Malmivuo, Jaakko — Tampere Univ. of Tech.
Nousiainen, Juha Jaakko Olavi — Tampere Univ. of Tech.
Lindroos, Kari — Tampere Univ. of Tech.

FrC13 — Roseraie 1,2

Innovations and Entrepreneurship in Bioengineering (Minisymposium)

Chair: Betker, Aimee L. — Univ. of Manitoba
Co-Chair: Summers, Ronald — Loughborough Univ.
Organizer: Betker, Aimee L. — Univ. of Manitoba

14:30-14:45 FrC13.1

Innovations and Entrepreneurship in Bioengineering - II (I), pp. 3119-3119.

Betker, Aimee L. — Univ. of Manitoba
Summers, Ronald — Loughborough Univ.

FrP2A1 — Forum 5&6

Signal Pattern Classification in Biomedical Signals V (Poster Session)

16:30-17:30 FrP2A1.1

Classification of EEG Signals Using a Genetic Based Machine Learning Classifier, pp. 3120-3123.

Skinner, Brad — Univ. of Tech. Sydney
Nguyen, Hung — Univ. of Tech. Sydney
Liu, Dikai — Univ. of Tech. Sydney

16:30-17:30 FrP2A1.2

Time-Variant Spatial Filtering for Motor Imagery Classification, pp. 3124-3127.

Zhang, Haihong — Inst. for Infocomm Res.
Wang, Chuanchu — Inst. for Infocomm Res.
Guan, Cuntai — Inst. for Infocomm Res.

16:30-17:30 FrP2A1.3

Limited Receptive Area Neural Classifier for Recognition of Swallowing Sounds Using Continuous Wavelet Transform, pp. 3128-3131.

Makeyev, Oleksandr — Clarkson Univ.
Sazonov, Edward — Clarkson Univ.
Schuckers, Stephanie — Clarkson Univ.
Lopez-Meyer, Paulo — Clarkson Univ.
Melanson, Ed — Univ. of Colorado at Denver
Neuman, Michael — Michigan Tech. Univ.

16:30-17:30 FrP2A1.4

Morphological Heart Arrhythmia Classification Using Hermitian Model of Higher-Order Statistics, pp. 3132-3135.

Karimifard, Saeed — Tehran Univ. of Medical Science
Ahmadian, Alireza — Tehran Univ. of Medical Sciences

16:30-17:30 FrP2A1.5

Different Learning Paradigms for the Classification of Melanoid Skin Lesions Using Wavelets, pp. 3136-3139.

Surowka, Grzegorz — Jagiellonian Univ.
Grzesiak-Kope_;, Katarzyna — The Faculty of Physics, Astronomy and Applied Computer

16:30-17:30 FrP2A1.6

Detection of Hypoglycemic Episodes in Children with Type 1 Diabetes Using an Optimal Bayesian Neural Network Algorithm, pp. 3140-3143.

Nguyen, Hung — Univ. of Tech. Sydney
Ghevondian, Nejhdeh — AIMedics Pty Ltd
Nguyen, Son — Univ. of Tech. Sydney
Jones, Timothy — Princess Margaret Hospital for Children

16:30-17:30 FrP2A1.7

Identification of Patellofemoral Pain Syndrome Using a Support Vector Machine Approach, pp. 3144-3147.

Lai, Tze Huei, Daniel — Univ. of Melbourne
Levinger, Pazit — La Trobe Univ.
Begg, Rezaul — Victoria Univ.
Gilleard, Wendy Lynne — Southern Cross Univ.
Palaniswami, Marimuthu — The Univ. of Melbourne

16:30-17:30 FrP2A1.8

Pulse Image Recognition Using Fuzzy Neural Network, pp. 3148-3151.

Xu, Lisheng — The Chinese Univ. of Hong Kong
Meng, Max Q.-H. — The Chinese Univ. of Hong Kong
Wang, Kuanquan — Harbin Inst. of Tech.

16:30-17:30 FrP2A1.9

The Power-Efficient Biomedical Acquisition System by Variable-Resolution Sigma-Delta Modulator, pp. 3152-3155.

Hsu, Chen-Ming — National Cheng Kung Univ. Department ofElectricalEngineeri
Wang, Wei-Song — National Cheng Kung Univ. Department of ElectricalEngineer
Luo, Ching-Hsing — National Cheng Kung Univ.

16:30-17:30 FrP2A1.10

New Approach to Quantitative Description of Deceleration of Fetal Heart Rate for the Patterns Classification, pp. 3156-3159.

Labaj, Pawel — The Silesian Univ. of Tech.
Jezewski, Michal — The Silesian Univ. of Tech.
Matonia, Adam — Inst. of Medical Tech. and Equipment
Kupka, Tomasz — Inst. of Medical Tech. and Equipment
Jezewski, Janusz — Inst. of Medical Tech. and Equipment
Gacek, Adam — Inst. of Medical Tech. and Equipment

16:30-17:30 FrP2A1.11

Investigation of the New Prediction Method for Ht Values During the Plasma Exchange, pp. 3160-3163.

Nitta, Yoshinori — The Univ. of Tokushima
Akutagawa, Masatake — The Univ. of Tokushima
Miyamoto, Hiroshi — The Univ. of Tokushima
Okahisa, Toshiya — The Univ. of Tokushima
Ohnishi, Yoshiaki — The Univ. of Tokushima
Nishimura, Masaji — The Univ. of Tokushima
Nakane, Syunya — The Univ. of Tokushima
Kaji, Ryuji — The Univ. of Tokushima
Kinouchi, Yohsuke — The Univ. of Tokushima

16:30-17:30 FrP2A1.12

Multimodal Function Optimization Based on the Survival of the Fitness Kind of the Evolution Strategy, pp. 3164-3167.

Lee, Junghoon — Yonsei Univ.
Song, Sangha — Yonsei Univ.
Yang, Yongju — yonsei Univ.
Shim, Hun — Yonsei Univ.
Lee, Hyun Sook — Sangji Univ.
Lee, Kyoung Joung — Yonsei Univ.
Yoon, Young-ro — Yonsei Univ.

16:30-17:30 FrP2A1.13

Wheeze Detection Using Cepstral Analysis in Gaussian Mixture Models, pp. 3168-3171.

Jen-Chien, Chien — National Taiwan Univ.
Huey-Dong, Wu — National Taiwan Univ. Hospital
Chong, Fok-Ching — National Taiwan Univ.
Li, Chung-I — Medical Group, Res. Center, Micro-Star Int'l.Co.,Ltd.,Jung-H

16:30-17:30 FrP2A1.14

Feature Selection for Swallowing Sounds Classification, pp. 3172-3175.

Yadollahi, Azadeh — Univ. of Manitoba
Moussavi, Zahra — Univ. of Manitoba

16:30-17:30 FrP2A1.15

Distinguishing Falls from Normal ADL Using Vertical Velocity Profiles, pp. 3176-3179.

Bourke, Alan — Univ. of Limerick
O'Donovan, Karol — Intel Corp.
ÓLaighin, Gearóid — National Univ. of Ireland, Galway

16:30-17:30 FrP2A1.16

An Efficient Piecewise Modeling of ECG Signals Based on Hermitian Basis Functions, pp. 3180-3183.

Ahmadian, Alireza — Tehran Univ. of Medical Sciences
Karimifard, Saeed — Tehran Univ. of Medical Science
Sadoughi Quchan Atigh, Hamid Reza — tehran Univ. of medical sciences
Abdoli, Mehrsima — Univ.

16:30-17:30 FrP2A1.17

Additive and Multiplicative Noise Reduction by Back Propagation Neural Network, pp. 3184-3187.

Chen, Yongjian — The Univ. of Tokushima
Akutagawa, Masatake — The Univ. of Tokushima
Katayama, Masato — The Univ. of Tokushima
Zhang, Qinyu — ShenZhen Graduate School, Harbin Inst. of Tech. ShenZh
Kinouchi, Yohsuke — The Univ. of Tokushima

16:30-17:30 FrP2A1.18

Automated Estimation of Sedation Depth from the EEG, pp. 3188-3191.

Greene, Barry R. — Univ. Coll. Cork
Mahon, Padraig — Cork Univ. Hospital
McNamara, Brian — Cork Univ. Hospital
Boylan, Geraldine — Univ. Coll. Cork
Shorten, George — Cork Univ. Hospital

16:30-17:30 FrP2A1.19

Real-Time Daily Activity Classification with Wireless Sensor Networks Using Hidden Markov Model, pp. 3192-3195.

He, Jin — Michigan Tech. Univ.
Li, Huaming — Michigan Tech. Univ.
Tan, Jindong — Michigan Tech. Univ.

16:30-17:30 FrP2A1.20

Electrocardiogram QRS Detection Using Multiscale Filtering Based on Mathematical Morphology, pp. 3196-3199.

Zhang, Fei — National Univ. of Singapore
Lian, Yong — National Univ. of Singapore

16:30-17:30 FrP2A1.21

Fast Automatic Template Matching for Spike Sorting Based on Davies-Bouldin Validation Indeices, pp. 3200-3203.

Sato, Takashi — The Univ. of Tokyo
Suzuki, Takafumi — The Univ. of Tokyo
Mabuchi, Kunihiko — Univ. of Tokyo

16:30-17:30 FrP2A1.22

SVM and Neural Networks Comparison in Mammographic CAD, pp. 3204-3207.

García-Orellana, Carlos J. — Univ. of Extremadura
Gallardo-Caballero, Ramon — Univ. of Extremadura
Macías-Macías, Miguel — Univ. of Extremadura
González-Velasco, Horacio — Univ. of Extremadura

16:30-17:30 FrP2A1.23

Evaluation of Electrocardiogram Beat Detection Algorithms: Patient Specific versus Generic Training, pp. 3208-3211.

Last, Thorsten — Univ. of Ulster at Jordanstown
Nugent, Chris — Univ. of Ulster
Owens, Frank — Univ. of Ulster

16:30-17:30 FrP2A1.24

A Dynamic Multi-Channel Decision-Fusion Strategy to Classify Differential Brain Activity, pp. 3212-3215.

Kook, Hyunseok — Southern Illinois Univ.
Gupta, Lalit — Southern Illinois Univ.
Kota, Srinivas — Southern Illinois Univ.
Molfese, Dennis — Univ. of Louisville

16:30-17:30 FrP2A1.25

Controlling Blood Glucose Levels in Diabetics by Neural Network Predictor, pp. 3216-3219.

Baghdadi, Golnaz — Shahed Univ.
Motie Nasrabadi, Ali — Shahed Univ.

16:30-17:30 FrP2A1.26

Brain-Computer Interface Analysis Using Continuous Wavelet Transform and Adaptive Neuro-Fuzzy Classifier, pp. 3220-3223.

Darvishi, Sam — Univ. of Tech. Sydney
Al-Ani, Ahmed — Univ. of Tech. Sydney

16:30-17:30 FrP2A1.27

Speed Estimation from a Tri-Axial Accelerometer Using Neural Networks, pp. 3224-3227.

Song, Yoonseon — Electronics and Telecommunications Res. Inst.
Shin, Seungchul — ETRI
Kim, Seunghwan — Electronics & Telecom Res. Inst.
Lee, Doheon — Korea Advanced Inst. of Science and Tech.
Lee, Kwang Hyung — Korea Advanced Inst. of Science and Tech.

16:30-17:30 FrP2A1.28

A Support System for ECG Analysis Based on Hidden Markov Models, pp. 3228-3231.

THOMAS, Julien — LORIA
ROSE, Cedric — LORIA
Charpillet, François — Loria

16:30-17:30 FrP2A1.29

Factored Interval Particle Filtering for Gait Analysis, pp. 3232-3235.

Saboune, Jamal — LORIA
ROSE, Cedric — LORIA
Charpillet, François — Loria

16:30-17:30 FrP2A1.30

Neural Network Based Near Lossless Compression of EEG Signals with Non Uniform Quantization, pp. 3236-3240.

Natarajan, Sriraam — SSN Coll. of Engineering

16:30-17:30 FrP2A1.31

Continuous Detection of Motor Imagery in a Four-Class Asynchronous BCI, pp. 3241-3244.

Banan Sadeghian, Elnaz — Amir Kabir Univ. of Tech. (Pol. Tehran),
Moradi, Mohammad Hassan — Amirkabir Univ. of Tech.

16:30-17:30 FrP2A1.32

Modeling Isometric Force Response Using Fuzzy Set Theory, pp. 3245-3248.

Stitt, Joseph — Pennsylvania State Univ.
Newell, Karl — Pennsylvania State Univ.

16:30-17:30 FrP2A1.33

Modified Ant Colony Clustering Method in Long-Term Electrocardiogram Processing, pp. 3249-3252.

Bursa, Miroslav — Czech Tech. Univ. in Prague
Lhotska, Lenka — Czech Tech. Univ. in Prague

16:30-17:30 FrP2A1.34

Vocal Folds Disorder Detection Using Pattern Recognition Methods, pp. 3253-3256.

Wang, Jianglin — Changwon National Univ.
Jo, Cheolwoo — Changwon National Univ.

16:30-17:30 FrP2A1.35

Algorithm for Classifying Arrhythmia Using Extreme Learning Machine and Principal Component Analysis, pp. 3257-3260.

Kim, Jinkwon — Yonsei Univ.
Shin, Hang Sik — Yonsei Univ.
Lee, Yonwook — Yonsei Univ.
Lee, Myoungho — Yonsei Univ.

16:30-17:30 FrP2A1.36

Estimation of Bio-Signal Based on Human Motion for Integrated Visualization of Daily-Life, pp. 3261-3265.

Umetani, Tomohiro — Nagoya City Univ.
Matsukawa, Tsuyoshi — Nagoya City Univ.
Yokoyama, Kiyoko — Nagoya City Univ.

FrP2A2 Forum 5&6

Adaptive and Parametric Filtering in Biomedical Signals III (Poster Session)

16:30-17:30 FrP2A2.1

Application of the Directed Transfer Function Method to the Study of the Propagation of Epilepsy Neural Information, pp. 3266-3269.

Ge, Manling — Hebei Univ. of Tech.
Jiang, Xiaochi — Hebei Univ. of Tech.
Qin, Bai — Beijing Neural Surgical Inst.
Yang, Shuo — Hebei Univ. of Tech.
Justin, Gusphyl — Univ. of Pittsburgh
Yan, Weili — Hebei Univ. of Tech.

16:30-17:30 FrP2A2.2

A Bayesian Approach for the Estimation of AR Coefficients from Noisy Biomedical Data, pp. 3270-3273.

Oikonomou, Vangelis — Univ. of Ioannina
Fotiadis, Dimitrios I. — Univ. of Ioannina

16:30-17:30 FrP2A2.3

Selection of Floating-Point or Fixed-Point for Adaptive Noise Canceller in Somatosensory Evoked Potential Measurement, pp. 3274-3277.

Chong Fei, Shen — Chinese Acad. of Medical Sciences
Liu, Hongtao — The Univ. of Hong Kong
Xie, XB — Inst. of Biomedical Engineering, Chinese Acad. of Medical
Luk, KDK — Department of Orthopaedics and Traumatology, The Univ. of H
Hu, Yong — The Univ. of Hong Kong

16:30-17:30 FrP2A2.4

Adaptive Noise Canceling of Electrocardiogram Artifacts in Single Channel Electroencephalogram, pp. 3278-3281.

Cho, Sung Pil — Yonsei Univ.
Song, Mi Hye — Yonsei Univ.
Park, Young Cheol — Yonsei Univ.
Choi, Ho Seon — Daewon Science Coll.
Lee, Kyoung Joung — Yonsei Univ.

16:30-17:30 FrP2A2.5

The Novel Method for the Fetal Electrocardiogram Extraction from the Abdominal Signal, pp. 3282-3284.

Song, Mi Hye — Yonsei Univ.
Cho, Sung Pil — Yonsei Univ.
Park, Ho Dong — Yonsei Univ.
Lee, Kyoung Joung — Yonsei Univ.

16:30-17:30 FrP2A2.6

Motion Artifact Reduction in Blood Pressure Signals Using Adaptive Digital Filter with a Capacitive Sensor, pp. 3285-3287.

Choi, Hyun Seok — Yonsei Univ.
Park, Ho Dong — Yonsei Univ.
Lee, Kyoung Joung — Yonsei Univ.

16:30-17:30 FrP2A2.7

Evaluation of On-Line Bradycardia Boundary Detectors from Neonatal Clinical Data, pp. 3288-3291.

Portet, Francois — Univ. of Aberdeen
Gao, Feng — Univ. of Aberdeen
Hunter, Jim — Univ. of Aberdeen
Sripada, Somayajulu — Univ. of Aberdeen

16:30-17:30 FrP2A2.8

Towards Optimal Virtual Patients: An Online Adaptive Control Approach, pp. 3292-3295.

Ghosh, Samik — The Univ. of Texas at Arlington
Young, Daniel — Entelos Inc
Gadkar, Kapil — Entelos Inc
Wennerberg, Leif — Entelos Inc
Basu, Kalyan — The Univ. of Texas at Arlington

16:30-17:30 FrP2A2.9

Distortion Analysis of Subband Adaptive Filtering Methods for Fmri Active Noise Control Systems, pp. 3296-3299.

Milani, Ali — Univ. of Texas at Dallas
Panahi, Issa — Univ. of Texas at Dallas
briggs, richard — UT southwestern

16:30-17:30 FrP2A2.10

Assessment of Itakura Distance As a Valuable Feature for Computer-Aided Classification of Sleep Stages, pp. 3300-3303.

Ebrahimi, farideh — shahed Univ.
Mikaili, Mohammad — Head of Biomedical Eng. Dep. at Shahed Univ.
Estrada, Edson — The Univ. of Texas at El Paso
Nazeran, Homayoun — The Univ. of Texas at El Paso

16:30-17:30 FrP2A2.11

Eigenvector Methods for Analysis of Human PPG, ECG and EEG Signals, pp. 3304-3307.

Ubeyli, Elif Derya — TOBB Ec. and Tech. Univ.
Cvetkovic, Dean — RMIT Univ.
Cosic, Irena — RMIT Univ.

16:30-17:30 FrP2A2.12

Predictive Modeling in Proteomics-Based Disease Detection, pp. 3308-3311.

Pham, Tuan D. — James Cook Univ.

FrP2B1 Forum 5&6
Optical and Infrared Imaging (Poster Session)

16:30-17:30 FrP2B1.1

Infrared Imager Requirements for Breast Cancer Detection, pp. 3312-3314.

González, Francisco Javier — Univ. Autónoma de San Luis Potosi

16:30-17:30 FrP2B1.2

Enhancement of Infrared Image Based on the Retinex Theory, pp. 3315-3318.

Li, Ying — Hebei Univ. of Tech.
Hou, Changzhi — Hebei Univ. of Tech.
Tian, Fu — ebei Univ. of Tech.
Yu, Hongli — Hebei Univ. of Tech.
Guo, Lei — Hebei Univ. of Tech.
Xu, Guizhi — Hebei Univ. of Tech.
Shen, Xueqin — Hebei Univ. of Tech.
Yan, Weili — Hebei Univ. of Tech.

16:30-17:30 FrP2B1.3

A Study of Thermographic Diagnosis System and Imaging Algorithm by Distributed Thermal Data Using Single Infrared Sensor, pp. 3319-3322.

Yoon, Se Jin — CR Tech. Co. Ltd.
Noh, Si Cheol — Inje Univ.
Choi, Heung Ho — Inje Univ.

16:30-17:30 FrP2B1.4

3D Modeling from Uncalibrated Color Images for a Complete Wound Assessment Tool, pp. 3323-3326.

Albouy, Benjamin — Univ. d'Auvergne - Antenne Univ.
LUCAS, Yves — Orleans Univ.
TREUILLET, Sylvie — Univ. Blaise Pascal de Clermont-Ferrand

16:30-17:30 FrP2B1.5

Semiautomatic Detection and Evaluation of Autofluorescent Areas in Retinal Images, pp. 3327-3330.

Kolar, Radim — Brno Univ. of Tech.
Jan, Jiri — Brno Univ. of Tech.
Robert, Laemmer — Friedrich-Alexander Univ. of Erlangen-Nürnberg
Jirik, Radovan — Brno Univ. of Tech.

16:30-17:30 FrP2B1.6

A High Speed Eye Tracking System with Robust Pupil Center Estimation Algorithm, pp. 3331-3334.

Long, Xindian — Carnegie Mellon Univ.
Tonguz, Ozan — Carnegie Mellon Univ.
Kiderman, Alex — Neuro Kinetics, Inc.,

16:30-17:30 FrP2B1.7

Coupling X-Ray and Optical Tomography Systems for in Vivo Examination of Small Animals, pp. 3335-3338.

da silva, anabela — CEA-LETI, MINATEC
bordy, thomas — CEA-LETI, MINATEC
debourdeau, mathieu — CEA-LETI, MINATEC
dinten, jean-marc — CEA-LETI, MINATEC
peltié, philippe — CEA-LETI, MINATEC
rizo, philippe — CEA-LETI, MINATEC

16:30-17:30 FrP2B1.8

Mueller Matrix Group Theory Formalism for Tissue Imaging Polarimetry Contrast Increase, pp. 3339-3342.

Fanjul-Vélez, Félix — Univ. of Cantabria
Samperio-García, David — Univ. of Cantabria
Pereda-Cubián, David — Univ. of Cantabria
Arce-Diego, José L. — Univ. of Cantabria

16:30-17:30 FrP2B1.9

One-Step Needle Pose Estimation for Ultrasound Guided Biopsies, pp. 3343-3346.

Khosravi, Sara — Univ. of British Columbia
Rohling, Robert — Univ. of British Columbia
Lawrence, Peter Donald — Univ. of British Columbia

16:30-17:30 FrP2B1.10

Quantitative Analysis Method for Evaluation of Optical Clearing of Skin, pp. 3347-3349.

Yoon, Jinhee — Yonsei Univ.
Son, Taeyoon — Yonsei Univ.
Byungjo, Jung — Yonsei Univ.

16:30-17:30 FrP2B1.11

Measurements of Scattering Changes Using Polarization-Sensitive Optical Coherence Tomography, pp. 3350-3352.

Lee, Sang-Won — Yonsei Univ.
Kang, Jin-Ho — Yonsei Univ.
Yoo, Ji-Yeong — Yonsei Univ.
Kim, Beop-Min — Yonsei Univ.

16:30-17:30 FrP2B1.12

Design and Implementation of an Acquisition System for the Photo-Motor Response of the Iris, pp. 3353-3356.

BOSNJAK, Antonio — Univ. de Carabobo.
López, Carolina — Univ. de Carabobo,
Chumbimuni, Roberto — Univ. de Carabobo.
Villanueva, Carlos — Univ. de Carabobo.
Eblen-Zajjur, Antonio — Univ. de Carabobo.

16:30-17:30 FrP2B1.13

Inspection of Skin Hemodynamics with Hyper Spectral Camera, pp. 3357-3361.

Nagaoka, Takashi — Shizuoka Cancer Center
S. Eikje, Natalja — Waseda Univ.
Nakamura, Atsushi — Waseda Univ.
Aizawa, Katsuo — Waseda Univ.
Yoshio, Kiyohara — Shizuoka Cancer Center Hospital
Fumihiko, Ichikawa — JFE Tech. Corp.
Toshio, Yamazaki — Mitaka Kohki.Co., Ltd.
Doi, Masao — Mitaka Kohki.Co., Ltd.
Katsushige, Nakamura — Mitaka Kohki.Co., Ltd.
Shinya, Otsubo — Waseda Univ.
Sota, Takayuki — Science & Engineering, Waseda Univ.

16:30-17:30 FrP2B1.14

Development of a Multi-Channel, Portable Optical Topography System, pp. 3362-3364.

Atsumori, Hirokazu — Hitachi, Ltd.
Kiguchi, Masashi — Hitachi, Ltd.
Obata, Akiko — Hitachi Ltd.
Sato, Hiroki — Hitachi Ltd.
Katura, Takusige — Hitachi Ltd.
Utsugi, Kei — Systems Development Lab. Hitachi Ltd.
Funane, Tsukasa — Hitachi, Ltd.
Maki., Atsushi — Hitachi Ltd.

16:30-17:30 FrP2B1.15

Superimposition of Thermal Imaging to Visual Imaging Using Homography, pp. 3365-3368.

Di Romualdo, Sandro — Univ. of Chieti-Pescara
Merla, Arcangelo — ITAB - Inst. of Advanced Biomedical Tech. - Foundation
Romani, Gian Luca — Univ. of Chieti-Pescara

16:30-17:30 FrP2B1.16

A 3-Dimensional Vision System for Dental Applications, pp. 3369-3372.

Zhang, Li — Univ. of Bristol, UK
Alemzadeh, Kazem — Univ. of Bristol

16:30-17:30 FrP2B1.17

Infrared Imaging Analysis for Thermal Comfort Assessment, pp. 3373-3376.

De Oliveira, Fabrice — INSA Lyon, CSTB (Centre Scientifique du Batiment
Moreau, Sophie — CSTB ("Centre Scientifique et Tech. du Bâtiment")
Gehin, Claudine — INSA Lyon
Dittmar, Andre — INSA Lyon

16:30-17:30 FrP2B1.18

Evaluation of Different Marker Sets for Motion Artifact Reduction in Breast Dynamic Infrared Imaging, pp. 3377-3379.

Agostini, Valentina — Pol. di Torino
Knaflitz, Marco — Pol. di Torino
Molinari, Filippo — Pol. di Torino

16:30-17:30 FrP2B1.19

Optical Imaging of Electrically Evoked Visual Signals in Cats: II. ICA "Harmonic Filtering" Noise Reduction, pp. 3380-3383.

Chen, Spencer Chin-Yu — Univ. of New South Wales
Wong, Yan Tat — Univ. of New South Wales
Hallum, Luke E. — Univ. of New South Wales
Dommel, Norbert Brian — Univ. of New South Wales
Cloherty, Shaun L — Univ. of New South Wales
Morley, John William — Univ. of Western Sydney
Suaning, Gregg — The Univ. of Newcastle
Lovell, Nigel H — Univ. of New South Wales

FrP2B2
Neuroimaging (fMRI & MRI) (Poster Session)

Co-Chair: Baillet, Sylvain — CNRS UPR640--LENA

16:30-17:30 FrP2B2.2

Neuroimaging of Event Related Brain Potentials (ERP) Using Fmri and Dipole Source Reconstruction, pp. 3384-3387.

eryilmaz, hamdi — boun
Duru, Adil Deniz — Bogazici Univ.
Parlak, burak — boun
Ademoglu, Ahmet — Bogazici Univ.
Demiralp, Tamer — 0;stanbul Medical School

16:30-17:30 FrP2B2.3

Functional MR Imaging of the Spinal Cord in Cervical Spinal Cord Injury Patients by Acupuncture at LI 4 (Hegu) and LI 11(Quchi), pp. 3388-3391.

Chen, Yexi — Shantou Univ. Medical Coll.
Kong, Kangmei — Shantou Univ. Medical Coll.
Wang, Weidong — The 2nd Hospital, Shantou Univ. Medical Coll.
Xie, Chuhai — Shantou Univ. Medical Coll.
Wu, RenHua — Shantou Univ. Medical Coll.

16:30-17:30 FrP2B2.4

Functional MR Imaging of the Cervical Spinal Cord by Use of 20Hz Functional Electrical Stimulation to Median Nerve, pp. 3392-3395.

Xie, Chuhai — Shantou Univ. Medical Coll.
Kong, Kangmei — Shantou Univ. Medical Coll.
Guan, Jitian — Shantou Univ. Medical Coll.
Chen, Yexi — Shantou Univ. Medical Coll.
Wu, RenHua — Shantou Univ. Medical Coll.

16:30-17:30 FrP2B2.5

The BOLD Signal Response for Fluctuating Stimulation Images, pp. 3396-3399.

SAWADA, Keisuke — Tokai Univ.
Magatani, Kazushige — Tokai Univ.

16:30-17:30 FrP2B2.6

Comparison between Shifted Spearman Rank Correlation Test and SPM in Fmri, pp. 3400-3403.

DEWALLE, ANNE-SOPHIE — Univ. des Sciences et Tech. de Lille
Betrouni, Nacim — Inst. de Tech. Médicale
Steinling, Marc — Univ. Hospital
Vermandel, Maximilien — Univ. de Lille
Rousseau, Jean — INSERM - Univ. de Lille 2
Vasseur, Christian — USTL

16:30-17:30 FrP2B2.7

Joint Spatial Denoising and Active Region of Interest Delineation in Functional Magnetic Resonance Imaging, pp. 3404-3407.

Ng, Bernard — Univ. of British Columbia (UBC)
Abugharbieh, Rafeef — Univ. of British Columbia
Palmer, Samantha Jane — Univ. of British Columbia
McKeown, Martin — Univ. of British Columbia

16:30-17:30 FrP2B2.8

Application of Fractal Dimension Method of Functional MRI Time-Series to Limbic Dysregulation in Anxiety Study, pp. 3408-3410.

OLEJARCZYK, ELZBIETA — Pol. Acad. of Sciences

16:30-17:30 FrP2B2.9

Pharmacological Fmri – Challenges in Analysing Drug-Induced Single-Event BOLD Responses, pp. 3411-3416.

Pohlmann, Andreas — GlaxoSmithKline R&D Ltd
Barjat, Hervé — GlaxoSmithKline R&D Ltd
Tilling, Lorna — GlaxoSmithKline R&D Ltd
James, Michael F — GlaxoSmithKline R&D Ltd

16:30-17:30 FrP2B2.10

Analysis and Realization of an Active Noise Control System on DSP Hardware Using an Fmri Bore Model, pp. 3417-3420.

Reddy, Rajiv — Univ. of Texas at Dallas
Panahi, Issa — Univ. of Texas at Dallas
briggs, richard — UT southwestern

16:30-17:30 FrP2B2.11

New Strategies for Automated Differential Diagnosis of Degenerative Brain Disorders, pp. 3421-3425.

Spetsieris, Phoebe — Center for Neurosciences, Feinstein Inst. for MedicalResearc
Ma, Yilong — Center for Neurosciences, Feinstein Inst. for Medical Rsearc
Eckert, Thomas — Center for Neurosciences, Feinstein Inst. for MedicalResearc
Dhawan, Vijay — Center for Neurosciences, Feinstein Inst. for MedicalResearc
Eidelberg, David — Center for Neurosciences, Feinstein Inst. for Medical Res.

16:30-17:30 FrP2B2.12

A Supervised Method to Assist the Diagnosis of Alzheimer's Disease Based on Functional Magnetic Resonance Imaging, pp. 3426-3429.

Tripoliti, Evanthia — Univ. of Ioannina
Fotiadis, Dimitrios I. — Univ. of Ioannina
Argyropoulou, Maria — Medical School Univ. of Ioannina

16:30-17:30 FrP2B2.13

Activation Detection in Functional MRI Using Model-Free Technique Based on CCA-ICA Analysis, pp. 3430-3433.

Mohamed, Nour eldin — Cairo Univ. , facualty of engineering
Mohamed, Ahmed — Cairo Univ.
Youssef, Abou-Bakr — Cairo Univ.
Kadah, Yasser M. — Cairo Univ.

FrP2B3 Forum 5&6

Methods in Biological Imaging II (Poster Session)

Chair: Olivo-Marin, Jean-Christophe — Inst. Pasteur

16:30-17:30 FrP2B3.1

Irradiation Adaptation to the Tumor Activity with the Help of Intensity-Modulated Radiation Therapy for Head and Neck Cancers, pp. 3434-3437.

Kubs, Fleur — CRAN-UMR7039, Nancy-Univ. CNRS and Centre AlexisVautrin an
Aletti, Pierre — CRAN-UMR7039, Nancy-Univ. CNRS and Centre Alexis Vautrin
Wolf, Didier — Nancy-Univ.
Millasseau, Sandrine — Varian Medical Systems
Marchesi, Vincent — Centre Alexis Vautrin

16:30-17:30 FrP2B3.2

Quantitative Parameters for the Assessment of Renal Scintigraphic Images, pp. 3438-3441.

Marcuzzo, Monica — Univ. Federal do Rio Grande do Sul
Masiero, Paulo Ricardo — Hospital de Clínicas de Porto Alegre
Scharcanski, Jacob — UFRGS

16:30-17:30 FrP2B3.3

Determination of Skin Repigmentation Progression, pp. 3442-3445.

Nugroho, Hermawan — Univ. Teknologi PETRONAS
Ahmad Fadzil, Mohamad Hani — Univ. Teknologi Petronas
Yap, Vooi Voon — Univ. Teknologi PETRONAS
Shamsudin, Norashikin — General Hospital Kuala Lumpur
Hussein, Suraiya Hani — General Hospital Kuala Lumpur

16:30-17:30 FrP2B3.4

Area Assessment of Psoriasis Lesion for PASI Scoring, pp. 3446-3449.

Ihtatho, Dani — Univ. Teknologi PETRONAS
Ahmad Fadzil, Mohamad Hani — Univ. Teknologi Petronas
M. Affandi, Azura — Hospital Kuala Lumpur
Hussein, Suraiya Hani — General Hospital Kuala Lumpur

16:30-17:30 FrP2B3.5

Static Mechanical Assessment of Elastic Young's Modulus of Tissue Mimicking Material Used for Medical Imaging, pp. 3450-3453.

Duboeuf, Francois — INSERM
Liebgott, Hervé — Univ. Lyon 1
Basarab, Adrian — INSA-Lyon
Brusseau, Elisabeth — UMR CNRS5515
Delachartre, Philippe — INSA-Lyon
VRAY, DIDIER — INSA-LYON, CNRS UMR5220, INSERM U630

16:30-17:30 FrP2B3.6

A Study on the Comparison of Median Filter Regularization Methods in Diffusion Tensor MRI, pp. 3454-3457.

Kim, Sunghee — Yonsei Univ.
Kwon, Kiwoon — Yonsei Univ.
Park, In Sung — Yonsei Univ.
Han, Bongsu — Yonsei Univ.
Kim, Dongyoun — Yonsei Univ.

16:30-17:30 FrP2B3.7

"Absolute" Quantification in Magnetic Resonance Spectroscopy: Validation of a Clinical Protocol in Multiple Sclerosis, pp. 3458-3461.

Bagory, Matthieu — Univ. de Lyon
Durand-Dubief, Françoise — Hôpital Neurologique
IBARROLA, Danielle — Centre National de la recherche Scientifique
Confavreux, Christian — Hôpital Neurologique Pierre Wertheimer
SAPPEY-MARINIER, Dominique — Univ. Claude Bernard - Lyon1

16:30-17:30 FrP2B3.8

The Complete Electrode Model for Imaging and Electrode Contact Compensation in Electrical Impedance Tomography, pp. 3462-3465.

Boverman, Gregory — Rensselaer Pol. Inst.
Kim, Bong-Seok — Rensselaer Pol. Inst.
isaacson, David — Rensselaer Pol. Inst.
Newell, Jonathan — Rensselaer Pol. Inst.

16:30-17:30 FrP2B3.9

Multichannel Segmentation of Cdna Microarray Images Using the Bayes Classifier, pp. 3466-3469.

Giannakeas, Nikolaos — Univ. of Ioannina
Fotiadis, Dimitrios I. — Univ. of Ioannina

16:30-17:30 FrP2B3.10

Quadrant Coverage Histogram: A New Method for Measuring Quality of Colonoscopic Procedures, pp. 3470-3473.

Liu, Danyu — Iowa State Univ.
Cao, Yu — Iowa State Univ.
Tavanapong, Wallapak — Iowa State Univ.
Wong, Johnny S — Iowa State Univ.
Oh, JungHwan — Univ. of North Texas
de Groen, Petrus (Piet) Cornelius — Mayo Clinic

16:30-17:30 FrP2B3.11

A Brief History about Analytic Tools in Medical Imaging: Splines, Wavelets, Singularities and Partial Differential Equations, pp. 3474-3480.

Demongeot, Jacques — Lab. TIMC-IMAG, UMR CNRS 5525

16:30-17:30 FrP2B3.12

Acoustic Thoracic Images for Transmitted Glottal Sounds, pp. 3481-3484.

Charleston-Villalobos, Sonia — Univ. Autonoma Metropolitana
Gonzalez-Camarena, Ramon — Univ. Autonoma Metropolitana
Chi-Lem, Georgina — NATIONAL Inst. OF Res. DISEASES
Aljama-Corrales, Tomas — Univ. Autonoma Metropolitana

16:30-17:30 FrP2B3.13

Double Negative Metamaterials for Subsurface Detection, pp. 3485-3488.

Boybay, Muhammed Said — Univ. of Waterloo
Ramahi, Omar — Univ. of Waterloo

16:30-17:30 FrP2B3.14

Evaluation of Autofocus Algorithms for Tuberculosis Microscopy, pp. 3489-3492.

Russell, Megan — Univ. of the Witwatersrand
Douglas, Tania S — Univ. of Cape Town

16:30-17:30 FrP2B3.15

Blind Source Separation of Electrocardiographic Signals Using System Stability Criteria, pp. 3493-3495.

Monzon, Jorge E. — Univ. Nacional del Nordeste
Pisarello, Maria Ines — Univ. Nacional del Nordeste
Alvarez Picaza, Carlos — Univ. Nacional del Nordeste

16:30-17:30 FrP2B3.16

Reduction of Metal Artifact in Three-Dimensional Computed Tomography (3D CT) with Dental Impression Materials, pp. 3496-3499.

Park, Wonse — Dental hospital, Yonsei Univ.

FrP2C1 Forum 5&6

Therapeutic Devices III (Poster Session)

16:30-17:30 FrP2C1.1

An Innovative Device to Support Politzer Manoeuvre, pp. 3500-3503.

De Porcellinis, Stefano — Univ. CAMPUS Bio-Medico
Setola, Roberto — Univ. Bio-Medico di Roma
Casale, Manuele — Univ. CAMPUS Bio-Medico
Bianchi di Castelbianco, Federico — Istituto di Ortofonologia
Salvinelli, Fabrizio — Univ. CAMPUS Bio-Medico

16:30-17:30 FrP2C1.2

Effect of the Needle Tip Height on the Puncture Force in a Simplified Epidural Anesthesia Simulator, pp. 3504-3507.

Naemura, Kiyoshi — Tokyo Univ. of Tech.

16:30-17:30 FrP2C1.3

Use of Temperature Gradient Measuring Device in Monitoring of Diabetic and Critically Ill Patients, pp. 3508-3511.

COULIC, Very — CHU Brugmann, Univ. Libre de Bruxelles
Novikov, Valeri — Inst. of transplantation and artificial organs
Devriendt, jacques — CHU Brugmann, Univ. Libre de Bruxelles
Gillet, Clementine — CHU brugmann
Bodson, Andre — CHU Charleroi, Div. Jumet
Dekoster, Erik — CHU brugmann

16:30-17:30 FrP2C1.4

A Unconstrained Multi-Channel Heart Rate Monitoring System for Exercising Rehabilitation Patients, pp. 3512-3515.

Park, Junho — Inje Univ.
Cho, Jongman — Inje Univ.
Nam, Taewoo — Inje Univ.
Choi, Junghyeon — Inje Univ.

16:30-17:30 FrP2C1.5

Effects of Micro-Amperage Direct Current Stimulation on Injury Potential and Its Relation to Wound Surface Area in Guinea Pig, pp. 3516-3519.

Talebi, Ghadamali — Tarbiat Modares Univ.
Torkaman, Giti — Tarbiat Modares Univ.
Firoozabadi, S.M.P. — Tarbiat Modares Univ.
Mofid, Mahmoud — Baqiyatallah Medical Sciences Univ.
Shariat, Shams — Tehran Medical Sciences Univ.
Sedighe, Kahrizi — Tarbiat Modares Univ.

16:30-17:30 FrP2C1.6

Evaluation of Leakage Flux Out of a Dental Magnetic Attachment, pp. 3520-3523.

Nishida, Minako — The Univ. of Tokushima
Tegawa, Yoshinori — The Univ. of Tokushima
Kinouchi, Yohsuke — The Univ. of Tokushima

16:30-17:30 FrP2C1.7

Electrochemical Therapy to Treat Cancer (In Vivo Treatment), pp. 3524-3527.

Telló, Marcos — Pontificia Univ. Católica do Rio Grande do Sul
Parise, Orlando — Hospital Sirio Libanęs
Buzaid, Antonio Carlos — Hospital Sirio Libanęs
Zanella, Rodrigo — UFRGS
Oliveira, Luciana Oliveira de — UFRGS
Cardona, Augusto — Pontificia Univ. Católica do Rio Grande do Sul
Oliveira, Rosemari Theresinha — UFRGS

16:30-17:30 FrP2C1.8

On Line Mesuarement of Urea by Aplication in Paired Filtration Dialysis (pfd), Experience in Military Hospital Center, pp. 3528-3531.

Martinez Chavez, Gustavo Adolfo — UDEFA

FrP2C2 — Forum 5&6
Image Guided Therapy II (Poster Session)

16:30-17:30 FrP2C2.1

A Model-Aided Segmentation in Urethra Identification Based on an Atlas Human Autopsy Image for Intensity Modulated Radiation Therapy, pp. 3532-3535.

Song, Yan — Univ. of Houston
Mueller, Boris — Memorial Sloan-Kettering Cancer Center
Burman, Chandra — Memorial Sloan-Kettering Cancer Center
Mychalczak, Borys — Memorial Sloan-Kettering Cancer Center
Song, Yulin — Memorial Sloan-Kettering Cancer Center

16:30-17:30 FrP2C2.2

Discussion Based on Numerical and Experimental Studies on Heating Characteristics of an RF Rectangular Resonant Cavity Applicator for Hyperthermia Targeting Deep-Seated Tumors, pp. 3536-3539.

Tange, Yutaka — Maizuru National Coll. of Tech.
Kanai, Yasushi — Niigata Inst. of Tech.
Saitoh, Yoshiaki — Niigata Univ.

16:30-17:30 FrP2C2.3

Finite Element Analysis of the Re-Entrant Type Resonant Cavity Applicator for Brain Tumor Hyperthermia, pp. 3540-3543.

Yabuhara, Tadao — Meiji Univ.
Kato, Kazuo — Meiji Univ.
Shindo, Yasuhiro — Meiji Univ.

16:30-17:30 FrP2C2.4

A Tumor-Mimic Model for Evaluating the Accuracy of HIFU Preclinical Studies: An in Vivo Study, pp. 3544-3547.

N'Djin, William Apoutou — INSERM
Melodelima, David — INSERM
Parmentier, Hubert — INSERM
Rivoire, Michel — Centre Leon Berard
Chapelon, Jean-Yves — INSERM U556

16:30-17:30 FrP2C2.5

Heat Shock Induced Apoptosis of Human Umbilical Vein Cells (HUVECs), pp. 3548-3551.

Zhou, Mingjie — SJTU
Zhang, Aili — Shanghai Jiao Tong Univ.
Hu, Xiaofang — Shanghai Jiaotong Univ.
Liu, Ping — Shanghai Jiao Tong Univ.
Xu, Lisa Xuemin — Shanghai Jiaotong Univ.

16:30-17:30 FrP2C2.6

FDTD Study of the Focusing Properties of a Hybrid Hyperthermia and Radiometry Imaging System Using a Realistic Human Head Model, pp. 3552-3555.

Gouzouasis, Ioannis — National Tech. Univ. of Athens
Karanasiou, Irene — National Tech. Univ. of Athens
Uzunoglu, Nikolaos — National Tech. Univ. of Athens

FrP2C3 — Forum 5&6
Clinical Engineering IV (Poster Session)

16:30-17:30 FrP2C3.1

Issues Associated with Off Label Use of Medical Devices, pp. 3556-3558.

David, Yadin — Texas Children's Hospital

16:30-17:30 FrP2C3.2

Is There a Primal Face of Pain? a Methodology Answer, pp. 3559-3562.

Martin, Schiavenato — UCF
Jacqueline, Byers — UCF
Paul, Scovanner — UCF
Windyga, Piotr — Univ. of Central Florida
Shah, Mubarak — UCF

16:30-17:30 FrP2C3.3

Impedance Estimation of Soft Tissue Using Ultrasound Signal, pp. 3563-3568.

Fukuda, Osamu — National Inst. of AIST
Tsubai, Masayoshi — National Inst. of (AIST)
Ueno, Naohiro — National Inst. of Advanced Industrial Science and Tech.

16:30-17:30 FrP2C3.4

A New Decision Support System for Mechanical Ventilation, pp. 3569-3572.

Tehrani, Fleur — California State Univ. Fullerton

16:30-17:30 FrP2C3.5

Model-Based Posturographic Sleepiness Monitor Tested on 20 Subjects, pp. 3573-3576.

Tietäväinen, Aino Saija Marika — Univ. of Helsinki
Forsman, Pia — Finnish Inst. of Occupational Health
Wallin, Anders — Univ. of Helsinki
Korsbäck, Anders Jaakko — Univ. of Helsinki
Haeggström, Edward — Univ. of Helsinki

16:30-17:30 FrP2C3.6

A Clinical Set-Up Tool (CST) for Rapid Stimulator Programming, pp. 3577-3580.

Tresadern, Phil — Univ. of Salford
Thies, Sibylle — Univ. of Salford
Kenney, Laurence — Univ. of Salford
Howard, David — Univ. of Salford
Goulermas, John Yannis — Univ. of Liverpool

16:30-17:30 FrP2C3.7

AHP for the Acquisition of Biomedical Instrumentation, pp. 3581-3584.

BALESTRA, Gabriella — Pol. di Torino
Knaflitz, Marco — Pol. di Torino

16:30-17:30 FrP2C3.8

PACS: Reengineering Workflow in the Imaging Department of a National Health Institute in Mexico, pp. 3585-3588.

Ortiz-Posadas, Martha — Univ. Autónoma Metropolitana
Benitez-Graniel, Marco Antonio — Univ. Autónoma Metropolitana Iztapalapa
Pimentel-Aguilar, Ana Bertha — Inst. Nacional de Enfermedades Res.

16:30-17:30 FrP2C3.9

DSS for Field Hospitals Planning. Technological and Functional Aspects, pp. 3589-3592.

Dori, Fabrizio — Univ. di Firenze
Iadanza, Ernesto — Univ. degli Studi di Firenze
Miniati, Roberto — Univ. di Firenze

16:30-17:30 FrP2C3.10

Whole-Body and Thoracic Bioimpedance Measurement: Hypertension and Hyperhydration in Hemodialyisis Patients, pp. 3593-3596.

Nescolarde, Lexa — Tech. Univ. of Catalonia (UPC)
Bogonez Franco, Paco — Tech. Univ. of Catalonia (UPC)
Calpe, Josep — Renal Clinic of Barcelona
Hernández, Rafael — Renal Clinic of Barcelona
Doñate, Teresa — Puigvert Foundation
Rosell, Javier — Tech. Univ. of Catalonia

FrP2C4 — Forum 5&6

Clinical Engineering V (Poster Session)

16:30-17:30 FrP2C4.2

Cuffless and Noninvasive Measurement of Systolic Blood Pressure, Diastolic Blood Pressure, Mean Arterial Pressure and Pulse Pressure Using Radial Artery Tonometry Pressure Sensor with Concept of Korean Traditional Medicine, pp. 3597-3600.

Park, Mikyoung — Electrotechnology Res. Inst.
Kang, HeeJung — DAEYOMEDI Co., Ltd
Huh, Young — Korea Electrotechnology Res. Inst.
Kim, KyungChul — Dong-Eui Univ.

16:30-17:30 FrP2C4.3

The Choice to Go Digital: A Guideline for Using PACS in Countries Receptive to Technology, pp. 3601-3604.

Ortiz-Posadas, Martha — Univ. Autónoma Metropolitana
García-Porres, Julieta — Univ. Autónoma Metropolitana - Iztapalapa
Lemus-Martinez, Cecilia — Univ. Autonoma Metropolitana - Iztapalapa

16:30-17:30 FrP2C4.4

A Probabilistic Algorithm for Estimating the Intention of Computer Users with Movement Disorders, pp. 3605-3608.

Grossman, Adam David — Stanford Univ.
Sanger, Terence David — Stanford

16:30-17:30 FrP2C4.5

Heating Properties of Re-Entrant Resonant Applicator for Brain Tumor by Electromagnetic Heating Modes, pp. 3609-3612.

Shindo, Yasuhiro — Meiji Univ.
Kato, Kazuo — Meiji Univ.
Yabuhara, Tadao — Meiji Univ.

16:30-17:30 FrP2C4.6

3-D Finite Element Analysis and Experimental Study on Brain Injury Mechanism, pp. 3613-3616.

Takahashi, Tomoki — Meiji Univ.
Kato, Kazuo — Meiji Univ.

16:30-17:30 FrP2C4.7

A Cross-Sectional Ultrasound Imaging for Measuring Body Composition, pp. 3617-3622.

Fukumoto, Kiyotaka — Kyushu Univ.
Tsubai, Masayoshi — National Inst. of (AIST)
Muraki, Satoshi — Kyushu Univ.
Fukuda, Osamu — National Inst. of AIST
Sato, Hironori — Hiroshima Inst. of Tech.

16:30-17:30 FrP2C4.8

Simulator with Photon and Arbitrarily Arranged RBC for Hematocrit Estimation, pp. 3623-3628.

Oshima, Shiori — Univ. of Tsukuba
Sankai, Yoshiyuki — Univ. of Tsukuba

16:30-17:30 FrP2C4.9

Assessment of Endothelial Function in the Radial Artery Using Inhaled Albuterol, pp. 3629-3631.

Huang, Bin — Lawrence Berkeley National Lab.
Brennan, Kathleen — lawrence berkeley national Lab.
Budinger, Thomas — Lawrence Berkeley National Lab.
Maltz, Jonathan S. — Siemens Medical & Berkeley Lab.

16:30-17:30 FrP2C4.10

Product Development for Weaning in Respiratory Care, pp. 3632-3633.

Fugger, Erwin — Austrian Res. Centers GmbH.
Kuehteubl, Gernot — Landesklinikum Hochegg
Pohl, Wolfgang — Landesklinikum Hochegg
Wagner, Hannes — Landesklinikum Hochegg

FrP2C5 Forum 5&6
Human-Robot Interactions III (Poster Session)

16:30-17:30 FrP2C5.1

Evaluation of Obstetric Gestures: An Approach Based on the Curvature of 3D Positions, pp. 3634-3637.

Moreau, Richard — INSA-Lyon
Ochoa, Victor — Univ. of Alberta
Pham, Minh Tu — Inst. National des Sciences Appliquées (INSA de Lyon)
Boulanger, Pierre — Univ. of Alberta
Redarce, Tanneguy — Inst. National des Sciences Appliquées (INSA de Lyon)
Dupuis, Olivier — Hospices Civils de Lyon

16:30-17:30 FrP2C5.2

Test of Tracing Performance with an Active Handheld Micromanipulator, pp. 3638-3641.

Choi, David Y — Carnegie Mellon Univ.
Sandoval, Roberto — Carnegie Mellon Univ.
MacLachlan, Robert A. — Carnegie Mellon Univ.
Ho, Lawrence — Univ. of Pittsburgh Medical Center
Lobes, Louis A. — Univ. of Pittsburgh Medical Center
Riviere, Cameron — Carnegie Mellon Univ.

16:30-17:30 FrP2C5.3

Soft Tissue Deformation Simulation in Virtual Surgery Using Nonlinear Finite Element Method, pp. 3642-3645.

Yan, Zhennan — Shanghai Jiao Tong Univ.
Gu, Lixu — Shanghai Jiaotong Univ.
Huang, Pengfei — Shanghai Jiao Tong Univ.
Lv, Sizhe — Shanghai Jiao Tong Univ.
YU, Xiao — Shanghai Jiao Tong Univ.
Kong, Xianming — Renji Hospital, Medical School, Shanghai Jiaotong Univ.

16:30-17:30 FrP2C5.4

Real-Time Cutting and Suture Simulation Using Hybrid Elastic Model, pp. 3646-3649.

Zhang, Jingsi — Shanghai Jiaotong Univ.
Gu, Lixu — Shanghai Jiaotong Univ.
Huang, Pengfei — Shanghai Jiao Tong Univ.
Dworzak, Jalda — Lab. of Image-Guided Surgery and Therapy
Chen, Feng — Shanghai Jiaotong Univ.
Kong, Xianming — Renji Hospital, Medical School, Shanghai Jiaotong Univ.

FrP2D1 Forum 5&6
Health Information Systems and Patient Records III (Poster Session)

16:30-17:30 FrP2D1.1

BioDat—Web-Based System for Storing and Analyzing 1D Signals, pp. 3650-3651.

Kozelek, Petr — Czech Tech. Univ. in Prague

16:30-17:30 FrP2D1.2

A Web-Based System for Family Health Record, pp. 3652-3656.

Bonacina, Stefano — Pol. di Milano
Marceglia, Sara — Pol. di Milano
Bertoldi, Michele — Pol. di Milano
Pinciroli, Francesco — Pol. di Milano

16:30-17:30 FrP2D1.3

Performance Analysis of Distributed and Centralized Models for Electronic Medical Record Exchanges, pp. 3657-3660.

Huang, Ean-Wen — National Taipei Coll. of Nursing
Lee, Chiung-San — National Taipei Coll. of Nursing
Jiang, Wey-Wen — National Taipei Coll. of Nursing
Chiou, Shwu-Fen — National Taipei Coll. of Nursing
Liu, Fei-Ying — Daan Junior High School
Liou, Der-Ming — Taipei City Hospital

16:30-17:30 FrP2D1.4

Multi-Agent System As a Platform for Management of Medical Documentation, pp. 3661-3664.

Lhotska, Lenka — Czech Tech. Univ. in Prague

16:30-17:30 FrP2D1.5

HSDPA (3.5G)-Based Ubiquitous Integrated Biotelemetry System for Emergency Care, pp. 3665-3668.

Kang, Jaemin — Seoul National Univ.
Shin, Il Hyung — Seoul National Univ.
Koo, Yoonseo — Seoul National Univ.
Jung, Min Yang — Seoul National Univ.
Suh, Gil Joon — Seoul National Univ. Hospital
Kim, Hee Chan — Seoul National Univ.

16:30-17:30 FrP2D1.6

Using Task Analysis to Improve the Requirements Elicitation in Health Information System, pp. 3669-3672.

Teixeira, Leonor — Aveiro Univ.
Ferreira, Carlos Manuel Santos — Aveiro Univ.
Sousa Santos, Beatriz — Aveiro Univ.

16:30-17:30 FrP2D1.7

A Conceptual Persistent Healthcare Quality Improvement Process for Software Development Management, pp. 3673-3676.

Lin, Jen-Chiun — National Taiwan Univ.
Su, Mei-Ju — National Taiwan Univ.
Cheng, Po-Hsun — National Taiwan Univ. Hospital
Weng, Yung-Ching — National Taiwan Univ.
Chen, Sao-Jie — National Taiwan Univ.
Lai, Jin-Shin — National Taiwan Univ. Hospital
Lai, Feipei — National Taiwan Univ.

16:30-17:30 FrP2D1.8

WIH-Based IEEE 802.11 ECG Monitoring Implementation, pp. 3677-3680.

Moein, Ali — Sciences & Res. Campus of Azad Univ.
Pouladian, Majid — Science and Res. Campus of Azad Univ.

FrP2D2 Forum 5&6

Telemedicine III (Poster Session)

16:30-17:30 FrP2D2.1

A Framework for Automated Evidence Gathering with Mobile Systems Using Bayesian Networks, pp. 3681-3684.

José, Alexandre Bellezi — Univ. of Brasília
Barbosa, Talles M. G. de A. — Catholic Univ. of Goiás
Sene Jr, Iwens G. — Catholic Univ. of Goiás
da Rocha, Adson F. — Univ. of Brasilia
Castro, Liana — Univ. of Brasilia
Assis de Oliveira Nascimento, Francisco — Univ. of Brasilia
Carvalho, João Luiz Azevedo de — Univ. of Southern California
Carvalho, Hervaldo Sampaio — Univ. of Brasília

16:30-17:30 FrP2D2.2

A Communication and Information Technology Infrastructure for Real Time Monitoring and Management of Type 1 Diabetes Patients, pp. 3685-3688.

Skevofilakas, Marios — National Tech. Univ. of Athens
Mougiakakou, Stavroula — National Tech. Univ. of Athens
Zarkogianni, Konstantia — National Tech. Univ. of Athens
Aslanoglou, Erika — DATAMED
Pavlopoulos, Sotiris — National Tech. Univ. of Athens
Vazeou, Andriani — Faculty of Nursing, Univ. of Athens
Bartsocas, Christos — Faculty of Nursing, Univ. of Athens
Nikita, Konstantina — National Tech. Univ. of Athens

16:30-17:30 FrP2D2.3

Ubiquitous Monitoring System for Chronic Obstructive Pulmonary Disease and Heart Disease Patients, pp. 3689-3692.

Shin, Il Hyung — Seoul National Univ.
Lee, Jae Ho — Seoul National Univ. Boondang Hospital
Kim, Hee Chan — Seoul National Univ.

16:30-17:30 FrP2D2.4

Screening Device for Identification of Patients with Paroxysmal Atrial Fibrillation to Prevent Ischemic Strokes, pp. 3693-3696.

Wieland, Steven — Univ. of Karlsruhe
Kikillus, Nicole — Univ. of Karlsruhe
Baas, Tobias — Univ. of Karlsruhe
Braecklein, Martin — Corscience GmbH.
Bolz, Armin — Univ. of Karlsruhe

16:30-17:30 FrP2D2.5

ECG R-R Peak Detection on Mobile Phones, pp. 3697-3700.

Sufi, Fahim — RMIT Univ.
Fang, Qiang — RMIT Univ.
Cosic, Irena — RMIT Univ.

16:30-17:30 FrP2D2.6

Using a Telemedicine System to Decrease Cardiovascular Disease Risk in an Underserved Population: Design, Use, and Interim Results, pp. 3701-3704.

Santamore, William — Temple Univ.

16:30-17:30 FrP2D2.7

A Cell Phone Based Health Monitoring System with Self Analysis Processor Using Wireless Sensor Network Technology, pp. 3705-3708.

Chung, Wan-Young — Dongseo
Yau, Chiew Lian — Dongseo Univ.
Shin, Kwang sig — Dongseo Univ.
Myllylä, Risto — Univ. of Oulu

16:30-17:30 FrP2D2.8

Mobile Consultant: Evaluation of Additional Services, pp. 3709-3712.

Banitsas, Konstantinos — Brunel Univ.
Georgiadis, Pantelis — Univ. of Patras
Tachakra, Sapal — Central Middlesex Hospital

16:30-17:30 FrP2D2.9

A Remote Patient Monitoring System Using a Java-Enabled 3G Mobile Phone, pp. 3713-3716.

Zhang, Pu — The Univ. of Tokushima
Kogure, Yuichi — Univ. of Tokushima
Matsuoka, Hiroki — The Univ. of Tokushima
Akutagawa, Masatake — The Univ. of Tokushima
Kinouchi, Yohsuke — The Univ. of Tokushima
Zhang, Qinyu — ShenZhen Graduate School, Harbin Inst. of Tech. ShenZh

16:30-17:30 FrP2D2.10

Region of Interest Video Coding for Low Bit-Rate Transmission of Carotid Ultrasound Videos Over 3G Wireless Networks, pp. 3717-3720.

Tsapatsoulis, Nicolas — Univ. of Cyprus
Loizou, Christos — Intercollege
Pattichis, Constantinos — Univ. of Cyprus

16:30-17:30 FrP2D2.11

Flexible Implementation of Front-End Bioelectric Signal Amplifier Using Fpaa for Telemedicine System, pp. 3721-3724.

Chan, Wai Wong — The Univ. of Macau
Chan, U Fai — The Univ. of Macau
Pun, Sio Hang — Univ. of Macau
Vai, Mang I. — Univ. of Macau
Mak, Peng Un — Univ. of Macau

16:30-17:30 FrP2D2.12

Experience at Italian National Institute of Health in the Assessment of the Quality in Telemedicine: Submission to a Quality Control Process, pp. 3725-3728.

Giansanti, Daniele — Dipartimento di Tecnologie e Salute
Morelli, Sandra — Istituto Superiore di Sanitŕ
Macellari, Velio — Istituto Superiore di Sanitŕ

16:30-17:30 FrP2D2.13

Design of a Methodology for Assessing an Electrocardiographic Telemonitoring System, pp. 3729-3732.

Alfonzo, Alberto — IUET-LV
Huerta, Mónica — Simon Bolivar Univ.
Wong C, Sara — Univ. Simon Bolivar
Passariello, Gianfranco — Univ. Simón Bolívar
Diaz, Mary — Univ. Simon Bolivar
La Cruz, Alexandra — Simon Bolivar Univ.
Cruz, Julio — Simon Bolivar Univ.

16:30-17:30 FrP2D2.14

A Generic Task-Driven Multi-Agent Telemedicine System, pp. 3733-3736.

NAGEBA, Ebrahim — INSA de Lyon
FAYN, Jocelyne — INSERM
RUBEL, Paul — INSA de Lyon ; Univ. de Lyon

16:30-17:30 FrP2D2.15

Design of Novel Assessment Techniques for Opioid Dependent Patients, pp. 3737-3740.

Patil, Sushil — Univ. of Tasmania
Gale, Timothy John — Univ. of Tasmania
Stack, Clive Rohan — Univ. of Tasmania

16:30-17:30 FrP2D3.1
Evaluation of Texture Features in Hepatic Tissue Characterization from Non-Enhanced CT Images, pp. 3741-3744.
Valavanis, Ioannis — National Tech. Univ. of Athens
Mougiakakou, Stavroula — National Tech. Univ. of Athens
Nikita, Alexandra — Medical School, Univ. of Athens
Nikita, Konstantina — National Tech. Univ. of Athens

16:30-17:30 FrP2D3.2
E-Learning for Laurea in Biomedical Laboratory Technicians: Presentation of a Pilote Study, pp. 3745-3747.
Giansanti, Daniele — Istituto Superiore di Sanitŕ
Castrichella, Livia — Univ. "La Sapienza" di Roma
Giovagnoli, Maria Rosaria — Univ.

16:30-17:30 FrP2D3.3
Diagnosis of Hemorrhage in a Prehospital Trauma Population Using Linear and Nonlinear Multiparameter Analysis of Vital Signs, pp. 3748-3751.
Chen, Liangyou — U.S. Army Medical Res. and Materiel Command
Reisner, Andrew — Massachusetts General Hospital
McKenna, Thomas — U.S. Army Medical Res.
Gribok, Andrei — U.S. Army Medical Res. and Materiel Command
Reifman, Jaques — U.S. Army Medical Res. and Materiel Command

16:30-17:30 FrP2D3.4
An Architecture for Multi-Dimensional Temporal Abstraction and Its Application to Support Neonatal Intensive Care, pp. 3752-3756.
Stacey, Michael Roeland — Univ. of Western Sydney
McGregor, Carolyn — Univ. of Ontario Inst. of Tech.
Tracy, Mark — Department of Paediatrics and Child Health, Univ. of Sydney

16:30-17:30 FrP2D3.5
A 3-D CAD Tool for CT Colonography, pp. 3757-3760.
Cardillo, Franco Alberto — Univ. of Pisa
Cesaraccio, Massimo — Univ. of Pisa
Starita, Antonina — Univ. of Pisa
Neri, Emanuele — Univ. of Pisa

16:30-17:30 FrP2D3.6
A Method for Estimating 3-D Nuclear Parameters Using an Image Taken from a Hepatic Histopathological Section, pp. 3761-3764.
Takahashi, Masanobu — Shibaura Inst. of Tech.
Yoshimi, Takashi — Shibaura Inst. of Tech.
Nakano, Masayuki — Chiba Medical Center

16:30-17:30 FrP2D3.7
A Neuro-Fuzzy Controller for the Estimation of Tidal Volume and Respiration Frequency Ventilator Settings for COPD Patients Ventilated in Control Mode, pp. 3765-3768.
Tzavaras, Aris — Tech. Educational Inst. of Athens
Weller, Peter — City Univ. London
Spyropoulos, Vasileios — Tech. Education Inst. of Athens

16:30-17:30 FrP2D3.8
Biochemical Informatics Methods for Diagnosis, Treatment, and Disease Management, pp. 3769-3772.
Hudson, Samuel E — California State Univ. Bakersfield

16:30-17:30 FrP2D3.9
An Evaluation and Comparison of the Performance of State of the Art Approaches for the Detection of Spiculated Masses in Mammograms, pp. 3773-3776.
Kage, Andreas — Fraunhofer Inst. for Integrated Circuits (IIS)
Elter, Matthias — Fraunhofer Inst. for Integrated Circuits (IIS)
Wittenberg, Thomas — Fraunhofer Inst. for Integrated Circuits (IIS)

16:30-17:30 FrP2D3.10
Request-Driven ECG Interpretation Based on Individual Data Validity Periods, pp. 3777-3780.
Augustyniak, Piotr — AGH Univ. of Science and Tech.

16:30-17:30 FrP2D3.11
Discriminatory Validity of Dyslexia Screening Tasks in French School Age Children, pp. 3781-3785.
Le Jan, Guylaine — LTSI, Univ. de Rennes1
Le Bouquin Jeannes, Regine — INSERM U642 - Univ. de Rennes 1
Costet, Nathalie — LTSI, Univ. de Rennes1
Faucon, Gerard — INSERM U642 - Univ. de Rennes 1

16:30-17:30 FrP2D3.12
SVM-Based Identification of Pathological Voices, pp. 3786-3789.
Chen, Wenxi — Univ. of Aizu
Peng, Ce — Tianjin Univ.
Zhu, Xin — the Univ. of Aizu
Wan, Baikun — Tianjin Univ.
Wei, Daming — Univ. of Aizu

16:30-17:30 FrP2D3.13
Iassist: A Software Framework for Intelligent Patient Monitoring, pp. 3790-3793.
Brouse, Christopher — Univ. of British Columbia
Dumont, Guy — Univ. of British Columbia
Yang, Ping — Univ. of British Columbia
Lim, Joanne — British Columbia Children's Hospital
Ansermino, J. Mark — British Columbia's Children's Hospital

16:30-17:30 FrP2D3.14

Ontology-Based Vector Space Model and Fuzzy Query Expansion to Retrieve Knowledge on Medical Computational Problem Solutions, pp. 3794-3797.

Bratsas, Charalampos — Aristotle Univ. of Thessaloniki
Koutkias, Vassilis — Aristotle Univ. of Thessaloniki
Kaimakamis, Evangelos — Aristotle Univ. of Thessaloniki
Bamidis, Panagiotis — Aristotle Univ.
Maglaveras, Nikolaos — Aristotle Univ. of Thessaloniki

FrP2D4 — Forum 5&6

Ambient Assisted Living Systems and Solutions II (Poster Session)

16:30-17:30 FrP2D4.1

A Mobile Phone-Based Communication Support System for Elderly Persons, pp. 3798-3801.

Ogawa, Hidekuni — Hiroshima Inst. of Tech.
Yonezawa, Yoshiharu — Hiroshima Inst. of Tech.
Maki, Hiromichi — International Trinity Coll.
Caldwell, Morton — Caldwell Biomedical Electronics

16:30-17:30 FrP2D4.2

Evaluation of PIR Detector Characteristics for Monitoring Occupancy Patterns of Elderly People Living Alone at Home, pp. 3802-3805.

Kaushik, Alka — Univ. of New South Wales
Lovell, Nigel H — Univ. of New South Wales
Celler, Branko George — Univ. of New South Wales

16:30-17:30 FrP2D4.3

Health Smart Home - towards an Assistant Tool for Automatic Assessment of the Dependence of Elders, pp. 3806-3809.

Le, Xuan Hoa Binh — INP Grenoble
Di Mascolo, Maria — INP Grenoble, CNRS, UJF
Gouin, Alexia — INP Grenoble
Noury, Norbert — Univ. Joseph Fourier Grenoble

16:30-17:30 FrP2D4.4

Integration of an Environmental Sound Module to an Existing In-Home Activity Simulator, pp. 3810-3813.

Virone, Gilles — Univ. of Virginia
Istrate, Dan — ESIGETEL

16:30-17:30 FrP2D4.5

Intelligent Monitoring to Improve Safety of Older Persons, pp. 3814-3817.

Chen, Datong — Carnegie Mellon Univ.
Bharucha, Ashok — Univ. of Pittsburgh
Wactlar, Howard — Carnegie Mellon Univ.

16:30-17:30 FrP2D4.6

A Fusion Health Monitoring with ECG and Accelerometer Sensors for Elderly Persons at Home, pp. 3818-3821.

Chung, Wan-Young — Dongseo
Bhardwaj, Sachin — Dongseo Univ.
Purwar, Amit — Dongseo Univ.
Lee, Dae-Seok — Dongseo Univ.
Myllylä, Risto — Univ. of Oulu

16:30-17:30 FrP2D4.7

Evaluation of Bluetooth Communications for the Deployment of Assisted Living Technologies in Home Environments, pp. 3822-3825.

McGrath, Michael James — Intel Ireland Ltd
Burns, Adrian — Intel
dishongh, terrance — intel Corp.

16:30-17:30 FrP2D4.8

Sound Information Notification System by Two-Channel Electrotactile Stimulation for Hearing Impaired Persons, pp. 3826-3829.

Okada, Kazuhide — Osaka Univ.
Kim, Gwan — Osaka Univ.
Pak, Pyong Sik — Osaka Univ.

16:30-17:30 FrP2D4.9

Validation of a Tele-Home-Care for Hand-Telerehabilitation, pp. 3830-3832.

Giansanti, Daniele — Istituto Superiore di Sanitŕ
Morelli, Sandra — Istituto Superiore di Sanitŕ
Maccioni, Giovanni — Istituto Superiore di Sanitŕ
Macellari, Velio — Istituto Superiore di Sanitŕ

16:30-17:30 FrP2D4.10

A Preliminary Study to Demonstrate the Use of an Air Bag Device to Prevent Fall-Related Injuries (I), pp. 3833-3835.

Tamura, Toshiyo — Chiba Univ. Gradute School of Engineering

FrD01 — Gratte Ciel 1

Signal Pattern Classification in Biomedical Signals I (Oral Session)

Chair: Lipping, Tarmo — Tampere Univ. of Tech.
Co-Chair: Faes, Luca — Univ. of Trento

17:30-17:45 FrD01.1

Cardiac Arrhythmia Detection by Parameters Sharing and MMI Training of Hidden Markov Models, pp. 3836-3839.

Lima, Carlos Manuel Gregorio Santos — Univ. of Minho
Cardoso, Manuel Jorge — Univ. of Minho

17:45-18:00 FrD01.2

Integration of Global and Local Knowledge for Fuzzy Expert System Creation - Application to Arrhythmic Beat Classification, pp. 3840-3843.

Tsipouras, Markos G. — Univ. of Ioannina
Exarchos, Themis P. — Unit of Medical Tech. & Intelligent Info
Fotiadis, Dimitrios I. — Univ. of Ioannina

18:00-18:15 FrD01.3

Comparison of Seven Approaches for Holter ECG Clustering and Classification, pp. 3844-3847.

Chudacek, Vaclav — Czech Tech. Univ. in Prague
Petrik, Milan — Czech Tech. Univ.
Georgoulas, George — Univ. of Patras
Cepek, Miroslav — Czech Tech. Univ. in Prague
Lhotska, Lenka — Czech Tech. Univ. in Prague
Stylios, Chrysostomos — Tech. Educational Inst. of Epirus

18:15-18:30 FrD01.4

Clustering Follow-Up Time-Series Recorded by Cardiac Implantable Devices, pp. 3848-3851.

Guéguin, Marie — Univ. de Rennes 1
Roux, Emmanuel — Univ. de Toulouse III
Hernández, Alfredo I — INSERM U642 LTSI.
Porée, Fabienne — Univ. de Rennes 1
Mabo, Philippe — Univ. de Rennes 1
Graindorge, Laurence — Sorin Group
Carrault, Guy — Univ. de Rennes 1

18:30-18:45 FrD01.5

Ventricular Arrhythmias Assessment, pp. 3852-3855.

Henriques, Jorge — Univ. of Coimbra
Carvalho, Paulo — Univ. of Coimbra
Gil, Paulo — Univ. of Coimbra
Marques, Amandio — Univ. of Coimbra
Rocha, Teresa — Inst. Pol. de Coimbra
Ribeiro, Bernardete — Univ. of Coimbra
Antunes, Manual — Univ. of Coimbra
Schmidt, Ralf — Philips Res.
Habetha, Joerg — Philips Res. Lab.

18:45-19:00 FrD01.6

Discrimination of Ischemia and Normal Sinus Rhythm for Cardiac Signals Using a Modified K Means Clustering Algorithm, pp. 3856-3859.

Shrivastav, Maneesh — Univ. of Minnesota
Iaizzo, Paul — Univ. of Minnesota

FrD02 — Gratte Ciel 2

PCA and ICA in Biomedical Signals I (Oral Session)

Chair: James, Christopher — Univ. of Southampton
Co-Chair: Senhadji, Lotfi — Univ. of Rennes 1; INSERM

17:30-17:45 FrD02.1

Residual Dependency Estimation of Independent Components Applied to EEG Event Related Potentials Associated with Emotional Processing, pp. 3860-3863.

Milanesi, Matteo — Univ. of Pisa
James, Christopher — Univ. of Southampton
Gemignani, Angelo — Univ. of Pisa
menicucci, danilo — National Reaserch Council (CNR)
Ghelarducci, Brunello — Univ. of Pisa
Landini, Luigi — Univ. of Pisa

17:45-18:00 FrD02.2

Narrowband vs. Broadband Phase Synchronization Analysis Applied to Independent Components of Ictal and Interictal EEG, pp. 3864-3867.

Gupta, Disha — Univ. of Southampton
James, Christopher — Univ. of Southampton

18:00-18:15 FrD02.3

Blind Source Separation Methods Applied to Synthesized Polysomnographic Recordings: A Comparative Study, pp. 3868-3871.

kachenoura, Amar — Inserm; Univ. de Rennes 1
Albera, Laurent — INSERM - Univ. de Rennes1
Senhadji, Lotfi — Univ. of Rennes 1; INSERM

18:15-18:30 FrD02.4

EEG Effects of Motion Sickness Induced in a Dynamic Virtual Reality Environment, pp. 3872-3875.

Lin, Chin-Teng — National Chiao-Tung Univ.
Chuang, Shang-Wen — National Chiao-Tung Univ.
Chen, Yu-Chieh — National Chiao-Tung Univ.
Ko, Li-Wei — National Chiao-Tung Univ.
Liang, Sheng-Fu — National Chiao-Tung Univ.
Jung, Tzyy-Ping — Univ. of California San Diego

18:30-18:45 FrD02.5

An Independent-Component-Analysis-Based Time-Space Processor for the Identification of Neural Stimulation Sources, pp. 3876-3879.

Robert, Pierre-Yves — École Pol. de Montréal
Sawan, Mohamad — Ec. Pol.

18:45-19:00 FrD02.6

An Empirical Quantitative EEG Analysis for Evaluating Clinical Brain Death, pp. 3880-3883.

Cao, Jianting — (1) Saitama Inst. of Tech. (2)BrainScienceInstitute, R
Chen, Zhe — Massachusetts General Hosptial, Harvard Medical School

FrD03 — Bellecour 1

RF Coil Technology for MRI (Oral Session)

Chair: Lee, Ray — New York Univ.
Co-Chair: Xu, Dan — Univ. of Illinois, Urbana-Champaign

17:30-17:45 FrD03.1

Cavity Resonator Coil for High Field Magnetic Resonance Imaging, pp. 3884-3885.

Solis-Najera, Sergio — Univ. Autonoma Metropolitana
Tomasi, Dardo — Brookhaven National Lab.
Rodriguez, Alfredo O — UAM, Iztapalapa

17:45-18:00 FrD03.2

A Dedicated Two-Element Phased Array Receiver Coil for High Resolution MRI of Rat Knee Cartilage at 7T, pp. 3886-3889.

Rengle, Adrian — Univ. de Lyon, Univ. Lyon 1, INSA-Lyon
Armenean, Mircea — Univ. de Lyon, Univ. Lyon1, INSA-Lyon
BOLBOS, Radu — Univ. of California San Francisco
Goebel, J-C — Univ. Nancy I,
Pinzano-Watrin, A — Univ. Nancy I
Saint-Jalmes, Hervé — Univ. de Lyon, Univ. Lyon1
Gillet, Pierre — Univ. Nancy I
BEUF, olivier — Univ. de Lyon, Univ. Lyon 1, INSA-Lyon

18:00-18:15 FrD03.3

Numerical Study of the Optimal Geometry of MRI Surface Coils, pp. 3890-3893.

Rojas, Rafael — UAM, Iztapalapa.
Rodriguez, Alfredo O — UAM, Iztapalapa

18:15-18:30 FrD03.4

Radiofrequency Power Deposition Near Metallic Wires During MR Imaging: Feasibility Study Using T1-Weighted Thermal Imaging, pp. 3894-3897.

Oulmane, Farah — Univ. Lyon 1
DETTI, Valerie — Univ. Lyon 1
GRENIER, Denis — Univ. Lyon 1
PERRIN, Emmanuel — Univ. Lyon 1
Saint-Jalmes, Hervé — Univ. de Lyon, Univ. Lyon1

18:30-18:45 FrD03.5

An Improved Hybrid MoM/FDTD Technique for MRI RF Coils Modeling Using Huygen's Equivalent Surface Method, pp. 3898-3901.

Li, Bing Keong — The Univ. of Queensland
Liu, Feng — The Univ. of Queensland
Weber, Ewald — The Univ. of Queensland
Padhi, Shantanu — EMI Centre, Univ. of Queensland
Crozier, Stuart — The Univ. of Queensland

18:45-19:00 FrD03.6

Comparison of Birdcage and Phase Array Coil Using FDTD for the B1 Homogeneity in High Field MRI, pp. 3902-3905.

Seo, Jeung Hoon — Kyung Hee Univ.
Han, Byung Hee — Kyung Hee Univ.
Lee, Soo Yeol — Kyung Hee Univ.

FrD04 — Bellecour 3

X-Ray-Based Imaging Analysis and Applications (Oral Session)

Chair: PEYRIN, Francoise — UMR CNRS 5220; Inserm U630; INSA-Lyon; ESRF

17:30-17:45 FrD04.1

Detection of Microcalcifications in Digital Mammograms, pp. 3906-3909.

Lopez-Aligue, Francisco J. — Univ. OF EXTREMADURA - Faculty of Sciences
Poveda-Pierola, Alberto — Univ. OF EXTREMADURA.
Acevedo-Sotoca, Isabel — Univ. OF EXTREMADURA, Fac. of Sceinces
Garcia-Urra, Fernando — Hospital Infanta Cristina

17:45-18:00 FrD04.2

Evaluation of Two Software Tools Dedicated to an Automatic Analysis of the CT Scanner Image Spatial Resolution, pp. 3910-3913.

Torfeh, Tarraf — QualiFormeD
Beaumont, Stéphane — QualiFormeD
Guédon, JeanPierre — Univ. of Nantes - EPUN
Denis, Eloďse — Univ. of Nantes - EPUN

18:00-18:15 FrD04.3

Fast Dose Calculation for Stereotactic Synchrotron Radiotherapy, pp. 3914-3917.

freud, nicolas — INSA-LYON
Letang, Jean Michel — INSA-Lyon
Mary, Corentin — CPE Lyon
Boudou, Caroline — CEA
Ferrero, Claudio — ESRF
Elleaume, Hélčne — INSERM
Bravin, Alberto — ESRF
Esteve, Francois — INSERM
Babot, Daniel — INSA-LYON

18:15-18:30 FrD04.4

Feasibility of Micro-Crack Detection in Human Trabecular Bone Images from 3D Synchrotron Microtomography, pp. 3918-3921.

LARRUE, Aymeric — UMR CNRS 5220 ; INSERM U630 ; INSA-Lyon ; ESRF
RATTNER, Aline — INSERM U890
LAROCHE, Norbert — INSERM U890
VICO, Laurence — INSERM U890
PEYRIN, Francoise — UMR CNRS 5220; Inserm U630; INSA-Lyon; ESRF

18:30-18:45 FrD04.5

Recognition of Microcalcifications in Digital Mammograms Based on Markov Random Field and Deterministic Fractal Modeling, pp. 3922-3925.

Huang, Yu-Kun — National Chung Cheng Univ.
Yu, Sung-Nien — National Chung Cheng Univ.

18:45-19:00 FrD04.6

In Vivo Cerebral Artery Microangiography in Rat and Mouse Using Synchrotron Radiation Imaging System, pp. 3926-3929.

Umetani, Keiji — Japan Synchrotron Radiation Res. Inst.
Sakurai, Takashi — Kobe Univ.
Kondoh, Takeshi — Kobe Univ.

FrD05 — Tęte d'Or Lounge

Instrumentation and Systems for Diagnosis and Clinical Management III (Oral Session)

17:30-17:45 FrD05.1

A Sub-Microwatt Low-Noise Amplifier for Neural Recording, pp. 3930-3933.

Holleman, Jeremy — Univ. of Washington
Otis, Brian — Univ. of Washington

17:45-18:00 FrD05.2

Modeling the Influence of Body Position in Bioimpedance Measurements, pp. 3934-3937.

Medrano, Guillermo — Aachen Univ. Helmholtz-Inst. for Biomedical
Leonhardt, Steffen — RWTH Aachen Univ.
Zhang, Peng — RWTH Aachen Univ.

18:00-18:15 FrD05.3

An Orientation Measuring System Suitable for Routine Uses Made by the Fusion of a 3D Gyroscope and a Magnetic Tracker, pp. 3938-3941.

Favre, Julien — Ec. Pol. Federale de Lausanne
Chardonnens, Julien — Ec. Pol. Federale de Lausanne
Aminian, Kamiar — Ec. Pol. Federale

18:15-18:30 FrD05.4

Monitoring and Analysis of Cardio Respiratory and Snoring Signals by Using an Accelerometer, pp. 3942-3945.

Sánchez Morillo, Daniel — Univ. of Cádiz
Rojas Ojeda, Juan Luis — Univ. of Cádiz
Cresp Foix, Felipe — Univ. of Cádiz
Barbosa Rendón, David — Univ. of Cádiz
León Jiménez, Antonio — Hospital Univ. Puerta del Mar de Cádiz

18:30-18:45 FrD05.5

A System for Accessing Implantable Medical Ports in the Office Setting, pp. 3946-3949.

Ellsmere, James — Harvard Medical School and Beth Israel Deaconess Medical Center
Wells, William — Harvard Medical School and Brigham & Women's Hospital

FrD06 — Tęte d'Or 2

Textile Sensors and Smart Fabrics I (Oral Session)

Chair: Paradiso, Rita — Milior SpA

17:30-17:45 FrD06.1

OFSETH: Optical Fibre Embedded into Technical Textile for Healthcare, an Efficient Way to Monitor Patient under Magnetic Resonance Imaging, pp. 3950-3953.

De jonckheere, Julien — USTL
Jeanne, Mathieu — CHRU de Lille
Weber, Stefan — Tech. Univ. of Munich
Logier, Regis — CHRU de Lille

17:45-18:00 FrD06.2

Wearable Seismocardiography, pp. 3954-3957.

Castiglioni, Paolo — Fondazione Don Carlo Gnocchi ONLUS
Faini, Andrea — Univ. degli Studi Milano-Bicocca
Parati, Gianfranco — Istituto Auxologico Italiano
Di Rienzo, Marco — Fondazione Don Carlo Gnocchi

18:00-18:15 FrD06.3

MagIC: A Textile System for Vital Signs Monitoring. Advancement in Design and Embedded Intelligence for Daily Life Applications, pp. 3958-3961.

Di Rienzo, Marco — Fondazione Don Carlo Gnocchi
Rizzo, Francesco — Fondazione Don C. Gnocchi ONLUS
Meriggi, Paolo — Fondazione Don Gnocchi
Castiglioni, Paolo — Fondazione Don Carlo Gnocchi ONLUS
Mazzoleni, Paolo — Fondazione Don Carlo Gnocchi ONLUS
Ferrarin, Maurizio — Foundation Don Carlo Gnocchi Onlus
Ferratini, Maurizio — Fondazione Don C. Gnocchi, ONLUS

18:15-18:30 FrD06.4

Smart Garments for Safety Improvement of Emergency/Disaster Operators, pp. 3962-3965.

Curone, Davide — Univ. degli Studi di Pavia
Dudnik, Gabriela — CSEM
Loriga, Giannicola — Smartex s.r.l.
Luprano, Jean — CSEM -Centre Suisse d'Electronique et de Microtechnique
Magenes, Giovanni — Univ. of Pavia
Paradiso, Rita — Milior SpA
tognetti, alessandro — Univ. of Pisa
Bonfiglio, Annalisa — Univ. of Cagliari

18:30-18:45 FrD06.5

Textile Integrated Contactless EMG Sensing for Stress Analysis (I), pp. 3966-3969.

Taelman, Joachim — Katholieke Univ. Leuven
Adriaensen, Tine — Katholieke Univ. Leuven
van der Horst, Caroline — TNO
Linz, Torsten — Tech. Univ. Berlin
Spaepen, Arthur — Katholieke Univ. Leuven

18:45-19:00 FrD06.6

Woven Electronics: A New Perspective for Wearable Technology (I), pp. 3970-3973.

Bonfiglio, Annalisa — Univ. of Cagliari
Maccioni, Maurizio — Univ. of Cagliari
Locci, Simone — Univ. of Cagliari
Orgiu, Emanuele — Univ. of Cagliari

FrD07 — Bellecour 2

Ventricular Assist Devices (Oral Session)

17:30-17:45 FrD07.1

Morphological Approach for the Functional Improvement of an Artificial Myocardial Assist Device Using Shape Memory Alloy Fibres, pp. 3974-3977.

Shiraishi, Yasuyuki — Inst. of Development, Aging andCancer, Tohoku Univ.
Yambe, Tomoyuki — Tohoku Univ.
Saijo, Yoshifumi — Inst. of Development Aging and Cancer, TohokuUniversity
Tanaka, Akira — Fukushima Univ.
Yoshizawa, Makoto — Tohoku Univ.
Park, Young Kwang — Waseda Univ.
Uematsu, Miyuki — Waseda Univ.
Ogawa, Daisuke — Tohoku Univ.
Tanaka, Akira — Fukushima Univ.
Umezu, Mitsuo — Waseda Univ. Graduate School
Baba, Atsushi — Tohoku Univ.
Fujimoto, Tetsuo — Shibaura Inst. of Tech.

17:45-18:00 FrD07.2

A Rule-Based Controller Based on Suction Detection for Rotary Blood Pumps, pp. 3978-3981.

Ferreira, Antonio — Univ. of Pittsburgh
Boston, J Robert — Univ. of Pittsburgh
Antaki, James — Carnegie-Mellon Univ.

18:00-18:15 FrD07.3

Improvement of Hemolysis in a Centrifugal Blood Pump with Hydrodynamic Bearings and Semi-Open Impeller, pp. 3982-3985.

Kosaka, Ryo — National Inst. of Advanced Industrial ScienceandTechnology (
Yamane, Takashi — National Inst. of Advanced Industrial Science and Tech.
Maruyama, Osamu — National Inst. of Advanced Industrial Science and Tech.
Nishida, Masahiro — National Inst. of Advanced Industrial Science andTechnology
Yada, Toru — Graduate School of Tokyo Univ. of Science
Satio, Sakae — U-Corp.
Hirai, Shusaku — U-Corp.

18:15-18:30 FrD07.4

Acute Increase in Reversal Blood Flow During Counterpulsation Is Associated with Vasoconstriction and Changes in the Aortic Mechanics, pp. 3986-3989.

Bia, Daniel — School of Medicine, Republic Univ.
Zócalo, Yanina — School of Medicine, Republic Univ.
Armentano, Ricardo Luis — Favaloro Univ.
de Forteza, Eduardo — Univ. Favaloro
Fischer, Edmundo — Univ. Favaloro

18:30-18:45 FrD07.5

A Dynamic Lumped Parameter Model of the Left Ventricular Assisted Circulation, pp. 3990-3993.

Lim, Einly — UNSW
Cloherty, Shaun L — Univ. of New South Wales
Reizes, John A — UNSW
Mason, David G — Ventracor Ltd
Salamonsen, Robert F — Alfred Hospital
Karantonis, Dean M — Univ. of New South Wales
Lovell, Nigel H — Univ. of New South Wales

FrD08 Gratte Ciel Lounge

Sleep Biosignal Analysis: Present State and Future Directions (Oral Session)

Chair: Ktonas, Periklis — Univ. of Athens
Co-Chair: Anderer, Peter — Medical Univ. of Vienna

17:30-17:45 FrD08.1

Automatic Sleep Classification According to Rechtschaffen and Kales, pp. 3994-3997.

Anderer, Peter — Medical Univ. of Vienna
Gruber, Georg — The Siesta Group Schlafanalyse GmbH
Parapatics, Silvia — The Siesta Group Schlafanalyse GmbH
Dorffner, Georg — Medical Univ. of Vienna

17:45-18:00 FrD08.2

Towards Automated Sleep State Estimation Using a Holter-Oximeter, pp. 3998-4001.

Chua, Chern-Pin — Univ. Coll. Dublin
Garvey, John — St Vincent's Univ. Hospital
Redmond, Stephen — Univ. Coll. Dublin
Heneghan, Conor — Univ. Coll. Dublin
Mc Nicholas, Walter — St. Vincent's Univ. Hospital

18:00-18:15 FrD08.3

Independent Components of Sleep Spindles, pp. 4002-4005.

Ventouras, Errikos — Tech. Educational Inst. of Athens
Alevizos, Ioannis — Medical School Univ. of Patras
Ktonas, Periklis — Univ. of Athens
Tsekou, Hara — Medical School, Univ. of Athens
Paparrigopoulos, Thomas — Medical School, Univ. of Athens
Kalatzis, Ioannis — Tech. Educational Inst. of Athens
Soldatos, Constantin — Medical School, Univ. of Athens
Nikiforidis, George — Medical School, Univ. of Patras

18:15-18:30 FrD08.4

Wavelet Analysis of Electroencephalographic and Electro-Oculographic Changes During the Sleep Onset Period, pp. 4006-4010.

Magosso, Elisa — Univ. of Bologna
Ursino, Mauro — Univ. of Bologna
Provini, Federica — Univ. of Bologna
Montagna, Pasquale — Univ. of Bologna

FrD09 Gratte Ciel 3

Robotic Devices for Rehabilitation I (Oral Session)

Chair: Patton, James (Jim) — Rehab Inst. Chicago & Northwestern U.
Co-Chair: Reinkensmeyer, David — Univ. of California

17:30-17:45 FrD09.1

Interactive Priming Enhanced by Negative Damping Aids Learning of an Object Manipulation Task, pp. 4011-4014.

Huang, Felix — Rehabilitation Inst. of Chicago
Patton, James (Jim) — Rehab Inst. Chicago & Northwestern U.
Mussa-Ivaldi, Ferdinando — Rehabilitation Inst. of Chicago

17:45-18:00 FrD09.2

Home Stroke Rehabilitation for the Upper Limbs, pp. 4015-4018.

Willmann, Richard — Philips Res. Europe
Lanfermann, Gerd — Philips
Saini, Privender — Philips Res. Europe
Timmermans, Annick — Philips Res. Europe
te Vrugt, Jürgen — Philips Res. Europe
Winter, Stefan — Philips Res. Europe

18:00-18:15 FrD09.3

A Computational Model of Human-Robot Load Sharing During Robot-Assisted Arm Movement Training after Stroke, pp. 4019-4023.

Reinkensmeyer, David — Univ. of California
Wolbrecht, Eric — Univ. of California, Irvine
Bobrow, James — Univ. of Calif, Irvine

18:15-18:30 FrD09.4

A Planar 3DOF Robotic Exoskeleton for Rehabilitation and Assessment, pp. 4024-4027.

Ball, Stephen Joseph — Queen's Univ.
Brown, Ian Edward — Queen's Univ.
Scott, Stephen H. — Queen's Univ.

18:30-18:45 FrD09.5

Quantification of Therapists' Manual Assistance on the Leg During Treadmill Gait Training with Partial Body-Weight Support after Spinal Cord Injury, pp. 4028-4032.

Galvez, Jose A. — Univ. of California, Irvine
Budovitch, Amy — Rancho Los Amigos National Rehabilitation Center
Harkema, Susan J — Univ. of Louisville
Reinkensmeyer, David — Univ. of California

18:45-19:00 FrD09.6

Stability Analysis for Tactile Pattern Based Recognition System for Hand Gestures, pp. 4033-4036.

Honda, Yuichiro — Tech. Univ. of Munich
Weber, Stefan — Tech. Univ. of Munich
Lueth, Tim — Tech. Univ. of Munich

FrD11 — Tęte d'Or 1

Ambient Assisted Living Systems and Solutions I (Oral Session)

Chair: Cohen, Maurice — Univ. of California San Francisco
Co-Chair: Tyrer, Harry — Univ. of Missouri - Columbia

17:30-17:45 FrD11.1

Falls Management: Detection and Prevention, Using a Waist-Mounted Triaxial Accelerometer, pp. 4037-4040.

Narayanan, Michael Ravi — Univ. of New South Wales
Lord, Stephen — Univ. of New South Wales
Budge, Marc — Canberra Hospital
Lovell, Nigel H — Univ. of New South Wales
Celler, Branko George — Univ. of New South Wales

17:45-18:00 FrD11.2

Evaluation of Technology-Based Service Scenarios for Supporting Independent Living, pp. 4041-4044.

Kenttä, Outi — VTT
Merilahti, Juho Markus — VTT
Petäkoski-Hult, Tuula — VTT
Ikonen, Veikko — VTT
Korhonen, Ilkka — VTT

18:00-18:15 FrD11.3

Early Detection of Health Changes in Older Adults, pp. 4045-4048.

Tyrer, Harry — Univ. of Missouri - Columbia
Skubic, Marjorie — Univ. of Missouri
Rantz, Marilyn — Univ. of Missouri - Columbia

18:15-18:30 FrD11.4

3D Human Pose Recognition for Home Monitoring of Elderly, pp. 4049-4051.

Jansen, Bart — Vrije Univ. Brussel
Temmermans, Frederik — Vrije Univ. Brussel
Deklerck, Rudi — Vrije Univ. Brussel

18:30-18:45 FrD11.5

Energy Efficient Contextual Sensing for Elderly Care, pp. 4052-4055.

Bhatia, Dinesh — The Univ. of Texas at Dallas
Estevez, Leonardo — Texas Inst.
Rao, Shekar — Texas Inst. Inc.

18:45-19:00 FrD11.6

An Extended PROSAFE Platform for Elderly Monitoring at Home, pp. 4056-4059.

Campo, Eric — LAAS-CNRS
Bonhomme, Sylvain — LAAS-CNRS
Esteve, Daniel — LAAS-CNRS
Guennec, Joëlle — EDF R&D

19:00-19:15 FrD11.7

Easily Installable Behavioral Monitoring System with Electric Field Sensor, pp. 4060-4063.

Tsukamoto, Sosuke — Tokyo Denki Univ.
Machida, Yuichiro — Tokyo Denki Univ.
Kameda, Noriyuki — Tokyo Denki Univ.
Hoshino, Hiroshi — Tokyo Denki Univ.
Tamura, Toshiyo — Chiba Univ. Gradute School of Engineering

FrD12 — Rhône 2

Microvascular Blood Flow with Laser Doppler Flowmetry: Linear and Nonlinear Signal Processing (Invited Session)

Chair: Humeau, Anne — Groupe ISAIP-ESAIP and Univ. d'Angers
Co-Chair: Stefanovska, Aneta — Lancaster Univ.
Organizer: Humeau, Anne — Groupe ISAIP-ESAIP and Univ. d'Angers

17:30-17:45 FrD12.1

Importance of Wavelet Analysis in Laser Doppler Flowmetry Time Series (I), pp. 4064-4067.

Bernjak, Alan — Faculty of Electrical Engineering, Univ. of Ljubljana
Stefanovska, Aneta — Lancaster Univ.

17:45-18:00 FrD12.2

Numerical Simulation of Laser Doppler Flowmetry Signals Based on a Model of Nonlinear Coupled Oscillators. Comparison with Real Data in the Frequency Domain (I), pp. 4068-4071.

Humeau, Anne — Groupe ISAIP-ESAIP and Univ. d'Angers
Chapeau-Blondeau, François — Univ. d'Angers
Rousseau, David — Univ. d'Angers
Abraham, Pierre — Centre Hospitalier Univ. d'Angers

18:00-18:15 FrD12.3

The Cardio-Respiratory Couplings Observed in the LDF Signal Using Wavelet Bispectrum (I), pp. 4072-4075.

Stefanovska, Aneta — Lancaster Univ.
Jamsek, Janez — Faculty of Education, Univ. of Ljubljana

18:15-18:30 FrD12.4

Normalization of Vasomotion in Laser Doppler Perfusion Monitoring (I), pp. 4076-4079.

Graaff, Reindert — Univ. Medical Centre Groningen and Univ.
Morales, Fernando — Univ. Medical Centre Groningen and Univ. of Groningen
Smit, Andries J. — Univ. Medical Center Groningen and Univ. ofGroningen
de Jong, Ed D. — Univ. Medical Center Groningen and Univ. ofGroningen
de Mul, Frits F.M. — Univ. Groningen, Univ. Medical Center Groningen
Rakhorst, Gerhard — Univ. Medical Center Groningen and Univ. of Groningen

18:30-18:45 FrD12.5

Estimation of Speed Distribution of Particles Moving in an Optically Turbid Medium Using Decomposition of a Laser-Doppler Spectrum (I), pp. 4080-4082.

Liebert, Adam — Inst. of Biocybernetics and Biomedical Engineering
Zolek, Norbert — Inst. of Biocybernetics and Biomedical Engineering
Wojtkiewicz, Stanislaw — Inst. of Biocybernetics and Biomedical Engineering
Maniewski, Roman — Inst. of Biocybernetics & Biomed Engr

18:45-19:00 FrD12.6

A Laser Doppler System for Intracerebral Measurements During Stereotactic Neurosurgery (I), pp. 4083-4086.

Wĺrdell, Karin — Linköping Univ.

FrD13 Roseraie 1,2

Biological and Biochemical Sensors: Materials and Analytical Technologies (Minisymposium)

Chair: Diamond, Dermot — Dublin City Univ.
Co-Chair: Laureyn, Wim — IMEC
Organizer: Diamond, Dermot — Dublin City Univ.
Organizer: Laureyn, Wim — IMEC

17:30-17:45 FrD13.1

Sensors for Small Molecules of Biochemical Interest Based on Surface-Enhanced Raman Spectroscopy: The Challenges of Preparing Enhancing Materials for Real-World Applications (I), pp. 4087-4087.

Bell, Steven E.J. — Queen's Univ.

17:45-18:00 FrD13.2

Magnetic Particle Handling Microsystems for Miniaturized Analytical Applications (I), pp. 4088-4089.

Gijs, Martin — Ec. Pol. Fédérale de Lausanne

18:00-18:15 FrD13.3

Polypyrrole Based Switchable Filter System (I), pp. 4090-4091.

Wu, Yanzhe — Dublin CIty Univ.
Nolan, Lorraine — Dublin City Univ.
Coyle, Shirley — DCU
Lau, King Tong — Dublin City Univ.
Wallace, Gordon — Univ. of Wollongong
Diamond, Dermot — Dublin City Univ.

18:15-18:30 FrD13.4

Towards a Method for Printing Network of Chick Forebrain Neurons for Biosensor Applications (I), pp. 4092-4095.

Sasoglu, F.Mert — Drexel Univ.
Kilinc, Devrim — Drexel Univ.
Allen, Kathleen — Drexel Univ.
Layton, Bradley E. — Drexel Univ.

18:30-18:45 FrD13.5

Beads-Based System for Optical Sensing Using Spiropyran Photoswitches (I), pp. 4096-4097.

Scarmagnani, Silvia — Dublin City Univ.
Walsh, Zarah — Dublin City Univ.
Alhashimy, Nameer — Dublin City Univ.
Radu, Alexandar — Dublin City Univ.
Macka, Mirek — Dublin City Univ.
Paull, Brett — Dublin City Univ.
Diamond, Dermot — Dublin City Univ.

SaA01 Gratte Ciel 1

Signal Pattern Classification in Biomedical Signals II (Oral Session)

Chair: Magenes, Giovanni — Univ. of Pavia

08:30-08:45 SaA01.1

Localization of an Inert Region in the Brain Using Modified Levenberg Marquarts Neural Network, pp. 4098-4101.

Katayama, Masato — The Univ. of Tokushima
Akutagawa, Masatake — The Univ. of Tokushima
Kaji, Yoshio — Tokushima Bunri Univ.
Nagashino, Hirofumi — The Univ. of Tokushima
Kinouchi, Yohsuke — The Univ. of Tokushima

08:45-09:00 SaA01.2

Non-Linear Neural Spike Train Decoding Via Polynomial Kernel Regression, pp. 4102-4105.

Cassidy, Andrew — Johns Hopkins Univ.
Etienne-Cummings, Ralph — Johns Hopkins Univ.

09:00-09:15 SaA01.3

Classifying Depth of Anesthesia Using EEG Features, a Comparison, pp. 4106-4109.

Esmaeili, Vahid — Sharif Univ. of Tech.
Shamsollahi, Mohammad Bagher — Sharif Univ. of Tech.
Arefian, Noor Mohammad — Shahid Beheshti Univ. of medical science
Assareh, Amin — Amirkabir Univ. of Tech.

09:15-09:30 SaA01.4

Impact of Patient-Specificity on Seizure Onset Detection Performance, pp. 4110-4114.

Shoeb, Ali — Massachusetts Inst. of Tech.
Bourgeois, Blaise — Children's Hospital Boston, Harvard Medical School
Treves, S. Ted — Children's Hospital Boston, Harvard Medical School
Schachter, Steven — Beth Israel Deaconess Medical Center, Harvard Medical School
Guttag, John — MIT

09:30-09:45 SaA01.5

Extraction of Qeeg Variables to Diagnose Early Dementia, pp. 4115-4118.

Che, Huije — Yonsei Univ.
Jung, YoungJin — Yonsei Univ.
Im, Chang-Hwan — Yonsei Univ.
Lee, Seung Hwan — Inje Univ. Ilsanpaik Hospital

09:45-10:00 SaA01.6

Melody Shape - a Suggested Novel Attribute for the Biomedical Analysis of the Infant Cry, pp. 4119-4122.

Várallyay Jr., György — Budapest Univ. of Tech. and Ec.
Benyo, Zoltan — Budapest Univ. of Tech. & Ec.

SaA02 Gratte Ciel 2

Signal Processing and Physiological System Modeling VII (Oral Session)

Chair: Laguna, Pablo — Zaragoza Univ.
Co-Chair: Meste, Olivier — UNSA-CNRS

08:30-08:45 SaA02.1

Ensemble Spontaneous Activity Alterations Detected by CISA Approach, pp. 4123-4126.

BOUDAOUD, SOFIANE — Nice Sophia Antipolis Univ.
Rix, Hervé, Henri — Univ. of Nice-Sophia Antipolis
Meste, Olivier — UNSA-CNRS
CAZALS, YVES — Univ. PAUL CEZANNE - AIX MARSEILLE III UMR 6153 CNRS -

08:45-09:00 SaA02.2

An Auditory Model Based Strategy for Cochlear Implants, pp. 4127-4130.

Nogueira, Waldo — Leibniz Univ. Hannover
Katai, Andras — Fraunhofer Inst.
Harczos, Tamas — Fraunhofer Inst.
Klefenz, Frank — Fraunhofer Inst.
Buechner, Andreas — Medizinische Hochschule Hannover
Edler, Bernd — Leibniz Univ. Hannover

09:00-09:15 SaA02.3

Algorithm for Characteristic Parameter Estimation of Gastric Impedance Spectra in Humans, pp. 4131-4134.

Beltran, Nohra — Innovamedica
de Folter, Jozefus J.M. — Innovamedica
Godinez, Montserrat — Innovamedica S.A. de C.V.
Díaz, Ursina — Innovamedica S.A. de C.V.
Sacristan, Emilio — Univ. Autónoma Metropolitana

09:15-09:30 SaA02.4

Electrohysterographic Analysis of Uterine Contraction Propagation with Labor Progression: A Preliminary Study, pp. 4135-4138.

Rabotti, Chiara — Eindhoven, Tech. Univ.
Mischi, Massimo — Eindhoven Univ. of Tech.
van Laar, Judith — Eindhoven Tech. Univ.
Oei, S. Guid — Maxima Medisch Centrum, Veldhoven
Bergmans, Johannes Wilhelmus Maria — Eindhoven Univ. of Tech.

09:30-09:45 SaA02.5

Fractal-Based Automatic Localization and Segmentation of Optic Disc in Retinal Images, pp. 4139-4141.

Ying, Huajun — Texas A&M Univ.
Zhang, Ming — Texas A&M Univ.
Liu, Jyh-Charn — Texas A&M Univ.

SaA03 Bellecour 1

Electrical Impedance Imaging (Oral Session)

Chair: Saulnier, Gary — Rensselaer Pol. Inst.

08:30-08:45 SaA03.1

Regional Admittivity Spectra with Tomosynthesis Images for Breast Cancer Detection, pp. 4142-4145.

Kao, Tzu-Jen — Rensselaer Pol. Inst. TROY NY, USA
Boverman, Gregory — Rensselaer Pol. Inst.
isaacson, David — Rensselaer Pol. Inst.
Saulnier, Gary — Rensselaer Pol. Inst.
Newell, Jonathan — Rensselaer Pol. Inst.
Moore, Richard — Massachusetts General Hospital
Kopans, Daniel — Massachusetts General Hospital

08:45-09:00 SaA03.2

Electrical Conductivity Imaging of Postmortem Canine Brains Using Magnetic Resonance Electrical Impedance Tomography, pp. 4146-4149.

Woo, Eung Je — Kyung Hee Univ.
Kim, Hyung Joong — Kyung Hee Univ.
Lee, Byung Il — Kyung Hee Univ.
Kim, Young Tae — Kyung Hee Univ.
Lee, Soo Yeol — Kyung Hee Univ.

09:00-09:15 SaA03.3

Layered Model for Breasts in Electrical Impedance Tomography, pp. 4150-4153.

Kulkarni, Rujuta — Rensselaer Pol. Inst.
Boverman, Gregory — Rensselaer Pol. Inst.
isaacson, David — Rensselaer Pol. Inst.
Saulnier, Gary — Rensselaer Pol. Inst.
Newell, Jonathan — Rensselaer Pol. Inst.

09:15-09:30 SaA03.4

An Electrical Impedance Spectroscopy System for Breast Cancer Detection, pp. 4154-4157.

Saulnier, Gary — Rensselaer Pol. Inst.
Liu, Ning — Rensselaer Pol. Inst.
Tamma, Chandana P — Rensselaer Pol. Inst.
xia, hongjun — GE Healthcare
Kao, Tzu-Jen — Rensselaer Pol. Inst. TROY NY, USA
Newell, Jonathan — Rensselaer Pol. Inst.
isaacson, David — Rensselaer Pol. Inst.

09:30-09:45 SaA03.5

Breast Cancer Detection Based on Multi-Frequency EIS Measurement, pp. 4158-4160.

Zhen, Cheng — the Fourth Military Medical Univ.
Dong, Xiuzhen — Fourth Military Medical Univ.
Fu, Feng — Fourth Medical Univ.
Ji, Zhenyu — the Fourth Military Medical Univ.
Xu, Canhua — Fourth Military Medical Univ.

09:45-10:00 SaA03.6

To Detect Lung Ventilation with Multi-Frequency EIT System, pp. 4161-4164.

Zhang, Shuai — Hebei Univ. of Tech.
Xu, Guizhi — Hebei Univ. of Tech.
Wang, Renping — Hebei Univ. of Tech.
Yang, Shuo — Hebei Univ. of Tech.
Yan, Weili — Hebei Univ. of Tech.

SaA04 Bellecour 3

Molecular Imaging I (Oral Session)

Chair: Visvikis, Dimitris — INSERM U650
Co-Chair: Lim, Eugene Yusuk — Royal Prince Alfred Hospital

08:30-08:45 SaA04.1

Evaluation of Geometrical Sensitivity for Respiratory Motion Gating by GATE and NCAT Simulation, pp. 4165-4168.

He, Jianfeng — RMIT Unviersity, Melbourne, Australia
O'Keefe, Graeme — Austin Hospital
Jones, Gareth — the Austin Hospital, Australia
Tim, Saunder — the Austin Hospital, Australia
Gong, Sylvia Jie — the Austin Hospital, Australia
Geso, Moshi — RIMT Univ.
Scott, Andrew M — the Austin Hospital, Australia

08:45-09:00 SaA04.2

Optimal Dual Time Point for FDG-PET in the Differentiation of Benign from Malignant Lung Lesions: A Simulation Study, pp. 4169-4172.

Jia, Rui — Tsinghua Univ.
Eberl, Stefan — Royal Prince Alfred Hospital
Wen, Lingfeng — Univ. of Sydney
Bai, Jing — Tsinghua Univ.
Feng, Dagan — The Univ. of Sydney

09:00-09:15 SaA04.3

A Differential Evolution Approach to PET Image De-Noising, pp. 4173-4176.

Gupta, Vikas — Nanyang Tech. Univ.
Julian, Chi Chiu Chan — Nanyang Tech. Univ.
Pui, Tze Sian — Nanyang Tech. Univ.

09:15-09:30 SaA04.4

Enhanced Formation of Parametric Images Using Fast Regressive GLLS for Noisy Functional Imaging, pp. 4177-4180.

Wen, Lingfeng — Univ. of Sydney
Eberl, Stefan — Royal Prince Alfred Hospital
Bai, Jing — Tsinghua Univ.
Feng, Dagan — The Univ. of Sydney

09:30-09:45 SaA04.5

Precise 3-D Localization of Fluorescent Probes without Numerical Fitting, pp. 4181-4184.

Andersson, Sean — Boston Univ.
Sun, Ting — Boston Univ.

09:45-10:00 SaA04.6

Tracking Interacting Subcellular Structures by Sequential Monte Carlo Method, pp. 4185-4188.

Wen, Quan — The Univ. of Texas at Arlington
Gao, Jean — Univ. of Texas

SaA05 — Tęte d'Or Lounge

Sensor-Actuator, Closed-Loop Systems (Oral Session)

Chair: De Rossi, Danilo — Univ. of Pisa
Co-Chair: Tamura, Toshiyo — Chiba Univ. Gradute School of Engineering

08:30-08:45 SaA05.1

A Magnetically Controlled Wireless Intraocular Oxygen Sensor: Concept, Prototype, and in Vitro Experiments, pp. 4189-4193.

Ergeneman, Olgac — ETH Zurich
Dogangil, Gorkem — Swiss Federal Inst. of Tech. (ETH) Zurich
Nazeeruddin, Mohammad Khaja — EPFL
Abbott, Jake J. — ETH Zurich
Nelson, Bradley — ETH Zurich

08:45-09:00 SaA05.2

Investigation of NMR Limits of Detection for Implantable Microcoils, pp. 4194-4197.

Baxan, Nicoleta — Univ. Lyon1 Claude Bernard
Rengle, Adrian — Univ. de Lyon, Univ. Lyon 1, INSA-Lyon
Pasquet, Guillaume — Univ. Lyon1 Claude Bernard
Chateaux, Jean-François — Univ. Lyon1 Claude Bernard
Briguet, André — Univ. Claude Bernard Lyon1
Morin, Pierre — Univ. Lyon1 Claude Bernard
Fakri-Bouchet, Latifa — Univ. Lyon 1 Claude Bernard

09:00-09:15 SaA05.3

Fuzzy Control of Ionic Polymer-Metal Composites, pp. 4198-4201.

Khadivi Heris, Hossein — Tehran Univ.
Seyed Aghazadeh, Babak — Tehran Univ.
Lucas, Caro — Tehran Univ.

09:15-09:30 SaA05.4

Optimizing the Tactile Display of Physiological Information: Vibro-Tactile vs. Electro-Tactile Stimulation, and Forearm or Wrist Location, pp. 4202-4205.

Ng, Ginna — Univ. of British Columbia
Barralon, Pierre — Univ. of British Columbia
Dumont, Guy — Univ. of British Columbia
Schwarz, Stephan K. W. — The Univ. of British Columbia
Ansermino, J. Mark — British Columbia's Children's Hospital

09:30-09:45 SaA05.5

The Effect of Deformation on Room Temperature Coulomb Blockade Using Conductive Carbon Nanotubes, pp. 4206-4210.

Legum, Benjamin — Drexel Univ.
Cooper, Ryan — Drexel Univ.
Mattia, Davide — Drexel Univ.
Gogotsi, Yury — Drexel Univ.
Layton, Bradley E. — Drexel Univ.

09:45-10:00 SaA05.6

Tooth Brushing Pattern Classification Using Three-Axis Accelerometer and Magnetic Sensor for Smart Toothbrus, pp. 4211-4214.

Lee, Kang-Hwi — Konkuk Univ.
Lee, Jeong-Whan — Konkuk Univ.
Kim, Kyeong-Seop — Konkuk Univ.
Kim, Dong-Jun — Cheongju Univ.
Kim, Kyungho — Samsung Advanced Inst. of Tech.
Yang, Heui-Kyung — Chungju Univ.
Jeong, Kee-Sam — Yongin Songdam Coll.
Lee, Byung-Chae — Yong-In Songdam Coll.

SaA06 Tęte d'Or 2

Expression Profiling and Algorithms I (Oral Session)

Chair: Wang, May Dongmei — Georgia Tech. and Emory Univ.

08:30-08:45 SaA06.1

How to Extract Marker Genes from Microarray Data Sets, pp. 4215-4218.

Schachtner, Reinhard — Univ. of Regensburg
Lutter, Dominik — Univ. Hospital Regensburg
Theis, Fabian — Max Planck Inst. for Dynamics and Self-Organization
Lang, Elmar W. — Univ. of Regensburg
Schmitz, Gerd — Univ. Hospital Regensburg
Tome, Ana Maria — Univ. de Aveiro
Gomez Vilda, Pedro — Univ. Pol. de Madrid

08:45-09:00 SaA06.2

Using a Single Neuron As a Marker Selector - a Breast Cancer Case Study, pp. 4219-4222.

Blazadonakis, Michalis — Tech. Univ. of Crete
Perperoglou, Aris — Tech. Univ. of Crete
Zervakis, Michalis — Tech. Univ. of Crete, Greece

09:00-09:15 SaA06.3

Coupling Texture Analysis and Physiological Modeling for Liver Dynamic MRI Interpretation, pp. 4223-4226.

Mescam, Muriel — INSERM, U642, Rennes F-35000 France; Univ. F
Bezy-Wendling, Johanne — INSERM, U642, Rennes F-35000 France; Univ. de Rennes
Kretowski, Marek — Faculty of Computer Science, Bialystok Tech. Univ.
Jurczuk, Krzysztof — Faculty of Computer Science, Bialystok Tech. Univ.
Eliat, Pierre-Antoine — PRISM ImagiVeC UPRES-EA 3890 IFR 140 Univ. de Rennes1, Fran
Olivié, Damien — Département d'Imagerie Médicale, CHRU Pontchaillou

09:15-09:30 SaA06.4

The Painter's Feature Selection for Gene Expression Data, pp. 4227-4230.

Apiletti, Daniele — Pol. di Torino
Baralis, Elena — Pol. di Torino
Bruno, Giulia — Pol. di Torino
Fiori, Alessandro — Pol. di Torino

09:30-09:45 SaA06.5

Reproducibility of Differential Gene Detection across Multiple Microarray Studies, pp. 4231-4234.

Vo, Tan Minh — Georgia Inst. of Tech.
Phan, John H. — Georgia Inst. of Tech.
Huynh, Kiet — Georgia Inst. of Tech.
Wang, May Dongmei — Georgia Tech. and Emory Univ.

09:45-10:00 SaA06.6

A Dynamical Model on the Network of P53-Mdm2 Feedback Loop Regulated by P14/19ARF, pp. 4235-4238.

Liu, Hui — Hebei Univ. of Tech.
Han, Yingrong — Hebei Univ. of Tech.
ZHAN, Yong — Hebei Univ. of Tech.
Chen, Ya-Fei — Univ.
Zhang, Yuhong — Hebei Univ. of Tech.
Yu, Hui — Hebei Univ. of Tech.
Zhao, Tongjun — Hebei Uniersity of Tech.
Zhuo, Yizhong — China Inst. of Atomic Energy

SaA07 Bellecour 2

Respiratory Systems I (Oral Session)

Chair: Baconnier, Pierre — Univ. Joseph Fourier
Co-Chair: Gumery, Pierre-Yves — Univ. joseph fourier

08:30-08:45 SaA07.1

Amplitude Analysis of Pressure Oscillations after Interruption of Tidal Breathing in Preschool Children, pp. 4239-4242.

Talts, Jaak — Univ. of Tartu
Kivastik, Jana — Univ. of Tartu
Jagomagi, Kersti — Univ. of Tartu

08:45-09:00 SaA07.2

Two Models of High Frequency Chest Compression Therapy: Interaction of Jacket Pressure and Mouth Airflow, pp. 4243-4246.

Lee, Yong Wan — Univ. of Minnesota
Lee, Jongwon — Univ. OF MINNESOTA
Warwick, Warren J. — Univ. of Minnesota

09:00-09:15 SaA07.3

Estimation of Expiratory Resistance: A Simulation Study, pp. 4247-4250.

Brighenti, Chiara — Univ. of Bologna
Gnudi, Gianni — Univ. of Bologna
Barbini, Paolo — Univ. of Siena
Avanzolini, Guido — Univ. of Bologna

09:15-09:30 SaA07.4

Modeling Human Respiratory Impedance in Hispanic Asthmatic Children, pp. 4251-4254.

Meraz, Erika — Univ. of Texas at El Paso
Nazeran, Homayoun — The Univ. of Texas at El Paso
Diong, Bill — Texas Christian Univ.
Goldman, Michael David — Univ. of California Los Angeles
Menendez, Roger — Allergy and Asthma Res. Center of El Paso
Ortiz, Gabe — Allergy and Asthma Res. Center of El Paso

09:30-09:45 SaA07.5

Quantitative Assessment of Pulmonary Shunt and Ventilation-Perfusion Mismatch without a Blood Sample, pp. 4255-4258.

Smith, Bram W. — Aalborg Univ.
Rees, Stephen — Aalborg Univ.
Karbing, Dan Stieper — Aalborg Univ.
Kjćrgaard, Sřren — Aalborg Hospital
Andreassen, Steen — Aalborg Univ.

09:45-10:00 SaA07.6

Drug-Induced Respiratory Depression: An Integrated Model of Drug Effects on the Hypercapnic and Hypoxic Drive, pp. 4259-4263.

Caruso, Antonello — ETH Zurich
Bouillon, Thomas — Univ. Hospital Bern
Schumacher, Peter — Univ. Hospital Bern
Luginbuehl, Martin — Univ. Hospital
Morari, Manfred — Swiss Federal Inst. of Tech.

SaA08 — Gratte Ciel Lounge

EEG and EP Analysis I (Oral Session)

Chair: Ktonas, Periklis — Univ. of Athens
Co-Chair: WENDLING, Fabrice — INSERM - Univ. de Rennes 1

08:30-08:45 SaA08.1

Eliciting Audio Evoked Potentials Using Continuous Stimuli, pp. 4264-4267.

Power, Alan — Univ. Coll. Dublin
Lalor, Edmund — Univ. Coll. Dublin
Reilly, Richard — Univ. Coll. Dublin

08:45-09:00 SaA08.2

Bayesian EEG Dipole Source Localization Using SA-RJMCMC on Realistic Head Model, pp. 4268-4272.

Yildiz, Gokcen — Galatasaray Univ.
Duru, Adil Deniz — Bogazici Univ.
Ademoglu, Ahmet — Bogazici Univ.
Demiralp, Tamer — 0;stanbul Medical School

09:00-09:15 SaA08.3

Seizure Recognition on Epilepsy Feature Tensor, pp. 4273-4276.

Acar Ataman, Evrim — Rensselaer Pol. Inst.
Aykut Bingol, Canan — Yeditepe Univ. Hospital
Bingol, Haluk — Bogazici Univ.
Bro, Rasmus — Copenhagen Univ.
Yener, Bulent — Rensselaer Pol. Inst.

09:15-09:30 SaA08.4

Modeling and Interpretation of Scalp-EEG and Depth-EEG Signals During Interictal Activity, pp. 4277-4280.

COSANDIER-RIMELE, Delphine — INSERM - Univ. de Rennes 1
Badier, Jean-Michel — Aix Marseille Univ.
Chauvel, Patrick — Faculté de Médecine (Aix-Marseille Univ. & Hôpital de la T
WENDLING, Fabrice — INSERM - Univ. de Rennes 1

09:30-09:45 SaA08.5

Modeling Neural Correlates of Auditory Attention in Evoked Potentials Using Corticothalamic Feedback Dynamics, pp. 4281-4284.

Trenado, Carlos — Computational Diagnostics and Biocybernetics Unit
Haab, Lars — Saarland Univ. Hospital
Strauss, Daniel J. — Computl Diagnostics & Biocybernetics

09:45-10:00 SaA08.6

Optimal Brain Network Synchrony Visualization: Application in an Alcoholism Paradigm, pp. 4285-4288.

Sakkalis, Vangelis — FORTH and Tech. Univ. of Crete
Tsiaras, Vassilis — Crete
Zervakis, Michalis — Tech. Univ. of Crete, Greece
Tollis, Ioannis — Univ. of Crete

SaA09 — Gratte Ciel 3

Orthopaedic and Musculo-Skeletal Biomechanics I (Oral Session)

Chair: Amirouche, Farid — Univ. of Illinois-Chicago
Co-Chair: Robinson, Charles — Clarkson Univ.

08:30-08:45 SaA09.1

Dynamic Simulation of Cervical Spine Following Single-Level Cervical Disc Replacement, pp. 4289-4292.

de Jongh, Cornelis Uys — Univ. of Stellenbosch
Basson, Anton Herman — Stellenbosch Univ.
Scheffer, Cornie — Stellenbosch Univ.

08:45-09:00 SaA09.2

Ball-And-Socket Joint Motion Description Using Spherical Medial Representation, pp. 4293-4296.

Guillard, Gwenael — Univ. of Geneva
Magnenat-Thalmann, Nadia — Univ. of Geneva

09:00-09:15 SaA09.3

Interaction of Ligament Bundles and Articular Contacts for the Simulation of Passive Knee Flexion, pp. 4297-4300.

Ozkan, Mehmed — Bogazici Univ.
Akalan, Ekin — Bogazici Univ.
temelli, yener — Istanbul Univ.

09:15-09:30 SaA09.4

Modeling Avian Kinematics Using Software Developed for the Human Musculoskeletal System, pp. 4301-4304.

Buford, Jr., William L — The Univ. of Texas Medical Branch
Hollister, Anne M. — LSU Health Sciences Center
Andersen, Clark — Univ. of Texas Medical Branch

09:30-09:45 SaA09.5

Knee Joint Endoprosthesis Loading in Full Extension, pp. 4305-4307.

Zach, Lukas — Czech Tech. Univ. in Prague
Konvickova, Svatava — Czech Tech. Univ. in Prague
Ruzicka, Pavel — Czech Tech. Univ. in Prague
Cheze, Laurence — Univ. Claude Bernard Lyon 1

09:45-10:00 SaA09.6

A Biomechanical Model of Human Ankle Angle Changes Arising from Short Peri-Threshold Anterior Translations of Platform on Which a Subject Stands, pp. 4308-4311.

Pilkar, Rakesh — Clarkson Univ.
Moosbrugger, John — Clarkson Univ.
Bhatkar, Viprali — Clarkson Univ.
Schilling, Robert — Clarkson Univ.
Storey, Christopher M. — Louisiana Tech. Univ.
Robinson, Charles — Clarkson Univ.

SaA10 — Rhône 1

MRI: Recent Advances in Physiological and Metabolic Imaging (Minisymposium)

Chair: Wu, Ed X. — The Univ. of Hong Kong
Co-Chair: Liang, Zhi-Pei — Univ. of Illinois, Urbana-Champaign
Organizer: Wu, Ed X. — The Univ. of Hong Kong
Organizer: Liang, Zhi-Pei — Univ. of Illinois, Urbana-Champaign

08:30-08:45 SaA10.1

Diffusion Tensor MR Study of Optic Nerve Degeneration in Glaucoma (I), pp. 4312-4315.

Hui, Edward S. — The Univ. of Hong Kong
Fu, Qing-ling — The Univ. of Hong Kong
So, Kwok-fai — The Univ. of Hong Kong
Wu, Ed X. — The Univ. of Hong Kong

08:45-09:00 SaA10.2

Magnetic Resonance Imaging (MRI) of Inflammation in Stroke (I), pp. 4316-4319.

Wiart, Marlene — Univ. of Lyon, Creatis, UMR CNRS 5220, U630Inserm,INSA de L
Davoust, Nathalie — Univ. de Lyon, Inserm U851, IFR128,
Pialat, Jean-Baptiste — Univ. of Lyon, Creatis, UMR CNRS 5220, U630 Inserm, INSA de
Berthezčne, Yves — Univ. of Lyon, Creatis, UMR CNRS 5220, U630 Inserm, INSA de
Nighoghossian, Norbert — Univ. of Lyon, Creatis, UMR CNRS 5220, U630 Inserm,INSA de

09:00-09:15 SaA10.3

Arterial Spin Labeling: A One-Stop-Shop for Measurement of Brain Perfusion in the Clinical Settings (I), pp. 4320-4323.

Golay, Xavier — Singapore Bioimaging Consortium
Petersen, Esben — National Neuroscience Inst.
Zimine, Ivan — National Neuroscience Inst.
LIM, TCHOYOSON C C — National Neuroscience Inst.

09:15-09:30 SaA10.4

High-Resolution MR Metabolic Imaging (I), pp. 4324-4326.

Haldar, Justin — Univ. of Illinois at Urbana-Champaign
Hernando, Diego — Univ. of Illinois at Urbana-Champaign
Budde, Matthew — Washington Univ. in St Louis
Wang, Qing — Biomedical MR Lab. Washington Univ. in Saint
Song, Sheng-Kwei — Washington Univ.
Liang, Zhi-Pei — Univ. of Illinois, Urbana-Champaign

09:30-09:45 SaA10.5

Automated Analysis of ^{1}H Magnetic Resonance Metabolic Imaging Data As an Aid to Clinical Decision-Making in the Evaluation of Intracranial Lesions (I), pp. 4327-4330.

Shungu, Dikoma C. — Weill Medical Coll. of Cornell Univ.
Du, Shuyan — Columbia Univ.
Mao, Xiangling — Weill Medicall Coll. of Cornell Univ.
Heier, Linda — Weill Medical Coll. of Cornell Univ.
Pannullo, Susan C. — Weill Medical Coll. of Cornell Univ.
Sajda, Paul — Columbia Univ.

SaA11 Tęte d'Or 1

Decision Support Systems I (Oral Session)

Chair: Senhadji, Lotfi — Univ. of Rennes 1; INSERM
Co-Chair: Celler, Branko George — Univ. of New South Wales

08:30-08:45 SaA11.1

A Decision Support System for the Acquisition and Elaboration of EEG Signals: The AmI-GRID Environment, pp. 4331-4334.

Starita, Antonina — Univ. of Pisa
Barcaro, Umberto — Univ. of Pisa
Palanca, Elena — Univ. of Pisa
Ciullo, Piero Paolo — Univ. of Pisa
Righi, Marco — Univ. of Pisa
Cerbioni, Katuscia — Univ. of Pisa
Di Bona, Sergio — Synapsis s.r.l.
Guerri, Davide — Synapsis s.r.l.

08:45-09:00 SaA11.2

A Decision Support Architecture for Telecare Patient Management of Chronic and Complex Disease, pp. 4335-4338.

Basilakis, Jim — Univ. of NSW
Lovell, Nigel H — Univ. of New South Wales
Celler, Branko George — Univ. of New South Wales

09:00-09:15 SaA11.3

Stress ECG and Laboratory Database for the Assessment of Diabetic Cardiovascular Autonomic Neuropathy, pp. 4339-4342.

Quintero, Luisanna — Univ. Simon Bolivar
Wong C, Sara — Univ. Simon Bolivar
Parra, Raul — Univ. Metropolitana
Cruz, Julio — Simon Bolivar Univ.
Antepara, Norka — Univ. Central de Venezuela
Almeida, Deyanira — Univ. Central de Venezuela
Ng, Francisco — BC Centre for Excellence in HIV/AIDS
Passariello, Gianfranco — Univ. Simón Bolívar

09:15-09:30 SaA11.4

Intelligent Monitoring of Critical Pathological Events During Anesthesia, pp. 4343-4346.

Gohil, Bhupendra — Auckland Univ. of Tech.
GholamHosseini, Hamid — Auckland Univ. of Tech.
Harrison, Michael — Univ. of Auckland
Lowe, Andrew — Pulsecor Limited
Al-Jumaily, Ahmed — Auckland Univ. of Tech.

09:30-09:45 SaA11.5

Distributed Intelligent Medical Assistant for Osteoporosis Detection, pp. 4347-4350.

LEJOUAD CHAARI, WIDED — Manouba Univ.
MOISAN, SABINE — National Res. Inst. in Computer Engineering and Control
Sevestre-Ghalila, Sylvie — U2S, ENIT / MAP5 Univ. Paris Descartes
RIGAULT, JEAN-PAUL — Nice Sophia Antipolis Univ. - INRIA

09:45-10:00 SaA11.6

Real-Time Development of Patient-Specific Alarm Algorithms for Critical Care, pp. 4351-4354.

Zhang, Ying — Harvard Medical School - MIT

10:00-10:15 SaA11.7

Towards Sustainable Decision-Support System Facilitating EBM, pp. 4355-4358.

Stolba, Nevena — Vienna Univ. of Tech.
Nguyen, Tho Manh — Vienna Univ. of Tech.
Tjoa, A Min — Vienna Univ. of Tech.

SaA12 Rhône 2

Modern Assistive Technologies (Invited Session)

Chair: Ghovanloo, Maysam — Georgia Inst. of Tech.
Co-Chair: Cooper, Rory — Univ. of Pittsburgh
Organizer: Ghovanloo, Maysam — Georgia Inst. of Tech.

08:30-08:45 SaA12.1

New Multifunctional Prosthetic Arm and Hand Systems (I), pp. 4359-4360.

Weir, Richard — Rehabilitation Inst. of Chicago

08:45-09:00 SaA12.2

Control Aspects of Motor Neural Prosthesis: Sensory Interface (I), pp. 4361-4363.

Popovic, Dejan — Aalborg Univ.
Dosen, Strahinja — Aalborg Univ.
Popovic, Mirjana — Aalborg Univ.
Stefanovic, Filip — Faculty of Electrical Engineergin
Kojovic, Jovana — Aalborg Univ.

09:00-09:15 SaA12.3

Monitoring Seat Feature Usage among Wheelchair Users (I), pp. 4364-4367.

Ding, Dan — Univ. of Pittsburgh
Cooper, Rory — Univ. of Pittsburgh
Cooper, Rosemarie — Univ. of Pittsburgh
Kelleher, Annmaire — Univ. of PIttsburgh

09:15-09:30 SaA12.4

Personal Mobility and Manipulation Using Robotics, Artificial Intelligence and Advanced Control (I), pp. 4368-4371.

Cooper, Rory — Univ. of Pittsburgh
Ding, Dan — Univ. of Pittsburgh
Grindle, Garrett — Univ. of Pittsburgh
Wang, Hongwu — Univ. of Pittsburgh

09:30-09:45 SaA12.5

Monitoring Mobility Assistive Device Use in Post-Stroke Patients (I), pp. 4372-4375.

Boissy, Patrick — Inst. Univ. de Gériatrie
Hester, Todd — Harvard Medical School
Sherrill, Delsey M. — Harvard Medical School
Corriveau, Hélčne — Univ. Sherbrooke
Bonato, Paolo — Harvard Medical School

09:45-10:00 SaA12.6

Tongue Operated Assistive Technologies (I), pp. 4376-4379.

Ghovanloo, Maysam — North Carolina State Univ.

SaA13 — Roseraie 1,2

Intellectual Property in Medical Devices and Biotechnology (Minisymposium)

Chair: Mak, Benjamin — Firm
Organizer: Mak, Benjamin — Firm

08:30-08:45 SaA13.1

Intellectual Property in Medical Devices and Biotechnology (I), pp. 4380-4380.

Mak, Benjamin — Firm

08:45-09:00 SaA13.2

Creating Value in a Medical Device Company through Intellectual Assets, pp. 4381-4385.

Harrison, Robert — 24IP Law Group

SaP1B1 — Forum 5&6

Electrical Imaging (Source and Impedance) (Poster Session)

10:30-12:00 SaP1B1.1

A 128-Electrode Three Dimension Electrical Impedance Tomography System, pp. 4386-4389.

Xu, Guizhi — Hebei Univ. of Tech.
Wang, Renping — Hebei Univ. of Tech.
Zhang, Shuai — Hebei Univ. of Tech.
Yang, Shuo — Hebei Univ. of Tech.
Justin, Gusphyl — Univ. of Pittsburgh
Sun, Mingui — Univ. of Pittsburgh
Yan, Weili — Hebei Univ. of Tech.

10:30-12:00 SaP1B1.2

A New Algorithm to Reconstruct EIT Images: Node-Back-Projection Algorithm, pp. 4390-4393.

Zhang, Jianjun — Hebei Univ. of Tech.
Yan, Weili — Hebei Univ. of Tech.
Xu, Guizhi — Hebei Univ. of Tech.
Zhao, Quanming — Hebei Univ. of Tech.

10:30-12:00 SaP1B1.3

An EEG-Based Real-Time Cortical Rhythmic Activity Monitoring System: A Pilot Study, pp. 4394-4397.

Hwang, Han-Jeong — Yonsei Univ.
Che, Huije — Yonsei Univ.
Im, Chang-Hwan — Yonsei Univ.

10:30-12:00 SaP1B1.4

Automatic Labeling of EEG Electrodes Using Combinatorial Optimization, pp. 4398-4401.

pechaud, mickaël — ENPC-ENS-INRIA
Keriven, Renaud — Ec. des Ponts
Papadopoulo, Théodore — INRIA Sophia-Antipolis
Badier, Jean-Michel — Aix Marseille Univ.

10:30-12:00 SaP1B1.5

Time-Varying Cortical Connectivity by Adaptive Multivariate Estimators Applied to a Combined Foot-Lips Movement, pp. 4402-4405.

Astolfi, Laura — Univ. of Rome
Babiloni, Fabio — Univ. of Rome
Cincotti, Febo — Fondazione Santa Lucia IRCCS
Mattia, Donatella — Fondazione Santa Lucia IRCCS
De Vico Fallani, Fabrizio — Univ. La Sapienza
Witte, Herbert — Friedrich Schiller Univ.
Hesse, Wolfram — Friedrich Schiller Univ. Jena
Salinari, Serenella — La Sapienza Univ.
Colosimo, Alfredo — Univ. of Rome "Sapienza"
Ursino, Mauro — Univ. of Bologna
Zavaglia, Melissa — Univ. of Bologna
Marciani, Maria Grazia — Tor Vergata Univ.

Chair: FELBLINGER, Jacques — IADI, UHP-Inserm ERI 13

10:30-12:00 SaP1B2.1
Image Reconstruction for Magnetic Induction Tomography and Preliminary Simulations on a Simple Head Model, pp. 4406-4409.
Wang, Cong — the Fourth Military Medical Univ.
Liu, Ruigang — Fourth Military Medical Univ.
Fu, Feng — Fourth Medical Univ.
You, Fusheng — Fourth Military Medical Univ.
Shi, Xuetao — Fourth Military Medical Univ.
Dong, Xiuzhen — Fourth Military Medical Univ.

10:30-12:00 SaP1B2.2
Even More Inversion Formulas for the 2D Radon Transform of Functions of Compact and Convex Support, pp. 4410-4413.
Ould Mohamed, Moctar Salem — Lab. Hubert Curien
Mennessier, Catherine — CPE-Lyon
Clackdoyle, Rolf — Univ. Jean Monnet

10:30-12:00 SaP1B2.3
Automatic Segmentation of the Lungs Using Robust Level Sets, pp. 4414-4417.
Silveira, Margarida — Inst. Superior Técnico
Nascimento, Jacinto — Inst. Superior Técnico
Marques, Jorge — Inst. Superior Tecnico and Inst.

10:30-12:00 SaP1B2.4
Free Isocentric 3D Imaging and a Novel Approach for Wobble Trajectories Using a Modified Standard C-Arm, pp. 4418-4421.
Tita, Ralf — Tech. Univ. München
Lueth, Tim — Tech. Univ. of Munich

10:30-12:00 SaP1B2.5
Radiological Image Enhancement by X-Ray Choppers, pp. 4422-4424.
Pouladian, Majid — Science and Res. Campus of Azad Univ.
Karami Gadallo, Leila — Science and Res. Campus of Azad Univ.

10:30-12:00 SaP1B2.6
Image-Based Strength Assessment of Bone, pp. 4425-4428.
Hangartner, Thomas N. — Wright State Univ.

10:30-12:00 SaP1B2.7
Degradation of the Z Resolution Due to a Longitudinal Motion with a 64-Channel CT Scanner, pp. 4429-4432.
GROSJEAN, Romain — IADI, UHP-Inserm ERI 13
SAUER, Benoit — IADI, UHP-Inserm ERI 13
GUERRA, Rui Matias — IADI, UHP-Inserm ERI 13
BLUM, Alain — Hopital Central
FELBLINGER, Jacques — IADI, UHP-Inserm ERI 13
HUBERT, Jacques — IADI, UHP-Inserm ERI 13 and Urology Department

10:30-12:00 SaP1B2.8
Reduction of False Positives in Polyp Detection Using Weighted Support Vector Machines, pp. 4433-4436.
Zheng, Yalin — Medicsight PLC
Yang, Xiaoyun — Medicsight PLC
Beddoe, Gareth — Medicsight PLC

10:30-12:00 SaP1B2.9
A Study of AAA Image Segmentation Technique Using Geometric Active Contour Model with Morphological Gradient Edge Function, pp. 4437-4440.
Kim, Hochul — Korea Univ.
Seol, Yunhwan — Korea Univ.
Choi, Seokyoon — Korea Univ.
Oh, Jangseok — Korea Univ.
Kim, MinGi — Korea Univ.
Sun, Kyung — Korea Univ.

10:30-12:00 SaP1B2.10
Physico-Mathematical Considerations on X-Ray Computed Tomography Based on Diffraction Enhanced Imaging, pp. 4441-4444.
Yuasa, Tetsuya — Yamagata Univ.

10:30-12:00 SaP1B2.11
Noise Performance of Readout Electronics for Photodetector, pp. 4445-4448.
Park, Shin Woong — Korea Univ.
Yuk, Sunwoo — Korea Orthopedics & Rehabilitation Engineering Center
Yi, Yun — Korea Univ.

10:30-12:00 SaP1B2.12
Efficient Computer-Aided Detection of Ground-Glass Opacity Nodules in Thoracic CT Images, pp. 4449-4452.
Ye, Xujiong — Medicsight PLC
Lin, Xinyu — Medicsight PLC
Beddoe, Gareth — Medicsight PLC
Dehmeshki, Jamshid — Kingston Univ.

10:30-12:00 SaP1B2.13
The Position of the Centres of the Sensors of the Parotec Pressure Measurement Insoles System Related to the Anatomy Centres of the Metatarsal Heads by Means of Radiological Records, pp. 4453-4456.
Zequera, Martha — Pontificia Univ. Javeriana

10:30-12:00 SaP1B2.14

Improving Pediatric Radiation Dose Management Using Agfa Digital Radiography DICOM Header Information, pp. 4457-4459.

Juste, Belen — Pol. Univ. of Valencia
Verdú, Gumersindo — Pol. Univ. of Valencia
Villaescusa, Nacho — hospital La Fe

10:30-12:00 SaP1B2.15

An Automatic Calibration Approach for Left Ventricular Volume Assessment, pp. 4460-4463.

perrenot, beatrice — CREATIS-LRMN; General Electric Healthcare
Vaillant, Régis — General Electric Healthcare
Douek, Philippe — CREATIS-LRMN, Hospices Civils de Lyon
prost, remy — CREATIS-LRMN
PEYRIN, Francoise — UMR CNRS 5220; Inserm U630; INSA-Lyon; ESRF
finet, gerard — hospices civils lyon

SaP1B3 Forum 5&6
Molecular Imaging II (Poster Session)

10:30-12:00 SaP1B3.1

Morphological and Parametric Estimation of Fetal Neural Stem Cell Migratory Capacity in the Rat Brain, pp. 4464-4467.

Flexman, Jennifer A. — Univ. of Washington
Cross, Donna J. — Univ. of Washington
Kim, Yongmin — Univ. of Washington
Minoshima, Satoshi — Univ. of Washington

10:30-12:00 SaP1B3.2

High Transparency Coded Apertures in Planar Nuclear Medicine Imaging, pp. 4468-4471.

Starfield, David Mark — Univ. of the Witwatersrand, Johannesburg
Rubin, David Milton — Univ. of the Witwatersrand, Johannesburg
Marwala, Tshilidzi — Univ. of the Witwatersrand

SaP1B4 Forum 5&6
Cardiac Imaging II (Poster Session)

10:30-12:00 SaP1B4.1

A Beating Heart Model 3D Printed from Specific Patient Data, pp. 4472-4475.

Markert, Mathias — Tech. Univ. Munich
Weber, Stefan — Tech. Univ. of Munich
Lueth, Tim — Tech. Univ. of Munich

10:30-12:00 SaP1B4.2

BEM Performance in Calculation of Pressure Distribution in Spline Based Segmented Medical Images, pp. 4476-4479.

Pashaee, Ali — Amirkabir Univ. of Tech. (Tehran Pol.
Fatouraee, Nasser — Amirkabir Univ. of Tech.

10:30-12:00 SaP1B4.3

Efficient Tracking of the Heart Using Texture, pp. 4480-4483.

Noce, Aurélien — LIRMM - Univ. Montpellier 2
POIGNET, Philippe — LIRMM, UMR CNRS 5506,Univ. of Montpellier II
TRIBOULET, Jean — Univ. of Montpellier II

10:30-12:00 SaP1B4.4

Simulation Environment for the Evaluation of 3D Coronary Tree Reconstruction Algorithms in Rotational Angiography, pp. 4484-4487.

Yang, Guanyu — Southeast Univ.
Bousse, Alexandre — LTSI-INSERM U642
Toumoulin, Christine — Univ. de Rennes I
Shu, Huazhong — Southeast Univ.

10:30-12:00 SaP1B4.5

A New Dynamic Elastic Model for Cardiac Image Analysis, pp. 4488-4491.

Schaerer, Joël — CNRS UMR#5220, Inserm U630, Univ. of Lyon
Clarysse, Patrick — CNRS UMR#5220, Inserm U630, Univ. of Lyon
Pousin, Jérôme — Insa de Lyon

10:30-12:00 SaP1B4.6

Myocardial Perfusion Assessment by Use of System Identification in a One-Compartment Model, pp. 4492-4495.

Kocher, Michel — Univ. of Applied Sciences Geneva
Daire, Jean-Luc — Geneva's Univ. Hospital
Thévenaz, Philippe — École Pol. fédérale de Lausanne
Schindler, Thomas Hellmut — Geneva's Univ. Hospital
Keller, Pierre-Frédéric — Geneva's Univ. Hospital
Didier, Dominique — Geneva's Univ. Hospital
Vallée, Jean-Paul — Geneva's Univ. Hospital

10:30-12:00 SaP1B4.7

MR/CT Multimodal Registration of Short-Axis Slices in CT Volumes, pp. 4496-4499.

CHENOUNE, YASMINA — Univ. Paris 12 Val-de-Marne
BOUAOUNE, YASMINA — Univ. Paris 12 Val-de-Marne
DELECHELLE, ERIC — Univ. Paris 12 Val-de-Marne
PETIT, ERIC — Univ. Paris 12 Val-de-Marne
GAROT, JEROME — Univ. Paris 12
RAHMOUNI, ALAIN — Hopital Henri MONDOR

10:30-12:00 SaP1B4.8

Blood Flow Visualization of Left Atrial Spontaneous Echo Contrast (SEC) Using Gradient Based Optical Flow Estimation, pp. 4500-4503.

Tanaka, Akira — Fukushima Univ.
Saijo, Yoshifumi — Inst. of Development Aging and Cancer, TohokuUniversity

10:30-12:00 SaP1B4.9

Automatic Detection of End Systole within a Sequence of Left Ventricular Echocardiographic Images Using Autocorrelation and Mitral Valve Motion Detection, pp. 4504-4507.

Kachenoura, Nadjia — INSERM
Delouche, Annie — INSERM
Herment, Alain — INSERM
FROUIN, Frederique — INSERM
Diebold, Benoit — Hôpital Europeen Georges Pompidou

10:30-12:00 SaP1B4.10

An Automated Myocardial Segmentation in Cardiac MRI, pp. 4508-4511.

EL-Berbari, Racha — INSERM
Bloch, Isabelle — GET- Télécom Paris (ENST) - CNRS UMR 5141 LTCI
Redheuil, Alban — HEGP
Angelini, Elsa — Ec. Nat. Superieure des Telecom
Mousseaux, Elie — HEGP
FROUIN, Frederique — INSERM
Herment, Alain — INSERM

10:30-12:00 SaP1B4.11

Temporal Tracking of Coronaries in Multi-Slice Computed Tomography, pp. 4512-4515.

Laguitton, Soizic — Univ. of Rennes 1
Boldak, Cezary — Inst. of Bialystok
Toumoulin, Christine — Univ. de Rennes I

10:30-12:00 SaP1B4.12

Analysis of Cardiac Diffusion Tensor Magnetic Resonance Images Using Sparse Representation, pp. 4516-4519.

Bao, lijun — INSA-Lyon
ZHU, Yuemin — -
Liu, Wanyu — Harbin Inst. of Tech.
robini, marc — CNRS UMR 5220
Pu, ZhaoBang — Harbin Inst. of Tech.
Magnin, Isabelle — INSA

10:30-12:00 SaP1B4.13

In Vivo MR Coronary Artery Imaging in Mice, pp. 4520-4523.

Wu, Yin — Univ. of Hong Kong
Wu, Ed X. — The Univ. of Hong Kong

SaP1B5 — Forum 5&6

Retrieval of Image Content for Medical Diagnosis and Screening (Poster Session)

Chair: Lerallut, Jean-Francois — Univ. de Tech. de Compiegne
Co-Chair: Cazuguel, Guy — GET/ENST Bretagne

10:30-12:00 SaP1B5.1

Multiresolution Analysis and Classification of Small Bowel Medical Images, pp. 4524-4527.

Khademi, April — Univ. of Toronto
Krishnan, Sridhar — Ryerson Univ.

10:30-12:00 SaP1B5.2

Venous Thrombosis Supervised Image Indexing and Fuzzy Retrieval, pp. 4528-4531.

DAHABIAH, Anas — GET-ENST bretagne
Puentes, John — INSERM - GET ENST Bretagne
Solaiman, Basel — GET-ENST Bretagne

10:30-12:00 SaP1B5.3

Content Based Image Retrieval Based on Wavelet Transform Coefficients Distribution, pp. 4532-4535.

Lamard, Mathieu — Univ. de Bretagne Occidentale
Cazuguel, Guy — GET/ENST Bretagne
QUELLEC, Gwenole — GET/ENST Bretagne
Bekri, Lynda — CHU Morvan Brest, Service d'ophtalmologie
Roux, Christian — ENST Bretagne - INSERM
Cochener, Béatrice — CHU Morvan

10:30-12:00 SaP1B5.4

Multimedia Medical Case Retrieval Using Decision Trees, pp. 4536-4539.

QUELLEC, Gwenole — GET/ENST Bretagne
Lamard, Mathieu — Univ. de Bretagne Occidentale
Bekri, Lynda — CHU Morvan Brest, Service d'ophtalmologie
Cazuguel, Guy — GET/ENST Bretagne
Cochener, Béatrice — CHU Morvan
Roux, Christian — ENST Bretagne - INSERM

10:30-12:00 SaP1B5.5

Network Collaborative Environment for Human Tissues 3D Modeling, pp. 4540-4543.

Krsek, Premysl — Faculty of Information Tech. Brno Univ. of

Co-Chair: Sadowski, Janusz — VTT Tech. Res. Centre

10:30-12:00 SaP1C1.1
Use of Ni Electrodes Chronoamperometry for Improved Diagnostics of Diabetes and Cardiac Diseases, pp. 4544-4547.
BRUNSWICK, PHILIPPE — IMPETO MEDICAL

10:30-12:00 SaP1C1.2
Fat Thickness Measurement Using Optical Technique with Miniaturized Chip LEDs: A Preliminary Human Study, pp. 4548-4551.
Hwang, In Duk — Samsung Advanced Inst. of Tech.
Shin, Kunsoo — Samsung Advanced Inst. of Tech.

10:30-12:00 SaP1C1.3
Optical Characteristics of Flowing Blood: Effects on the Pulse Oximeter, pp. 4552-4555.
Sakamoto, Katsuyuki — Chiba Inst. of Science

10:30-12:00 SaP1C1.4
Remote Point-Of-Gaze Estimation with Free Head Movements Requiring a Single-Point Calibration, pp. 4556-4560.
Guestrin, Elias Daniel — Univ. of Toronto
Eizenman, Moshe — Univ. of Toronto

10:30-12:00 SaP1C1.5
Support Vector Machines As Multivariate Calibration Model for Prediction of Blood Glucose Concentration Using a New Non-Invasive Optical Method Named Pulse Glucometry, pp. 4561-4563.
Ogawa, Mitsuhiro — Kanazawa-Univ.
Yamakoshi, Yasuhiro — TYT Inst. of Tech. Co., Ltd.
Satoh, Makoto — Kanazawa-Univ.
Nogawa, Masamichi — Kanazawa Univ.
Yamakoshi, Takehiro — Kanazawa Univ.
Tanaka, Shinobu — Kanazawa Univ.
Rolfe, Peter — Oxford BioHorizons Ltd
Tamura, Toshiyo — Chiba Univ. Gradute School of Engineering
Yamakoshi, Ken-ichi — Kanazawa Univ.

10:30-12:00 SaP1C1.6
Measurement of Temperature Differences between Micro-Regions in Water Using Near-Infrared Spectroscopy, pp. 4564-4567.
Kakuta, Naoto — Kyushu Univ.
Ozaki, Atsushi — Kyushu Univ.
Li, Fuguo — Univ. of Electro-Communications
Arimoto, Hidenobu — Natl Inst. of Advd Industrial Sci & Tech.
Yamada, Yukio — Univ. of Electro-Communications

10:30-12:00 SaP1C1.7
A New Method for the Quantification of Breathing, pp. 4568-4571.
Johnson, Michelle — Univ. of Alabama in Huntsville
Price, Patrick — Univ. of Alabama in Huntsville
Jovanov, Emil — Univ. of Alabama in Huntsville

10:30-12:00 SaP1C1.8
Scanpath-Based Analysis of Objects Conspicuity in Context of Human Vision Physiology, pp. 4572-4575.
Augustyniak, Piotr — AGH Univ. of Science and Tech.

10:30-12:00 SaP1C1.9
A Pilot Study on Using Derivatives of Photoplethysmographic Signals As a Biometric Identifier, pp. 4576-4579.
Yao, Jianchu — East Carolina Univ.
SUN, XIAODONG — EAST CAROLINA Univ.
WAN, YONGBO — SHAANXI Univ. OF SCIENCE AND Tech.

10:30-12:00 SaP1C1.10
Experimental and Numerical Study on Optimal Spot-Electrodes Arrays in Transthoracic Electrical Impedance Cardiography, pp. 4580-4583.
Ikarashi, Akira — Ishikawa Sunrise Industries Creation
Nogawa, Masamichi — Kanazawa Univ.
Tanaka, Shinobu — Kanazawa Univ.
Yamakoshi, Ken-ichi — Kanazawa Univ.

10:30-12:00 SaP1C1.11
In Vivo Characterization of Viscoelastic Properties of Human Skin Using Dynamic Micro Indentation, pp. 4584-4587.
Boyer, Gaetan — CNRS Ec. centrale de Lyon
Zahouani Hassan, Hassan — Ec. centrale de Lyon
lebot alain, alain — Ec. centrale de Lyon
laquieze leslie, leslie — Ec. centrale de Lyon

10:30-12:00 SaP1C1.12
Sound Propagation in Liquid-Filled Arterial Segments: Measurements and Model Predictions, pp. 4588-4591.
Kyle, Aaron M. — Purdue Univ.
Albors, Gabriel O. — Univ. of Puerto Rico - Mayagüez
Wodicka, George R. — Purdue Univ.
Juan, Eduardo J. — Univ. of Puerto Rico - Mayagüez

SaP1C2 Forum 5&6
Genomics and Computational Biology (Poster Session)

10:30-12:00 SaP1C2.1
Mdrview: A Visualization of the Polymorphism of Mdr1 Protein in Breast Cancer, pp. 4592-4594.
Xhemo, Edlira — Tenon Hospital; Univ. Paris 6
Fajac, Anne — Tenon Hospital
Boire, Jean-Yves — INSERM
Levy, Pierre — Assistance Publique Hopitaux de Paris, Inserm

10:30-12:00 SaP1C2.2
Analysing Gene Regulatory Networks by Both Constraint Programming and Model-Checking, pp. 4595-4598.
Fromentin, Jonathan — Ec. Centrale de Nantes
COMET, Jean-Paul — Univ. of Evry
LE GALL, Pascale — Univ. of Evry
Roux, Olivier — Ec. Centrale de Nantes

10:30-12:00 SaP1C2.3
An Optimal Algorithm for Enumerating State Space of Stochastic Molecular Networks with Small Copy Numbers of Molecules, pp. 4599-4602.
Cao, Youfang — Shanghai Jiao Tong Univ.
Liang, Jie — Univ. of Illinois at Chicago

10:30-12:00 SaP1C2.4
Validation of Biological Models with Temporal Logic and Timed Hybrid Petri Nets, pp. 4603-4608.
Troncale, Sylvie — Univ. of Evry and CNRS
COMET, Jean-Paul — Univ. of Evry
Bernot, Gilles — Univ. of Evry and Genopole

10:30-12:00 SaP1C2.5
Reconstruction of Chemical Molecules from Images, pp. 4609-4612.
Algorri, Maria-Elena — Inst. Tecnologico Autonomo de Mexico
Zimmermann, Marc — Fraunhofer Inst. for Algorithms and Scientific Computing
Friedrich, Christoph M. — Fraunhofer Inst. for Algorithms and Scientific Computing
Akle, Santiago — Inst. Tecnologico Autonomo de Mexico
Hofmann-Apitius, Martin — Fraunhofer Inst. for Algorithms and ScientificComputing

10:30-12:00 SaP1C2.6
Applications of Diffusion Maps in Gene Expression Data-Based Cancer Diagnosis Analysis, pp. 4613-4616.
Xu, Rui — Univ. of Missouri - Rolla
Damelin, Steven — Georgia Southern Univ.
Wunsch, Donald — Univ. of Missouri - Rolla

SaP1C3 Forum 5&6
Expression Profiling and Algorithms II (Poster Session)

10:30-12:00 SaP1C3.1
Routes to Identify Marker Genes for Microarray Classification, pp. 4617-4620.
Schachtner, Reinhard — Univ. of Regensburg
Lutter, Dominik — Univ. Hospital Regensburg
Stadlthanner, Kurt — Univ. of Regensburg
Lang, Elmar W. — Univ. of Regensburg
Schmitz, Gerd — Univ. Hospital Regensburg
Tome, Ana Maria — Univ. de Aveiro
Gomez Vilda, Pedro — Univ. Pol. de Madrid

10:30-12:00 SaP1C3.2
A Graph-Theoretic Technique for Classification of Normal and Tumor Tissues Using Gene Expression Microarray Data, pp. 4621-4624.
Kim, Saejoon — Sogang Univ.

10:30-12:00 SaP1C3.3
Semi-Automated Clustering of Gene Expression Data Sets, pp. 4625-4628.
Kim, Minho — Electronics and Telecommunications Res. Inst.
Jung, Ho-Youl — Electronics and Telecommunications Res. Inst.
Chung, Myungguen — Electronics and Telecommunications Res. Inst. (ETRI)
Kim, Pora — Electronics and Telecommunications Res. Inst. (ETRI)
Park, Seon-Hee — Electronics and Telecommunications Res. Inst. (ETRI)
Park, Soo-Jun — Electr & Telecomm Res. Inst.

10:30-12:00 SaP1C3.4
Linear Predictive Coding and Wavelet Decomposition for Robust Microarray Data Clustering, pp. 4629-4632.
Istepanian, Robert — Kingston Univ.
Sungoor, Ala — Kingston Univ.
Jean Christophe, Nebel — Kingston Univ.

10:30-12:00 SaP1C3.5
Improved Bolstering Error Estimation for Gene Ranking, pp. 4633-4636.
Huynh, Kiet — Georgia Inst. of Tech.
Phan, John H. — Georgia Inst. of Tech.
Vo, Tan Minh — Georgia Inst. of Tech.
Wang, May Dongmei — Georgia Tech. and Emory Univ.

10:30-12:00 SaP1C3.6

Extending Microarray Quality Control and Analysis Algorithms to Illumina Chip Platform, pp. 4637-4640.

Stokes, Todd — Georgia Inst. of Tech.
Han, Xiao — Georgia Inst. of Tech.
Moffitt, Richard A. — Georgia Inst. of Tech.
Wang, May Dongmei — Georgia Tech. and Emory Univ.

SaP1C4 Forum 5&6

Heart Rate and Blood Pressure Variability III (Poster Session)

10:30-12:00 SaP1C4.1

Geometric Measures of Poincare Plots for the Detection of Small Sympathovagal Shifts, pp. 4641-4644.

Thong, Tran — Oregon Health & Science Univ.

10:30-12:00 SaP1C4.2

Effect of Amplitude Criteria on Operating Characteristic of Detection for OSAH Events with Oxygen Saturation, pp. 4645-4648.

Lee, Khuan Y. — Univ. Teknologi MARA
Bister, Michel — Univ. of Nottingham
Salleh, Yusof Md — Univ. Tech. Mara
Blanchfield, Peter — Univ. of Nottingham

10:30-12:00 SaP1C4.3

The Effect of Music on Hypertensive Patients, pp. 4649-4651.

Teng, Xiaofei — The Chinese Univ. of Hong Kong
Wong, Mico Yee Man — The Chinese Univ. of Hong Kong
Zhang, Yuan-Ting — The Chinese Univ. of Hong Kong

10:30-12:00 SaP1C4.4

Metabolic Variability Analysis Using a Mixing Chamber-Breath by Breath Indirect Calorimeter and the Clino-Ortho Maneuver, pp. 4652-4655.

Cadena, Miguel — Univ. Autonoma Metropolitana
Infante, Oscar — Inst. Nacional de Cardiologia Dr. Ignacio Chavez
Sacristan, Emilio — Univ. Autónoma Metropolitana

10:30-12:00 SaP1C4.5

Ultra Short Term Analysis of Heart Rate Variability for Monitoring Mental Stress in Mobile Settings, pp. 4656-4659.

Salahuddin, Lizawati — Information and Communications Univ.
Jeong, Myeong Gi — Information and Communications Univ.
Kim, Desok — Information and Communications Univ.
Cho, Jaegeol — Samsung Electronics

10:30-12:00 SaP1C4.6

Wavelet Coherence Detects Non-Autonomic Heart Rate Fluctuations in Familial Amyloidotic Polyneuropathy, pp. 4660-4662.

Östlund, Nils — Univ. Hospital
Suhr, Ole — Umeĺ Univ.
Wiklund, Urban — Univ. hospital

SaP1C5 Forum 5&6

Orthopaedic and Musculo-Skeletal Biomechanics III (Poster Session)

10:30-12:00 SaP1C5.1

Transorbital Endoscopic Image Guidance, pp. 4663-4666.

Atuegwu, Nkiruka Chioma — Vanderbilt Univ.
Mawn, Louise — Vanderbilt
Galloway, Bob — Vanderbilt

10:30-12:00 SaP1C5.2

Biomechanical Study on the Sensorial Epithelium of Otolithic Organs, pp. 4667-4670.

Ciaravella, Gaetano — IMT Lucca Inst. for Advanced Studies
bennequin, daniel — Univ. Paris 7 ,and LPPA to the Coll. de France
Laschi, Cecilia — Scuola Superiore Sant'Anna

10:30-12:00 SaP1C5.3

Effectiveness of Moulded Insoles in Reducing Plantar Pressure in Diabetic Patients, pp. 4671-4674.

Zequera, Martha — Pontificia Univ. Javeriana

10:30-12:00 SaP1C5.4

Reliable Model-Based Kinematics Analysis System for Articulated Fingers, pp. 4675-4678.

Chang, Cheung-Wen — Cheng Kung Univ.
Kuo, Lie-Chieh — National Cheng Kung Univ.
Chen, Yen-Ting — National Cheng Kung Univ.
Su, Fong-Chin — National Cheng Kung Univ.
Jou, I-Ming — National Cheng Kung Univ.
Sun, Yung-Nien — National Cheng Kung Univ.

10:30-12:00 SaP1C5.5

A Rigid Body Spring Model to Investigate the Lateral Shift - Restraining Force Behavior of the Patella, pp. 4679-4682.

Jafari, Ali — Sharif Univ. of Tech.
Farahmand, Farzam — Sharif Univ. of Tech.
Meghdari, Ali — Sharif Univ. of Tech.

10:30-12:00 SaP1C5.6

3D Endoscopic Approach for Endonasal Sinus Surgery, pp. 4683-4686.

Moral, Analia Ines — Tech. Univ. of Braunschweig
kunkel, Maria Elizete — Tech. Univ. Braunschweig
Markus, Rilk — TU BS
Wagner, Ingo — Bonn Univ.
Eichhorn, Klaus W.G. — Univ. of Bonn, Germany
Bootz, F — Bonn Univ.
Wahl, Friedrich — Tech. Univ. of Braunschweig
Kathrin, Tingelhoff — Bonn Univ.

10:30-12:00 SaP1C5.7

Estimation of Ground Reaction Force and Zero Moment Point on a Powered Ankle-Foot Prosthesis, pp. 4687-4692.

Martinez-Villalpando, Ernesto Carlos — Massachusetts Inst. of Tech.
Herr, Hugh — MIT
Farrell, Matthew — MIT

10:30-12:00 SaP1C5.8

Performance Analysis of an Optoelectronic Localization System for Monitoring Brain Lesioning with Proton Beams, pp. 4693-4698.

Shihadeh, Fadi — California State Univ. San Bernardino
Schulte, Reinhard — Loma Linda Univ. Medical Center
Schubert, Keith Evan — California State Univ. San Bernardino
Chakrapani, Pani — Univ. of Redlands

10:30-12:00 SaP1C5.9

Deformation Analysis of the Human Femur by Holographic Interferometry, pp. 4699-4702.

MATSUMOTO, Toshiro — Kinki Univ.
Watanabe, Toshiaki — Kinki Univ.
Kojima, Arata — Kansai Medical Univ.

SaP1D1 Forum 5&6

Brain-Computer Interfaces IV (Poster Session)

10:30-12:00 SaP1D1.1

Introduction to NeuroComm: A Platform for Developing Real-Time EEG-Based Brain-Computer Interface Applications, pp. 4703-4706.

Wang, Chuanchu — Inst. for Infocomm Res.
Zhang, Haihong — Inst. for Infocomm Res.
Phua, Koksoon — Inst. for Infocomm Res.
Dat, Tran Huy — Inst. for Infocomm Res.
Guan, Cuntai — Inst. for Infocomm Res.

10:30-12:00 SaP1D1.2

A Customizable Multi-Channel Stimulator for Cortical Neuroprosthesis, pp. 4707-4710.

Ferrandez, Jose M. — Univ. Pol. de Cartagena
Fernandez, Eduardo — Univ. Miguel Hernandez
Bonomini, Paula — Univ. Miguel Hernandez
Liańo, Enrique — Univ. Miguel Hernandez
Toledo, Javier — Univ. Pol. de Cartagena
Martinez, J.Javier — Univ. Pol. de Cartagena

10:30-12:00 SaP1D1.3

Comparative Study on the Insertion Behavior of Cerebral Microprobes, pp. 4711-4714.

Haj Hosseini, Neda — Univ. of Freiburg, IMTEK
Hoffmann, Rüdiger — Univ. of Freiburg
Kisban, Sebastian Aron — Univ. of Freiburg
Stieglitz, Thomas — Univ. of Freiburg
Paul, Oliver — Univ. of Freiburg
Ruther, Patrick — Univ. of Freiburg

10:30-12:00 SaP1D1.4

Brain Computer Interface Research at the Neuroscience Department of the "Tor Vergata" University of Rome, Italy, pp. 4715-4718.

Quitadamo, Lucia Rita — Univ. of Rome
Abbafati, Manuel — Univ. of Rome
Saggio, Giovanni — Univ. of Rome
Marciani, Maria Grazia — Tor Vergata Univ.
Bianchi, Luigi — Univ. of Rome

10:30-12:00 SaP1D1.5

Estimation of Force Motor Command for NIRS-Based BMI, pp. 4719-4722.

Tsubone, Tadashi — Nagaoka Univ. of Tech.
Tsutsui, Kiyotaka — Nagaoka Univ. of Tech.
Wada, Yasuhiro — Nagaoka Univ. of Tech.

10:30-12:00 SaP1D1.6

Research for Estimating Direction of Saccadic Eye Movements by Single Trial Processing, pp. 4723-4726.

Funase, Arao — Naogya Inst. of Tech.
Hashimoto, Tetsuro — Nagoya Inst. of Tech.
Yagi, Tohru — Tokyo Inst. of Tech.
Barros, Allan — Federal Univ. of the Maranhao
Cichocki, Andrzej — BSI RIKEN
TAKUMI, Ichi — Naogya Inst. of Tech.

10:30-12:00 SaP1D1.7

Statistical Selection of Multiple-Input Multiple-Output Nonlinear Dynamic Models of Spike Train Transformation, pp. 4727-4730.

Song, Dong — Univ. of Southern California
Chan, Rosa — Univ. of Southern California
Marmarelis, Vasilis — Univ. of Southern California
Hampson, Robert — Wake Forest Univ.
Deadwyler, Sam — Wake Forest Univ.
Berger, Theodore — Univ. of Southern California

10:30-12:00 SaP1D1.8

A Study on the Frontal Cortex in Psychophysical Tasks Using Near -Infrared Spectroscopy, pp. 4731-4734.

Yagi, Tohru — Tokyo Inst. of Tech.
Ogata, Hajime — Tokyo Inst. of Tech.
Mukai, Toshiharu — The Inst. of Physical and Chemical Res. (RIKEN)

10:30-12:00 SaP1D1.9

Laminar Characterization of Spiking Activity in the Rat Motor Cortex, pp. 4735-4738.

Parikh, Hirak — Univ. of Michigan
Marzullo, Timothy — Univ. of Michigan
Yazdan-Shahmorad, Azadeh — Univ. of Michigan
Gage, Gregory J. — Univ. of Michigan
Kipke, Daryl — Univ. of Michigan

10:30-12:00 SaP1D1.10

Preliminary Experimentation on Vibrotactile Feedback in the Context of Mu-Rhythm Based BCI, pp. 4739-4742.

Cincotti, Febo — Fondazione Santa Lucia IRCCS
Kauhanen, Laura — Helsinki Univ. of Tech.
Aloise, Fabio — Fondazione Santa Lucia IRCCS
Palomäki, Tapio — Helsinki Univ. of Tech.
Caporusso, Nicholas — Fondazione Santa Lucia IRCCS
Jylänki, Pasi — Helsinki Univ. of Tech.
Mattia, Donatella — Fondazione Santa Lucia IRCCS
Babiloni, Fabio — Univ. of Rome
Vanacker, Gerolf — Katholieke Univ. Leuven, Belgium
Nuttin, Marnix — Katholieke Univ. Leuven, Belgium
Marciani, Maria Grazia — Tor Vergata Univ.
Millán, José del R. — IDIAP Res. Inst.

SaP1D2 — Forum 5&6

Neuromodulation II - Neurophysiology (Poster Session)

Chair: Veltink, Peter — Univ. of Twente
Co-Chair: Durand, Dominique — Case Western Res. Univ.

10:30-12:00 SaP1D2.1

The Rtms Effect on Perceptual Reversals of Ambiguous Figures, pp. 4743-4746.

Ge, Sheng — Kyushu Univ.
Ueno, Shoogo — Kyushu Univ.
Iramina, Keiji — Kyushu Univ.

10:30-12:00 SaP1D2.2

Adaptation of Human Brain Bioelectrical Activity to Low-Level Microwave, pp. 4747-4750.

Bachmann, Maie — Tallinn Univ. of Tech.
Rubljova, Jekaterina — Tallinn Univ. of Tech.
Lass, Jaanus — Tallinn Univ. of Tech.
Tomson, Ruth — Tallinn Univ. of Tech.
Tuulik, Viiu — Tallinn Univ. of Tech.
Hinrikus, Hiie — Tallinn Univ. of Tech.

10:30-12:00 SaP1D2.3

Temporal Aspect of Three Visual Search Tasks by Using TMS, pp. 4751-4754.

Matsuoka, Akira — Kyushu Univ.
Kawamura, Yuuji — Kyushu Univ.
Ge, Sheng — Kyushu Univ.
Ueno, Shoogo — Kyushu Univ.
Iramina, Keiji — Kyushu Univ.

10:30-12:00 SaP1D2.4

A Spiking Neural Network of the CA3 of the Hippocampus Can Be a Neural Prosthesis for Lost Cognitive Functions, pp. 4755-4758.

Raghavan, Brijesh — Anna Univ.
Gurubharan, Ravindaran — Anna Univ.

10:30-12:00 SaP1D2.5

Experimental Platform for the Study of Region Specific Excitation and Inhibition in Neural Tissue, pp. 4759-4762.

Ross, James — Georgia Inst. of Tech.
Reddy, Nakul — Georgia Inst. of Tech.
Bakkum, Douglas — Georgia Inst. of Tech.
Potter, Steve — Georgia Inst. of Tech.
DeWeerth, Stephen P. — Georgia Tech. Univ.

SaP1D3 Forum 5&6

Robotic Devices for Rehabilitation III (Poster Session)

Chair: Patton, James (Jim) — Rehab Inst. Chicago & Northwestern U.

10:30-12:00 SaP1D3.1

Occupational Therapists' Evaluation of Haptic Motor Rehabilitation, pp. 4763-4766.

Kayyali, Ruba — Univ. of Ottawa
Alamri, Atif — Univ. of Ottawa
Eid, Mohammad — Univ. of Ottawa
Iglesias, Rosa — Univ. of Ottawa
Shirmohammadi, Shervin — Univ. of Ottawa
El Saddik, Abdulmotaleb — Univ. of Ottawa
Lemaire, Edward — The Ottawa Hospital Rehab Centre

10:30-12:00 SaP1D3.3

Advanced Robust Tracking Control of a Powered Wheelchair System, pp. 4767-4770.

Nguyen, Nghia Tuan — Univ. of Tech. Sydney
Nguyen, Hung — Univ. of Tech. Sydney
Su, Steven Weidong — Univ. of Tech. Sydney

10:30-12:00 SaP1D3.4

Obstacle Avoidance for Power Wheelchair Using Bayesian Neural Networ, pp. 4771-4774.

Trieu, Hoang Tuyen — Univ. of Tech. Sydney
Nguyen, Hung — Univ. of Tech. Sydney
Willey, Keith — Univ. of Tech. Sydney

10:30-12:00 SaP1D3.5

Real-Time Obstacle Detection for an Autonomous Wheelchair Using Stereoscopic Cameras, pp. 4775-4778.

Nguyen, Thanh Hai — Univ. of Tech. Sydney
Nguyen, Jordan Son — Univ. of Tehcnology, Sydney
Pham, Duc Minh — Univ. of Tehcnology, Sydney
Nguyen, Hung — Univ. of Tech. Sydney

10:30-12:00 SaP1D3.6

Development of an Automatic Ankle Stretching Device for Lower Limb Monoplegia Patients, pp. 4779-4781.

Choi, Junghyeon — Inje Univ.
Cho, Jongman — Inje Univ.
Nam, Taewoo — Inje Univ.
Park, Junho — Inje Univ.

10:30-12:00 SaP1D3.7

Development of Tilt Table with Visual Feedback Function for Hemiplegia Patients, pp. 4782-4785.

Cho, Jongman — Inje Univ.
Choi, Junghyeon — Inje Univ.
Nam, Taewoo — Inje Univ.
Park, Junho — Inje Univ.
Ibrahim, Fatimah — Univ. of Malaya

10:30-12:00 SaP1D3.8

Suggestion of One-Hand Type Power-Assisted Wheelchair and Driving Control for Persons with Hemiplegia, pp. 4786-4789.

Nakamura, Fumitoshi — Musashi Inst. of Tech.
Watada, Masaya — Musashi Inst. of Tech.
Kim, Yong-Jae — Musashi Inst. of Tech.

10:30-12:00 SaP1D3.9

Design Considerations for a Personalized Wheelchair Navigation System, pp. 4790-4793.

Ding, Dan — Univ. of Pittsburgh
Parmanto, Bambang — Univ. of Pittsburgh
Karimi, Hassan — Univ. of Pittsburgh
Roongpiboonsopit, Duangduen — Univ. of Pittsburgh
Pramana, Gede — Univ. of Pittsburgh
Conahan, Thomas — Univ. of Pittsburgh
Kasemsuppakorn, Piyawan — Univ. of Pittsburgh

10:30-12:00 SaP1D3.10

Development of a "Neuro-Orthosis" for the Control of Wrist Movements at Rheumatic Diseases, pp. 4794-4797.

Ugurlu, Umit — Bogazici Univ.
Ozkan, Mehmed — Bogazici Univ.
Ozdogan, Huri — Istanbul Univ.

10:30-12:00 SaP1D3.11

An Experimental Method for Measuring the Moment of Inertia of an Electric Power Wheelchair, pp. 4798-4801.

Wang, Hongwu — Univ. of Pittsburgh
Grindle, Garrett — Univ. of Pittsburgh
Connor, Samual — Human Engineering Res. Lab.
Cooper, Rory — Univ. of Pittsburgh

SaP1D4 Forum 5&6

EMG Applications (Poster Session)

10:30-12:00 SaP1D4.1

The Relationship between SEMG and Change in Pennation Angle of Brachialis, pp. 4802-4805.

Shi, Jun — Shanghai Univ.
Zheng, Yongping — The Hong Kong Pol. Univ.
Yan, Zhuangzhi — Shanghai Univ.

10:30-12:00 SaP1D4.2

SVM for Estimation of Wrist Angle from Sonomyography and SEMG Signals, pp. 4806-4809.

Shi, Jun — Shanghai Univ.
Zheng, Yongping — The Hong Kong Pol. Univ.
Yan, Zhuangzhi — Shanghai Univ.

10:30-12:00 SaP1D4.3

Reciprocal EMG Controlled FES for Pathological Tremor Suppression of Forearm, pp. 4810-4813.

Zhang, Dingguo — Nanyang Tech. Univ.
Ang, Wei Tech — Nanyang Tech. Univ.

10:30-12:00 SaP1D4.4

A Ubiquitous Wearable Unit for Controlling Muscular Fatigue During Cycling Exercise Sessions, pp. 4814-4817.

Kiryu, Tohru — Niigata Univ.
Yamashita, Kazuki — Niigata Univ.

10:30-12:00 SaP1D4.5

Relationship between Muscle Tension and Hardness in Isolated Frog Muscle with Electrical Stimulation, pp. 4818-4821.

Uchiyama, Takanori — Keio Univ.
Kato, Ryoko — Graduate School of Keio Univ.
Murayama, Mitsuyoshi — Keio Univ.

10:30-12:00 SaP1D4.6

Time Dependency Assessment of Muscular Fatigue Index and Hand Tremor under Operating Conditions, pp. 4822-4825.

Ma, Xianghong — Aston Univ.

10:30-12:00 SaP1D4.7

Hidden Markov Multivariate Autoregressive (HMM-Mar) Modeling Framework for Surface Electromyography (sEMG) Data, pp. 4826-4829.

Chiang, Joyce — Univ. of British Columbia
Wang, Z. Jane — Univ. of British Columbia
McKeown, Martin — Univ. of British Columbia

10:30-12:00 SaP1D4.8

Hand Pose Estimation Using EMG Signals, pp. 4830-4833.

Yoshikawa, Masahiro — Univ. of Tsukuba
Mikawa, Masahiko — Univ. of Tsukuba
Tanaka, Kazuyo — Univ. of Tsukuba

10:30-12:00 SaP1D4.9

A Low Cost Grip Transducer Based Instrument to Quantify Fingertip Touch Force, pp. 4834-4837.

Boukhenous, samir — Houari Boumediene Univ.
Boukhenous samir, Attari moukhtar — Houari Boumediene Univ.

10:30-12:00 SaP1D4.10

Extracting Neural Drives from Surface EMG: A Generative Model and Simulation Studies, pp. 4838-4841.

Jiang, Ning — Univ. of New Brunswick
parker, philip — Univ. of new brunswick
Englehart, Kevin — Univ. of New Brunswick

10:30-12:00 SaP1D4.11

A Real-Time Pattern Recognition Based Myoelectric Control Usability Study Implemented in a Virtual Environment, pp. 4842-4845.

Hargrove, Levi — Univ. of New Brunswick
Losier, Yves — Inst. of Biomedical Engineering, Univ. of New
Lock, Blair — Rehabilitation Inst. of Chicago
Englehart, Kevin — Univ. of New Brunswick
Hudgins, Bernard — Univ. of New Brunswick

SaP1D5 Forum 5&6

Central Neuromuscular Control (Poster Session)

10:30-12:00 SaP1D5.1

Time-Varying Synergies in Velocity Profiles of Finger Joints of the Hand During Reach and Grasp, pp. 4846-4849.

Vinjamuri, Ramana — Univ. of Pittsburgh
Mao, Zhi-Hong — Univ. of Pittsburgh
Sclabassi, Robert — Univ. of Pittsburgh
Sun, Mingui — Univ. of Pittsburgh

10:30-12:00 SaP1D5.2

Vergence Transient Component: An Index to Oculomotor Learning Modification, pp. 4850-4853.

Alvarez, Tara — New Jersey Inst. of Tech.
Semmlow, John — Rutgers Univ.
Ciuffreda, Kenneth — SUNY- School of Optometry
Gayed, Bassem — New Jersey Inst. of Tech.
Granger-Donetti, Bérangčre — Essilor International

10:30-12:00 SaP1D5.3

Saccadic Behavior During the Response to Pure Vergence Stimuli, pp. 4854-4857.

Semmlow, John — Rutgers Univ.
Pedrono, Claude — Essilor International
Alvarez, Tara — New Jersey Inst. of Tech.

10:30-12:00 SaP1D5.4

Activation of Forearm Muscles for Wrist Extension in Patients Affected by Lateral Epicondylitis, pp. 4858-4861.

Rojas, Mónica — Tech. Univ. of Catalonia
Mańanas, Miquel Angel — Tech. Univ. of Catalonia (UPC)
Müller, Bertram — Egarsat
Chaler, Joaquim — Mutua Egara Hospital

10:30-12:00 SaP1D5.5

Formation of an Internal Model of Environment Dynamics During Upper Limb Reaching Movements: A Fuzzy Approach, pp. 4862-4865.

MacDonald, Chad — Univ. of Texas at El Paso
Moussavi, Zahra — Univ. of Manitoba
Sarkodie-Gyan, Thompson — Univ. of Texas at El Paso

10:30-12:00 SaP1D5.6

Measurement of Distance Error in Reaching Movement of the Human Hand without Using Vision, pp. 4866-4869.

Huang, Jian — Yokohama National Univ.
Kosaka, Sho — Yokohama National Univ.
Imamura, Yuuki — Yokohama National Univ.
Yabuta, Tetsuro — Yokohama National Univ.

10:30-12:00 SaP1D5.7

Development of a Wearable Motion Capture Suit and Virtual Reality Biofeedback System for the Instruction and Analysis of Sports Rehabilitation Exercises, pp. 4870-4874.

Fitzgerald, Diarmaid — Univ. Coll. Dublin
Foody, John — National Univ. of Ireland Maynooth
caulfield, brian — UCD
Kelly, Daniel — National Univ. of Ireland, Maynooth
Ward, Tomas — NUIM
Markham, Charles — NUIM
McDonald, John — National Univ. of Ireland, Maynooth

SaP1D6 — Forum 5&6
Locomotion (Poster Session)

10:30-12:00 SaP1D6.1

Support Vector Machines for Detecting Recovery from Knee Replacement Surgery Using Quantitative Gait Measures, pp. 4875-4878.

Levinger, Pazit — La Trobe Univ.
Lai, Tze Huei, Daniel — Univ. of Melbourne
Webster, Kate — La Trobe Univ.
Begg, Rezaul — Victoria Univ.
Feller, Julian — La Trobe Univ.

10:30-12:00 SaP1D6.2

Hybrid Control of Powered Orthosis and Functional Neuromuscular Stimulation for Restoring Gait, pp. 4879-4882.

Obinata, Goro — Nagoya Univ.
MATSUNAGA, TOSHIKI — Akita Univ. Hospital
IWAMI, TAKEHIRO — Akita Univ.
SHIMADA, YOICHI — Akita Univ. Hospital
MIYAWAKI, KAZUTO — AKITA R&D CENTER

10:30-12:00 SaP1D6.3

Tibialis Anterior EMG Activation Pattern Changes with Walking Speed During Overground and Treadmill Walking, pp. 4883-4886.

Barrett, Alan — Univ. of Limerick
Donnelly, Alan — Univ. of Limerick
ÓLaighin, Gearóid — National Univ. of Ireland, Galway

10:30-12:00 SaP1D6.4

Regulation of Minimum Toe Clearance Variability in the Young and Elderly During Walking on Sloped Surfaces, pp. 4887-4890.

Khandoker, Ahsan Habib — The Univ. of Melbourne
Lynch, Kate — Victoria Univ.
Karmakar, Chandan Kumar — The Univ. of Melbourne
Begg, Rezaul — Victoria Univ.
Palaniswami, Marimuthu — The Univ. of Melbourne

10:30-12:00 SaP1D6.5

Pendulum Analysis of an Integrated Accelerometer to Assess Its Suitability to Measure Dynamic Acceleration for Gait Applications, pp. 4891-4894.

Godfrey, Alan — Univ. of Limerick
Hourigan, Timothy — Univ. of Limerick
ÓLaighin, Gearóid — National Univ. of Ireland, Galway

SaB01 — Gratte Ciel 1
Signal Pattern Classification in Biomedical Signals III (Oral Session)

Chair: Nandi, Asoke K — The Univ. of Liverpool

12:45-13:00 SaB01.1

Unsupervised Clustering of Free-Living Human Activities Using Ambulatory Accelerometry, pp. 4895-4898.

Nguyen, Anthony — CSIRO, ICT Centre
Moore, Darren — CSIRO, ICT Centre
McCowan, Iain — CSIRO, ICT Centre

13:00-13:15 SaB01.2

Accelerometry Based Classification of Walking Patterns Using Time-Frequency Analysis, pp. 4899-4902.

Wang, Ning — Univ. of New South Wales
Ambikairajah, E — Univ. of New South Wales
Lovell, Nigel H — Univ. of New South Wales
Celler, Branko George — Univ. of New South Wales

13:15-13:30 SaB01.3

A Multivariate Time-Warping Based Classifier for Gesture Recognition with Wearable Strain Sensors, pp. 4903-4906.

Giorgino, Toni — Univ. of Pavia
Tormene, Paolo — Univ. of Pavia
Quaglini, Silvana — Univ. of Pavia

13:30-13:45 SaB01.4

A Novel Approach to Recognize Hand Movements Via Semg Patterns, pp. 4907-4910.

khezri, mahdi — sharif Univ. of Tech.
Jahed, Mehran — Sharif Univ. of Tech.

13:45-14:00 SaB01.5

Strict 2-Surface Proximal Classification of Knee-Joint Vibroarthrographic Signals, pp. 4911-4914.

Mu, Tingting — The Univ. of Liverpool
Nandi, Asoke K — The Univ. of Liverpool
Rangayyan, Raj — Univ. of Calgary

14:00-14:15 SaB01.6

Estimating Regional Conductivity in 2D Disc Head Model by Multidemensional Support Vector Regression, pp. 4915-4918.

Shen, Xueqin — Hebei Univ. of Tech.
Yan, Hui — City Coll. Zhejiang Univ.
Yan, Weili — Hebei Univ. of Tech.
Guo, Lei — Hebei Univ. of Tech.

SaB02 — Gratte Ciel 2

Signal Processing and Physiological System Modeling VIII (Oral Session)

Chair: Conforto, Silvia — Univ. Roma TRE
Co-Chair: Giansanti, Daniele — Istituto Superiore di Sanitŕ

12:45-13:00 SaB02.1

Closed-Loop System Identification of Ankle Dynamics with Compliant Loads, pp. 4919-4922.

Zhao, Yong — McGill Univ.
Kearney, Robert Edward — McGill Univ.

13:00-13:15 SaB02.2

Amplitude Demodulation of Entrained Sway to Analyze Human Postural Control, pp. 4923-4926.

Bhatkar, Viprali — Clarkson Univ.
Pilkar, Rakesh — Clarkson Univ.
Storey, Christopher M. — Louisiana Tech. Univ.
Robinson, Charles — Clarkson Univ.

13:15-13:30 SaB02.3

Design and Costruction of Step Counters for Disable People: Preliminar Experience at the Italian Institute of Health, pp. 4927-4929.

Maccioni, Giovanni — Istituto Superiore di Sanitŕ
Macellari, Velio — Istituto Superiore di Sanitŕ
Giansanti, Daniele — Istituto Superiore di Sanitŕ

13:30-13:45 SaB02.4

Classification of Motor Activities through Derivative Dynamic Time Warping Applied on Accelerometer Data, pp. 4930-4933.

Muscillo, Rossana — Univ. Roma TRE
Conforto, Silvia — Univ. Roma TRE
Schmid, Maurizio — Univ. Roma TRE
Caselli, Paolo — Univ. Roma Tre
d'alessio, Tommaso — Univ. Roma TRE

13:45-14:00 SaB02.5

Assessment of Fall Risk Using a Pneumatic Pattern Generator, pp. 4934-4936.

Maccioni, Giovanni — Istituto Superiore di Sanitŕ
Macellari, Velio — Istituto Superiore di Sanitŕ
Giansanti, Daniele — Istituto Superiore di Sanitŕ

SaB03 — Bellecour 1

Electrical Source Imaging (Oral Session)

Chair: He, Bin — Univ. of Minnesota
Co-Chair: GARNERO, LINE — CNRS

12:45-13:00 SaB03.1

Modeling and Detecting Deep Brain Activity with MEG & EEG, pp. 4937-4940.

Attal, Yohan — CNRS
Bhattacharjee, Manik — CNRS UPR640 - LENA
Yelnik, Jérôme — Inserm
Cottereau, Benoit — CNRS
Lefčvre, Julien — CNRS UPR 640
OKADA, Yoshio — Univ. of New Mexico
BARDINET, ERIC — CNRS
CHUPIN, Marie — CNRS UPR 640 LENA
Baillet, Sylvain — CNRS UPR640--LENA

13:00-13:15 SaB03.2

Spatial Localization of Cortical Time-Frequency Dynamics, pp. 4941-4944.

Dalal, Sarang S. — INSERM
Guggisberg, Adrian G. — Univ. of California, San Francisco
Edwards, Erik — Univ. of California, San Francisco
Sekihara, Kensuke — Tokyo Metropolitan Univ.
Findlay, Anne M. — Univ. of California, San Francisco
Canolty, Ryan T. — Univ. of California, Berkeley
Knight, Robert T. — Univ. of California, Berkeley
Barbaro, Nicholas M. — Univ. of California, San Francisco
Kirsch, Heidi E. — Univ. of California, San Francisco
Nagarajan, Srikantan S. — Univ. of California, San Francisco

13:15-13:30 SaB03.3

Challenging the Estimation of Cortical Activity from MEG with Simulated Fmri-Constrained Retinotopic Maps, pp. 4945-4948.

Gramfort, Alexandre — INRIA Sophia Antipolis
Cottereau, Benoit — CNRS
Clerc, Maureen — ENPC, ENS, INRIA
Thirion, Bertrand — INRIA Futurs
Baillet, Sylvain — CNRS UPR640--LENA

13:30-13:45 SaB03.4

An Adaptive Directed Transfer Function Approach for Detecting Dynamic Causal Interactions, pp. 4949-4952.

Wilke, Christopher — Univ. of Minnesota
Ding, Lei — Univ. of Minnesota
He, Bin — Univ. of Minnesota

13:45-14:00 SaB03.5

Cortical Activity and Connectivity of Human Brain During the Prisoner's Dilemma: An EEG Hyperscanning Study, pp. 4953-4956.

Babiloni, Fabio — Univ. of Rome
Astolfi, Laura — Univ. of Rome
Cincotti, Febo — Fondazione Santa Lucia IRCCS
Mattia, Donatella — Fondazione Santa Lucia IRCCS
Tocci, Andrea — Fondazione S.Lucia IRCCS
Tarantino, Annapaola — Fondazione S.Lucia IRCCS
Marciani, Maria Grazia — Tor Vergata Univ.
Salinari, Serenella — La Sapienza Univ.
Gao, Shangkai — Tsinghua Univ.
Colosimo, Alfredo — Univ. of Rome "Sapienza"
De Vico Fallani, Fabrizio — Univ. La Sapienza

14:00-14:15 SaB03.6

High Resolution EEG Hyperscanning During a Card Game, pp. 4957-4960.

Babiloni, Fabio — Univ. of Rome
Tocci, Andrea — Fondazione S.Lucia IRCCS
De Vico Fallani, Fabrizio — Univ. La Sapienza
Cincotti, Febo — Fondazione Santa Lucia IRCCS
Mattia, Donatella — Fondazione Santa Lucia IRCCS
Bianchi, Luigi — Univ. of Rome
Salinari, Serenella — La Sapienza Univ.
Marciani, Maria Grazia — Tor Vergata Univ.
Colosimo, Alfredo — Univ. of Rome "Sapienza"
Astolfi, Laura — Univ. of Rome

SaB04 — Bellecour 3

Eye and Breast Image Segmentation (Oral Session)

Chair: Garcia, Maria — Univ. of Valladolid

12:45-13:00 SaB04.1

Towards Automatic Grading of Nuclear Cataract, pp. 4961-4964.

Li, Huiqi — Inst. for Infocomm Res.
Lim, Joo Hwee — Inst. for Infocomm Res.
Liu, Jiang — Inst. for Infocomm Res. A*STAR
Wong, Tien Yin — National Univ. of Singapore

13:00-13:15 SaB04.2

A Hybrid Segmentation Approach for Geographic Atrophy in Fundus Auto-Fluorescence Images for Diagnosis of Age-Related Macular Degeneration, pp. 4965-4968.

Lee, Noah — Columbia Univ.
Laine, Andrew — Columbia Univ.
Smith, R Theodore — Columbia Univ.

13:15-13:30 SaB04.3

Feature Extraction and Selection for the Automatic Detection of Hard Exudates in Retinal Images, pp. 4969-4972.

Garcia, Maria — Univ. of Valladolid
Hornero, Roberto — Univ. of Valladolid
Sánchez, Clara I. — Univ. of Valladolid
López, María I. — Univ. of Valladolid
Díez, Ana — Univ. of Valladolid

13:30-13:45 SaB04.4

Digital Mammographic Computer Aided Diagnosis (CAD) Using Adaptive Level Set Segmentation, pp. 4973-4978.

Ball, John — Naval Surface Warfare Center Dahlgren
Bruce, Lori — Mississippi State Univ.

13:45-14:00 SaB04.5

Digital Mammogram Spiculated Mass Detection and Spicule Segmentation Using Level Sets, pp. 4979-4984.

Ball, John — Naval Surface Warfare Center Dahlgren
Bruce, Lori — Mississippi State Univ.

14:00-14:15 SaB04.6

Colour-Texture Based Image Analysis Method for Assessing the Hormone Receptors Status in Breast Tissue Sections, pp. 4985-4988.

Kostopoulos, Spiros — Medical Image Processing and Analysis (M.I.P.A)
Cavouras, Dionysios — Tech. Educational Inst. of Athens
Daskalakis, Antonis — Medical Image Processing and Analysis (M.I.P.A) Group,Lab.
Bougioukos, Panagiotis — Medical Image Processing and Analysis (M.I.P.A) Group,Lab.
Georgiadis, Pantelis — Univ. of Patras
Kagadis, George — Univ. of Patras
Kalatzis, Ioannis — Tech. Educational Inst. of Athens
Ravazoula, Panagiota — Department of Pathology, Univ. Hospital of Patras, Greece
Nikiforidis, George — Medical School, Univ. of Patras

SaB05 — Tęte d'Or Lounge

Wearable and Portable Communicative Systems I (Oral Session)

Chair: Korhonen, Ilkka — VTT

12:45-13:00 SaB05.1

Walking Analysis Using an Acceleration Sensor, pp. 4989-4992.

TSURUOKA, Yuriko — The Inst. of Statistical Mathematics
Shibasaki, Ryosuke — Center for Spatial Information Science, Univ. of Tokyo

13:00-13:15 SaB05.2

Automatic Recognition of Postural Allocations, pp. 4993-4996.

Sazonov, Edward — Clarkson Univ.
Krishnamurthy, Vidya — Clarkson Univ.
Makeyev, Oleksandr — Clarkson Univ.
Ray, Browning — Univ. of Colorado Health Sciences Center
Hill, James — Univ. of Colorado Health Sciences Center
Schutz, Yves — Univ. of Lausanne

13:15-13:30 SaB05.3

Surveillance of Infants at Risk of Apparent Life Threatening Events (ALTE) with the BBA Bootee: A Wearable Multiparameter Monitor, pp. 4997-5000.

Rimet, Yves — Hospital Center of Aix-en-Provence
Brusquet, Yves — Hospital Center of Aix-en-Provence
Ronayette, Dominique — Univ. Hospital Center of Limoges
Dageville, Christian — Univ. Hospital Center of Nice
Lubrano-Lavadera, Marc — Univ. Hospital Center of Rouen
Mallet, Eric — Univ. Hospital Center of Rouen
Rambaud, Caroline — Raymond Poincaré Hospital
Terlaud, Christian — Hospital Center of Saint-Junien
Silve, Jerôme — TAM-Télésanté
Lerda, Olivier — TAM-Télésanté
Netchiporouk, Larissa — TAM-Télésanté
Weber, Jean-Luc — TAM-Télésanté

13:30-13:45 SaB05.4

Time Based Measurement of the Impedance of the Skin-Electrode Interface for Dry Electrode ECG Recording, pp. 5001-5004.

Dozio, Roberta — Trinity Coll. Dublin
Baba, Adeshina — Univ. of Dublin, Trinity Coll.
Assambo, Cedric — Trinity Coll. Dublin
Burke, Martin J. — Trinity Coll. Dublin

13:45-14:00 SaB05.5

The Development of a White Cane Which Navigates the Visually Impaired, pp. 5005-5008.

Shiizu, Yuriko — Tokai Univ.
Magatani, Kazushige — Tokai Univ.

SaB06 — Tęte d'Or 2

Structural Bioinformatics and Computational Proteomics I (Oral Session)

Chair: Fenstermacher, David — H. Lee Moffitt Cancer Center & Res. Inst.
Co-Chair: Fotiadis, Dimitrios I. — Univ. of Ioannina

12:45-13:00 SaB06.1

Predicting Peptide Bond Conformation Using Feature Selection and the Nad've Bayes Approach, pp. 5009-5012.

Exarchos, Kostas — Univ. of Ioannina
Exarchos, Themis P. — Unit of Medical Tech. & Intelligent Info
Papaloukas, Costas — Univ. of Ioannina
Troganis, Anastassios — Univ. of Ioannina
Fotiadis, Dimitrios I. — Univ. of Ioannina

13:00-13:15 SaB06.2

Improvement in Fold Recognition Accuracy of a Reduced-State Space Hidden Markov Model by Using Secondary Structure Information in Scoring, pp. 5013-5016.

Lampros, Christos — Unit of Medical Tech. and Intelligent Information
Papaloukas, Costas — Univ. of Ioannina
Exarchos, Kostas — Univ. of Ioannina
Fotiadis, Dimitrios I. — Univ. of Ioannina

13:15-13:30 SaB06.3

Prediction of Specific Protein-DNA Recognition by Knowledge-Based Two-Body and Three-Body Interaction Potentials, pp. 5017-5020.

Zhao, Guijun — UIC
Carson, Matthew — Univ. of Illinois at Chicago
Lu, Hui — Univ. of Illinois at Chicago

13:30-13:45 SaB06.4

Influence of Electromagnetic Radiation on Enzyme Kinetics, pp. 5021-5024.

Pirogova, Elena — RMIT Univ.
Cosic, Irena — RMIT Univ.
Vojisavljevic, Vuk — RMIT Univ.

13:45-14:00 SaB06.5

Training Set Reduction Methods for Protein Secondary Structure Prediction in Single-Sequence Condition, pp. 5025-5028.

Aydin, Zafer — Georgia Inst. of Tech.
Pakatci, Isa Kemal — Sabanci Univ.
Erdogan, Hakan — Sabanci Univ.
Altunbasak, Yucel — Georgia Inst. of Tech.

14:00-14:15 SaB06.6

Perturbation-Based Markovian Transmission Model for Macromolecular Machinery in Cell, pp. 5029-5034.

Lu, Hsiao-Mei — Univ. of Illinois at Chicago
Liang, Jie — Univ. of Illinois at Chicago

SaB07 — Bellecour 2

Heart Rate and Blood Pressure Variability I (Oral Session)

Chair: Bianchi, Anna Maria — Pol. di Milano
Co-Chair: Sornmo, Leif — Lund Univ.

12:45-13:00 SaB07.1

Local-Scale Analysis of Cardiovascular Signals by Detrended Fluctuations Analysis: Effects of Posture and Exercise, pp. 5035-5038.

Castiglioni, Paolo — Fondazione Don Carlo Gnocchi ONLUS
Quintin, Luc — Univ. Lyon
Civijian, Andrei — Univ. of Lyon 1
Parati, Gianfranco — Istituto Auxologico Italiano
Di Rienzo, Marco — Fondazione Don Carlo Gnocchi

13:00-13:15 SaB07.2

Cardiac Response to Robotic Assisted Locomotion in Normal Subjects: A Preliminary Study, pp. 5039-5042.

Magagnin, Valentina — Pol. of Milan
Caiani, Enrico — Pol. of Milan
Cazzaniga, Alberto — Hospital Valduce 'Villa Beretta'
Porta, Alberto — Univ. degli Studi di Milano
Licari, Vittorio — Galeazzi Ortophedic Hospital IRCCS
Molteni, F — Hospital Valduce 'Villa Beretta'
Cerutti, Sergio — Pol. Univ. of Milan

13:15-13:30 SaB07.3

Low-Order Parametric System Identification for Intrapartum Uterine Pressure-Fetal Heart Rate Interaction, pp. 5043-5046.

Warrick, Philip A. — McGill Univ.
Kearney, Robert Edward — McGill Univ.
Precup, Doina — McGill Univ.
Hamilton, Emily — McGill Univ.

13:30-13:45 SaB07.4

Comparison of HRV Analysis Methods During Orthostatic Challenge: HRV with Respiration or without?, pp. 5047-5050.

Aysin, Benhur — ANSAR Medical Tech. Inc.
Colombo, Joe — ANSAR Medical Tech. Inc.
Aysin, Elif — ANSAR Inc.

13:45-14:00 SaB07.5

Heart Rate Chaos As a Mortality Predictor in Mild to Moderate Heart Failure, pp. 5051-5054.

Arzeno, Natalia — Massachusetts Inst. of Tech.
Poon, Chi-Sang — Massachusetts Inst. of Tech.

SaB08 — Gratte Ciel Lounge

Brain-Computer Interfaces I (Oral Session)

Chair: Hesse, Christian — F.C. Donders Centre for Cognitive Neuroimaging

12:45-13:00 SaB08.1

A Comparison of Mental Task Combinations for Asynchronous EEG-Based BCIs, pp. 5055-5058.

Sepulveda, Francisco — Univ. of Essex
Dyson, Matthew — Univ. of Essex
Gan, John Q. — Univ. of Essex, UK
Tsui, C.S. Louis — Univ. of Essex

13:00-13:15 SaB08.2

Implementation of a Brain-Computer Interface Based on Three States of Motor Imagery, pp. 5059-5062.

Wang, Yijun — Tsinghua Univ.
Hong, Bo — Tsinghua Univ.
Gao, Xiaorong — Tsinghua Univ.
Gao, Shangkai — Tsinghua Univ.

13:15-13:30 SaB08.3

Evaluation of an Eye Gaze Point Detection Method Using VEP Elicited by Multi-Pseudorandom Stimulation for Brain Computer Interface, pp. 5063-5066.

Momose, Keiko — Waseda Univ.

13:30-13:45 SaB08.4

Towards Asynchronous Brain-Computer Interfaces: A P300-Based Approach with Statistical Models, pp. 5067-5070.

Zhang, Haihong — Inst. for Infocomm Res.
Guan, Cuntai — Inst. for Infocomm Res.
Wang, Chuanchu — Inst. for Infocomm Res.

13:45-14:00 SaB08.5

Subspace Estimation Approach to P300 Detection and Application to Brain-Computer Interface, pp. 5071-5074.

Rivet, Bertrand — Commissariat ŕ l'Energie Atomique
Souloumiac, Antoine — Commissariat ŕ l'Energie Atomique

14:00-14:15 SaB08.6

A Tree-Structure Mutual Information-Based Feature Extraction and Its Application to EEG-Based Brain-Computer Interfacing, pp. 5075-5078.

Oveisi, Farid — Iran Univ. of Science and Tech.
Erfanian, Abbas — Iran Univ. of Science and Tech.

SaB09 — Gratte Ciel 3

Orthopaedic and Musculo-Skeletal Biomechanics II (Oral Session)

Chair: Amirouche, Farid — Univ. of Illinois-Chicago

12:45-13:00 SaB09.1

A Fast Method for Finding Range of Motion in the Human Joints, pp. 5079-5082.

Arbabi, Ehsan — Ec. Pol. Fédérale de Lausanne (EPFL)
Boulic, Ronan — Ec. Pol. Fédérale de Lausanne (EPFL)
Thalmann, Daniel — Ec. Pol. Fédérale de Lausanne (EPFL)

13:00-13:15 SaB09.2

Soft Tissue Modeling Using Nonlinear Mass Spring and Simplified Medial Representation, pp. 5083-5086.

Chen, Feng — Shanghai Jiaotong Univ.
Gu, Lixu — Shanghai Jiaotong Univ.
Huang, Pengfei — Shanghai Jiao Tong Univ.
Zhang, Jingsi — Shanghai Jiaotong Univ.
Xu, Jianrong — Renji Hospital, Medical School, Shanghaijiaotong Univ.

13:15-13:30 SaB09.3

Ellipsoid-Constrained Robust Fitting of Quadrics with Application to the 3D Morphological Characterization of Articular Surfaces, pp. 5087-5090.

Allaire, Stéphane — Princess Margaret Hospital, Univ. Health Network
Jacq, Jean-José — CHU Morvan
Burdin, Valérie — Ec. Nationale Supérieure des Télécommunications
Roux, Christian — ENST Bretagne - INSERM

13:30-13:45 SaB09.4

A Novel Biomedical Meshing Algorithm and Evaluation Based on Revised Delaunay and Space Disassembling, pp. 5091-5094.

YU, Xiao — Shanghai Jiao Tong Univ.
Gu, Lixu — Shanghai Jiaotong Univ.
Lv, Sizhe — Shanghai Jiao Tong Univ.
Liu, Jie — Shanghai Jiao Tong Univ.
Huang, Pengfei — Shanghai Jiao Tong Univ.
Kong, Xianming — Renji Hospital, Medical School, Shanghai Jiaotong Univ.

13:45-14:00 SaB09.5

Automated Method for Clinic and Morphologic Analysis of Bones Using Implicit Modeling Technique, pp. 5095-5098.

Gargouri, Imed — Notre-Dame Hospital

14:00-14:15 SaB09.6

Experimental Investigation of Posterior Elbow Dislocation in a Primate Model, pp. 5099-5102.

Abraham, Edward — Univ. of Illinois at Chicago Coll. of Medicine
Al Kork, Samer — Univ. of Illinois at Chicago
Amirouche, Farid — Univ. of Illinois-Chicago
hande, erin — Univ. of Illinois at Chicago
Rai, Surya — Univ. of Illinois at Chicago
Biafora, Sam — Univ. of Illinois at Chicago Coll. of Medicine

SaB10 Rhône 1

Biomaterials and Cell-Biomaterial Interactions I (Oral Session)

Chair: Migonney, Veronique — Univ. Paris

12:45-13:00 SaB10.1

The Effect of Pre-Polymeric Solution and Subsequent Encapsulation in Hydrogel Membranes on the Stability and Biological Activity of Horse Myoglobins, pp. 5103-5106.

Torres-Lugo, Madeline — Univ. of Puerto Rico, Mayaguez Campus
Valentin, Celimar — Univ. of Puerto Rico, Mayaguez Campus
Lopez-Garriga, Juan — Univ. of Puerto Rico, Mayaguez Campus

13:00-13:15 SaB10.2

RGD Nanodomains Grafting Onto Titanium Surface, pp. 5107-5110.

Forget, Guillaume — INSERM
Latxague, Laurent — INSERM U577
Héroguez, Valérie — CNRS - ENSCPB - Univ. Bordeaux I
Labrugere, Christine — ICMCB-CNRS
Durrieu, Marie-Christine — INSERM U577

13:15-13:30 SaB10.3

Poly(Ethylene Glycol) Hydrogels As Possible Multidrug Resistance Associated Protein (MRP) Inhibitors, pp. 5111-5114.

Santos-Roman, Nilmarie — Univ. of Puerto Rico, Mayaguez Campus
Mendez, Jannet — Univ. of Puerto Rico, Mayaguez Campus
Torres-Lugo, Madeline — Univ. of Puerto Rico, Mayaguez Campus

13:30-13:45 SaB10.4

Morphology and Adhesion of Human Fibroblast Cells Cultured on Bioactive Polymer Grafted Ligament Prosthesis, pp. 5115-5118.

ZHOU, Jie — Univ. Paris 13
Migonney, Veronique — Univ. Paris

13:45-14:00 SaB10.5

Grafting Bioactive Polymers Onto Titanium Surfaces and Human Osteoblasts Response, pp. 5119-5122.

mayingi, josselin — Inst. Galilee, Univ. Paris 13
Migonney, Veronique — Univ. Paris

14:00-14:15 SaB10.6

Impact of RGD Peptide Density Grafted Onto Poly(ethylene Terephthalate) on MC3T3 Cell Attachment, pp. 5123-5126.

Chollet, Celine — INSERM
Labrugere, Christine — ICMCB-CNRS
Durrieu, Marie-Christine — INSERM U577

SaB11 Tęte d'Or 1

Decision Support Systems II (Oral Session)

Chair: Taktak, Azzam Fouad George — Royal Liverpool Univ. Hospital
Co-Chair: Senhadji, Lotfi — Univ. of Rennes 1; INSERM

12:45-13:00 SaB11.1

Characterization of EEGs in Alzheimer's Disease Using Information Theoretic Methods, pp. 5127-5131.

Zhao, Peng — Univ. of Plymouth
Van-Eevelt, Peter — Univ. of Plymouth
Goh, Cindy — Univ. of Plymouth
Hudson, Nigel — Derriford Hospital
Wimalaratna, Sunil — Radcliffe Infirmary
Ifeachor, Emmanuel — Univ. of Plymouth

13:00-13:15 SaB11.2

Schemes for Fusion of EEG and ECG towards Temporal Lobe Epilepsy Diagnostics, pp. 5132-5135.

Bermudez, Thomas — Aston Univ.
Lowe, David — Aston Univ.
Arlaud-Lamborelle, Anne-Marie — Hôpital Général Henri Duffaut

13:15-13:30 SaB11.3

Comparison of Three Methods for Classifying Burst and Suppression in the EEG of Post Asphyctic Newborns, pp. 5136-5139.

Löfhede, Johan — Univ. Coll. of Borĺs
Löfgren, Nils — Univ. Coll. of Borĺs
Thordstein, Magnus — Unit of Clinical Neurophysiology, Sahlgrenska Univ. Hospita
Flisberg, Anders — Goteborg Univ.
Kjellmer, Ingemar — Goteborg Univ.
Lindecrantz, Kaj — Univ. Coll. of Borĺs

13:30-13:45 SaB11.4

Multi-Class Classification of Cancer Stages from Free-Text Histology Reports Using Support Vector Machines, pp. 5140-5143.

Nguyen, Anthony — CSIRO, ICT Centre
Moore, Darren — CSIRO, ICT Centre
McCowan, Iain — CSIRO, ICT Centre
Fry, Mary-Jane — Queensland Health

13:45-14:00 SaB11.5

Combining Evidence in Hybrid Medical Decision Support Models, pp. 5144-5147.

Cohen, Maurice — Univ. of California San Francisco
Hudson, Donna L — Univ. of California, San Francisco

14:00-14:15 SaB11.6

An Algebraic Approach to Detect Logical Inconsistences Is Medical Appropriateness Criteria, pp. 5148-5151.

García-Remesal, Miguel — School of Computer Science. Univ. Pol. de
Maojo, Víctor — School of Computer Science. Univ. Pol. de Madrid
Laita, Luis — School of Computer Science. Univ. Pol. de Madrid
Roanes-Lozano, Eugenio — Univ. Complutense de Madrid
Crespo, José — School of Computer Science. Univ. Pol. de Madrid

SaB12 — Rhône 2

Working in Bioengineering: Making an Impact (Minisymposium)

Chair: Linte, Cristian A. — Robarts Res. Inst. - Univ. of Western Ontario
Co-Chair: Lazareck, Lisa Joanna — Univ. of Oxford
Organizer: Lazareck, Lisa Joanna — Univ. of Oxford

12:45-13:00 SaB12.1

Working in Bioengineering: Making an Impact (I), pp. 5152-5154.

Linte, Cristian A. — Robarts Res. Inst. - Univ. of Western Ontario
Lazareck, Lisa Joanna — Univ. of Oxford

SaB13 — Roseraie 1,2

From Idea to Product - Innovation Approaches and Healthcare Market Characteristics (Invited Session)

Chair: Such, Olaf — Philips
Co-Chair: Galloway, Robert — Vanderbilt
Organizer: Such, Olaf — Philips

12:45-13:00 SaB13.1

From Idea to Product - Why so Many Innovations in Healthcare Wilt on the Way to Commercialization (I), pp. 5155-5155.

Such, Olaf — Philips

13:00-13:15 SaB13.2

Price Trend Analysis and Its Implications for the Development of New Medical Technologies, pp. 5156-5159.

Brown, Alan — Univ. of Ulster
Meenan, Brian — Univ. of Ulster
Young, Terry — Brunel Univ.

13:15-13:30 SaB13.3

Innovative Healthcare Systems on Their Way to the Market: How to Cope with Commercialization Barriers, pp. 5160-5161.

HOFMANN, ISA — IHOFMANN

13:30-13:45 SaB13.4

Found in Translation; from the Laboratory to the Operating Room to the Market (I), pp. 5162-5165.

Galloway, Robert — Vanderbilt

SaC01 — Gratte Ciel 1

Signal Pattern Classification in Biomedical Signals IV (Oral Session)

Chair: Celler, Branko George — Univ. of New South Wales
Co-Chair: Al-Jumaily, Adel — Univ. of Tech. Sydney

14:30-14:45 SaC01.1

Body Sensor Network Based ECG Segmentation and Analysis, pp. 5166-5169.

Li, Huaming — Michigan Tech. Univ.
Tan, Jindong — Michigan Tech. Univ.

14:45-15:00 SaC01.2

Some Practical Remarks on Neural Networks Approach to Fetal Cardiotocograms Classification, pp. 5170-5173.

Jezewski, Michal — The Silesian Univ. of Tech.
Wrobel, Janusz — Inst. of Medical Tech. and Equipment
Labaj, Pawel — The Silesian Univ. of Tech.
Leski, Jacek — Silesian Univ. of Tech.
Henzel, Norbert — Silesian Univ. of Tech.
Horoba, Krzysztof — Inst. of Medical Tech. and Equipment
Jezewski, Janusz — Inst. of Medical Tech. and Equipment

15:00-15:15 SaC01.3

Applying Neural Network Classifiers in the Diagnosis of the Obstructive Sleep Apnea Syndrome from Nocturnal Pulse Oximetric Recordings, pp. 5174-5177.

Marcos, J. Victor — Univ. de Valladolid
Hornero, Roberto — Univ. of Valladolid
Álvarez, Daniel — Univ. of Valladolid
del Campo, Félix — Hospital del Río Hortega
López, Miguel — Univ. of Valladolid

15:15-15:30 SaC01.4

Classification Algorithms for SIFT-MS Medical Diagnosis, pp. 5178-5181.

Moorhead, Katherine Tracey — Univ. of Canterbury
Lee, Dominic — Univ. of Canterbury
Chase, J. Geoffrey — Univ. of Canterbury
Moot, Andrew R. — Univ. of Otago
Ledingham, Katy M. — Syft Tech. Ltd
Scotter, Jennifer — Syft Tech. Ltd
Allardyce, Randall A. — Univ. of Otago
Senthilmohan, Senti T. — Syft Tech. Ltd.
Endre, Zoltan — Univ. of Otago, Christchurch

15:30-15:45 SaC01.5

Channel and Feature Selection in Multifunction Myoelectric Control, pp. 5182-5185.

Al-Jumaily, Adel — Univ. of Tech. Sydney
Khushaba, Rami N. — Univ. of Tech. Sydney

15:45-16:00 SaC01.6

Characterization of Breast Tumors with NIR Methods Using Optical Indices, pp. 5186-5189.

Alacam, Burak — Rensselaer Pol. Inst.
Yazici, Birsen — RPI
Chance, Britton — UPENN
Nioka, Shoko — UPENN

SaC02 — Gratte Ciel 2

Multivariate and Multimodal Biomedical Signal Processing I (Oral Session)

Chair: Principe, Jose — Univ. of Florida
Co-Chair: Malmivuo, Jaakko — Tampere Univ. of Tech.

14:30-14:45 SaC02.1

BioS: A New Tool for Biopotential Experiments, pp. 5190-5193.

Bucolo, Maide — Univ. degli Studi di Catania
Di Grazia, Federica — Univ. of Catania
Fortuna, Luigi — Univ. of Catania
Frasca, Mattia — Univ. of Catania
Sapuppo, Francesca — Univ. degli Studi di Catania

14:45-15:00 SaC02.2

Improved Detection of Deep Sources with Weighted Multielectrode EEG Leads, pp. 5194-5197.

Väisänen, Outi — Tampere Univ. of Tech.
Malmivuo, Jaakko — Tampere Univ. of Tech.

15:00-15:15 SaC02.3

Features Extraction from Time-Varying Cortical Networks Adopting a Theoretical Graph Approach, pp. 5198-5201.

De Vico Fallani, Fabrizio — Univ. La Sapienza
Astolfi, Laura — Univ. of Rome
Cincotti, Febo — Fondazione Santa Lucia IRCCS
Mattia, Donatella — Fondazione Santa Lucia IRCCS
Tocci, Andrea — Fondazione S.Lucia IRCCS
Capitanio, Samantha — Fondazione S.Lucia IRCCS
Marciani, Maria Grazia — Tor Vergata Univ.
Salinari, Serenella — La Sapienza Univ.
Witte, Herbert — Friedrich Schiller Univ.
Gao, Shangkai — Tsinghua Univ.
Colosimo, Alfredo — Univ. of Rome "Sapienza"
Babiloni, Fabio — Univ. of Rome

15:15-15:30 SaC02.4

Long-Term Subjective and Objective Sleep Analysis of Total Sleep Time and Sleep Quality in Real Life Settings, pp. 5202-5205.

Merilahti, Juho Markus — VTT
Saarinen, Ari — Rokua Rehabilitation Centre
Pärkkä, Juha — VTT
Korhonen, Ilkka — VTT
Antila, Kari — VTT
Mattila, Elina — VTT

15:30-15:45 SaC02.5

Robust Single-Trial ERP Estimation Based on Spatiotemporal Filtering, pp. 5206-5209.

Li, Ruijiang — Univ. of Florida
Principe, Jose — Univ. of Florida
Bradley, Margaret — Univ. of Florida
Ferrari, Vera — Univ. of Florida

15:45-16:00 SaC02.6

Detection of Synchronized Firings in Multivariate Neural Spike Trains During Motor Tasks, pp. 5210-5213.

Bourien, Jerome — UFR Pharmacie - Univ. Montpellier1
Sanchez, Justin C. — Univ. of Florida
Bellanger, Jean-Jacques — LTSI-INSERM U642
WENDLING, Fabrice — INSERM - Univ. de Rennes 1
Principe, Jose — Univ. of Florida

16:00-16:15 SaC02.7

Development of the Hand Motion Recognition System Based on Surface EMG Using Suitable Measurement Channels for Pattern Recognition, pp. 5214-5217.

Nagata, Kentaro — Kanagawa Rehabilitation Inst.
Ando, Keiichi — TOKAI Univ.
Magatani, Kazushige — TOKAI Univ.
Yamada, Masafumi — Kanagawa Rehabilitation Center

SaC03 Bellecour 1

Neuroimaging (fMRI) (Oral Session)

Chair: Baillet, Sylvain — CNRS UPR640--LENA
Co-Chair: He, Bin — Univ. of Minnesota

14:30-14:45 SaC03.1

Application and Validation of Spatial Mixture Modelling for the Joint Detection-Estimation of Brain Activity in Fmri, pp. 5218-5222.

VINCENT, Thomas — CEA
CIUCIU, Philippe — CEA
IDIER, Jérôme — CNRS

14:45-15:00 SaC03.2

The Haemodynamic Response to the Interictal Epileptic Spikes, pp. 5223-5226.

Tana, Maria Gabriella — Pol. Univ. of Milan
Bianchi, Anna Maria — Pol. di Milano
Vitali, Paolo — National Neurological Inst. "C.Besta"
Villani, Flavio — National Neurological Inst. "C.Besta"
Cerutti, Sergio — Pol. Univ. of Milan

15:00-15:15 SaC03.3

Localization of Brain Activity by Temporal Anti-Correlation with the Posterior Cingulate Cortex, pp. 5227-5230.

Wang, Shijie — Southeast Univ.
Zhang, Zhiqiang — The General Hospital of Nanjing Millitary District
Lu, Guangming — The General Hospital of Nanjing Millitary District
Luo, Limin — Univ. of Southeast

15:15-15:30 SaC03.4

Directly Measuring Local Region Functional Connectivity with Multivariate Correlation Technique, pp. 5231-5234.

zhang, hui — Chinese Acad. of Science
Tian, Jie — Inst. of Automation,Chinese Acad. of Sciences
zhen, zonglei — Chinese Acad. of Science

15:30-15:45 SaC03.5

Spectral Clustering of Fmri Data within Regions of Interest: Clarification of L-Dopa Effects in Parkinson's Disease, pp. 5235-5238.

Lee, Pamela Wen-Hsin — Univ. of British Columbia
Wang, Z. Jane — Univ. of British Columbia
Palmer, Samantha Jane — Univ. of British Columbia
McKeown, Martin — Univ. of British Columbia

15:45-16:00 SaC03.6

Implementation of Low Resolution Electro-Magnetic Tomography with Fmri Statistical Maps on Realistic Head Models, pp. 5239-5242.

Duru, Adil Deniz — Bogazici Univ.
Demiralp, Tamer — 0;stanbul Medical School
Ademoglu, Ahmet — Bogazici Univ.
eryilmaz, hamdi — boun

SaC04 Bellecour 3

3D Organ Segmentation and Modeling (Oral Session)

14:30-14:45 SaC04.1

Fully Automatic Liver Segmentation through Graph-Cut Technique, pp. 5243-5246.

Massoptier, Laurent — Inst. of Clinical Physiology of National Res. Council
Casciaro, Sergio — Inst. of Clinical Physiology of National Res. Council

14:45-15:00 SaC04.2

Graph Cut Liver Segmentation for Interstitial Ultrasound Therapy, pp. 5247-5250.

ESNEAULT, Simon — INSERM U642, Rennes, F-35000, France; Univ. de Rennes 1, LT
Hraiech, Najah — Univ. de Rennes 1; ANSYS France, Lyon
Delabrousse, Eric — INSERM U556, Lyon, F-69003, France;
Dillenseger, Jean-Louis — Univ. de Rennes 1

15:00-15:15 SaC04.3

Joint Segmentation-Registration of Organs Using Geometric Models, pp. 5251-5254.

Ayvaci, Alper — Rensselaer Pol. Inst.
Freedman, Daniel — Rensselaer Pol. Inst.

15:15-15:30 SaC04.4

Statistical Shape Model-Based Segmentation of Brain Mri Images, pp. 5255-5258.

Bailleul, Jonathan — GREYC CNRS UMR 6072 Univ. de Caen
RUAN, Su — IUT de Troyes, Univ. de Reims
CONSTANS, Jean-Marc — EA3916, CHRU de Caen

15:30-15:45 SaC04.5

3D Automatic Segmentation and Reconstruction of Prostate on MR Images, pp. 5259-5262.

Betrouni, Nacim — Inst. de Tech. Médicale
PUECH, Philippe — CHRU de Lille
DEWALLE, ANNE-SOPHIE — Univ. des Sciences et Tech. de Lille
Lopes, Renaud — Inserm, U703 and Univ. of Lille1
DUBOIS, Patrick — Inserm
Vermandel, Maximilien — Univ. de Lille

15:45-16:00 SaC04.6

3D Segmentation with an Application of Level Set-Method Using MRI Volumes for Image Guided Surgery, pp. 5263-5266.

BOSNJAK, Antonio — Univ. de Carabobo.
Montilla, Guillermo — Univ. de Carabobo
Villegas, Ricardo — Univ. de Carabobo.
Jara, Iván — Hospital Metropolitano del Norte.

SaC05 Tęte d'Or Lounge

Wearable and Portable Communicative Systems II (Oral Session)

Co-Chair: Rodriguez-Villegas, Esther — Imperial Coll. London

14:30-14:45 SaC05.1

Development of a Wearable Electro-Larynx for Laryngectomees and Its Evaluation, pp. 5267-5270.

Hashiba, Mitsuo — The Univ. of Tokyo
Sugai, Yasunori — Densei Inc.
Izumi, Takashi — Hokkaido Tokai Univ.
Ino, Shuichi — The Univ. of Tokyo
Ifukube, Tohru — The Univ. of Tokyo

14:45-15:00 SaC05.2

Context-Aware Sensing of Physiological Signals, pp. 5271-5275.

Wu, Winston — Univ. of California, Los Angeles
Batalin, Maxim — Univ. of California, Los Angeles
Au, Lawrence — Univ. of California, Los Angeles
Bui, Alex — Univ. of California, Los Angeles
Kaiser, William — Univ. of California, Los Angeles

15:00-15:15 SaC05.3

A Wearable Physiological Sensor Suite for Unobtrusive Monitoring of Physiological and Cognitive State, pp. 5276-5281.

Matthews, Robert — Quantum Applied Science & Res. Inc.
McDonald, Neil — Quantum Applied Science & Res. Inc.
Hervieux, Paul — Quantum Applied Science & Res. Inc.
Turner, Peter — Quantum Applied Science & Res. Inc.
Steindorf, Marty — Quantum Applied Science & Res. Inc.

15:15-15:30 SaC05.4

A Low-Voltage Low-Power Front-End for Wearable EEG Systems, pp. 5282-5285.

Yates, David — Imperial Coll. London
Lopez-Morillo, Enrique — Univ. of Sevilla
Carvajal, Ramon G. — Univ. of Sevilla
Ramirez-Angulo, Jaime — New Mexico State Univ.
Rodriguez-Villegas, Esther — Imperial Coll. London

15:30-15:45 SaC05.5

How to Pass Information and Deliver Energy to a Network of Implantable Devices within the Human Body, pp. 5286-5289.

Sun, Mingui — Univ. of Pittsburgh
Hackworth, Steven A. — Univ. of Pittsburgh
Tang, Zhide — Chongqing Univ.
Sclabassi, Robert — Univ. of Pittsburgh

15:45-16:00 SaC05.6

A Preliminary Study for Portable Walking Distance Measurement System Using Ultrasonic Sensors, pp. 5290-5293.

Jang, Yongwon — Electronics and Telecommunications Res. Inst.
Shin, Seungchul — ETRI
Lee, Jeong Won — Electronics & Telecom Res. Inst.
Kim, Seunghwan — Electronics & Telecom Res. Inst.

SaC06 Tęte d'Or 2

Novel Technologies for Bioinformatics I (Oral Session)

Chair: Fang, Qiang — RMIT Univ.

14:30-14:45 SaC06.1

A Simulation for Effects of RF Electromagnetic Radiation from a Mobile Handset on Eyes Model Using the Finite-Difference Time-Domain Method, pp. 5294-5297.

Yang, Li — Hebei Univ. of Tech.
Ge, Manling — Hebei Univ. of Tech.
Guo, Jia — Hebei Univ. of Tech.
Wang, Qingmeng — Hebei Univ. of Tech.
Jiang, Xiaochi — Hebei Univ. of Tech.
Yan, Weili — Hebei Univ. of Tech.

14:45-15:00 SaC06.2

Synchronization Software for Automation in Anesthesia, pp. 5298-5301.

Bressan, Nadja — Faculdade de Ciencias da Univ. do Porto
Castro, Ana — Faculdade de Ciencias da Univ. do Porto
Brás, Susana — Faculdade de Ciencias da Univ. do Porto
Oliveira, Hélder P. — Faculdade de Engenharia da Univ. do Porto
Ribeiro, Lénio — Hospital Veterinário do Porto
Ferreira, David A — Univ. de Trás-os-Montes e Alto Douro
Antunes, Luis — Univ. de Trás-os-Montes e Alto Douro
Amorim, Pedro — Hospital Geral de Santo António
Nunes, Catarina S — Faculdade de Ciencias da Univ. do Porto

15:00-15:15 SaC06.3

Detecting Positively Selected Sites from Amino Acid Sequences: An Implicit Codon Model, pp. 5302-5306.

Ouyang, Zheng — Univ. of Illinois at Chicago
Liang, Jie — Univ. of Illinois at Chicago

15:15-15:30 SaC06.4

Parameter Identifiability of Cardiac Ionic Models Using a Novel CellML Least Squares Optimization Tool, pp. 5307-5310.

Hui, Ben Bunny Chun Bun — Univ. of New South Wales
Dokos, Socrates — Univ. of New South Wales
Lovell, Nigel H — Univ. of New South Wales

15:30-15:45 SaC06.5

Cell-Graph Mining for Breast Tissue Modeling and Classification, pp. 5311-5314.

Bilgin, Cemal Cagatay — Rensselaer Pol. Inst.
Demir, Cigdem Gunduz — Bilkent Univ.
Nagi, Chandandeep — Mount Sinai Medical Center
Yener, Bulent — Rensselaer Pol. Inst.

15:45-16:00 SaC06.6

Defining Muscle Elastance As a Parameter, pp. 5315-5318.

Palladino, Joseph — Trinity Coll.
Noordergraaf, Abraham — Univ. of Pennsylvania

SaC07 — Bellecour 2

Heart Rate and Blood Pressure Variability II (Oral Session)

Chair: Meste, Olivier — UNSA-CNRS
Co-Chair: Wiklund, Urban — Univ. hospital

14:30-14:45 SaC07.1

Statistical Analysis of QT/RR Hysteresis in Healthy Horses, pp. 5319-5322.

Kozelek, Petr — Czech Tech. Univ. in Prague

14:45-15:00 SaC07.2

Assessment of Slow-Breathing Relaxation Technique in Acute Stressful Tasks Using a Multipurpose Non-Invasive Beat-By-Beat Cardiovascular Monitoring System, pp. 5323-5325.

Nogawa, Masamichi — Kanazawa Univ.
Yamakoshi, Takehiro — Kanazawa Univ.
Ikarashi, Akira — Ishikawa Sunrise Industries Creation
Tanaka, Shinobu — Kanazawa Univ.
Yamakoshi, Ken-ichi — Kanazawa Univ.

15:00-15:15 SaC07.3

Arterial Blood Pressure Analysis Based on Scattering Transform I, pp. 5326-5329.

Laleg, Taous-Meriem — INRIA Rocquencourt,
Crépeau, Emmanuelle — INRIA Rocquencourt
PAPELIER, Yves — Paris-Sud Univ.
Sorine, Michel — INRIA

15:15-15:30 SaC07.4

Arterial Blood Pressure Analysis Based on Scattering Transform II, pp. 5330-5333.

Laleg, Taous-Meriem — INRIA Rocquencourt,
Medigue, Claire — INRIA
Cottin, François — Univ. of Evry
Sorine, Michel — INRIA

15:30-15:45 SaC07.5

Electrical Acupuncture Modifies Autonomic Balance by Resetting the Neural Arc of Arterial Baroreflex System, pp. 5334-5337.

Sugimachi, Masaru — Natl Cardio Center Res. Inst.
Kawada, Toru — Nat. Cardiovascular Center Res. Inst.
Kamiya, Atsunori — National Cardiovascular Center Res. Inst.
Li, Meihua — Nat. Cardiovascular Center Res. Inst.
Zheng, Can — National Cardio. Center Res. Inst.
Sunagawa, Kenji — Kyushu Univ.

SaC08 — Gratte Ciel Lounge

Brain-Computer Interfaces II (Oral Session)

Chair: Hesse, Christian — F.C. Donders Centre for Cognitive Neuroimaging

14:30-14:45 SaC08.1

Development of an Optical Brain-Machine Interface, pp. 5338-5341.

Utsugi, Kei — Hitachi Ltd.
Obata, Akiko — Hitachi Ltd.
Sato, Hiroki — Hitachi Ltd.
Katura, Takusige — Hitachi Ltd.
Sagara, Kazuhiko — Hitachi Ltd.
Maki., Atsushi — Hitachi Ltd.
Koizumi, Hideaki — Hitachi Ltd.

14:45-15:00 SaC08.2

Application to Robot Control Using Brain Function Measurement by Near-Infrared Spectroscopy, pp. 5342-5345.

Tsubone, Tadashi — Nagaoka Univ. of Tech.
Muroga, Takeo — Nagaoka Univ. of Tech.
Wada, Yasuhiro — Nagaoka Univ. of Tech.

15:00-15:15 SaC08.3

Decoding Performance for Hand Movements: EEG vs. MEG, pp. 5346-5348.

Waldert, Stephan — Univ. of Tübingen
Braun, Christoph — Univ. of Tübingen
Preissl, Hubert — Univ. of Tübingen
Birbaumer, Niels — Eberhard-Karls-Univ.
Aertsen, Ad — Albert-Ludwigs-Univ.
Mehring, Carsten — Albert-Ludwigs-Univ.

15:15-15:30 SaC08.4

Including Planning Activity in Feature Space Distributes Activation Over a Broader Neuron Population, pp. 5349-5352.

Singhal, Girish — Johns Hopkins Univ.
Acharya, Soumyadipta — Johns Hopkins Univ.
Davidovics, Natan — Johns Hopkins Univ.
He, Jiping — Arizona State Univ.
Thakor, Nitish — Johns Hopkins Univ.

15:30-15:45 SaC08.5

A Cortical Recording Platform Utilizing Uecog Electrode Arrays, pp. 5353-5357.

Kim, Jiwan — Univ. of Wisconsin-Madison
Wilson, J. Adam — Univ. of Wisconsin-Madison
Williams, Justin — Univ. of Wisconsin

15:45-16:00 SaC08.6

Impact of Lossy Compression on Neural Response Characteristics Extracted from High-Density Intra-Cortical Implant Data, pp. 5358-5361.

Shetliffe, Michael — Michigan State Univ.
Kamboh, Awais Mehmood — Michigan State Univ.
Mason, Andrew — Michigan State Univ.
Oweiss, Karim — Michigan State Univ.

SaC09 — Gratte Ciel 3

Peripheral Neuromuscular Control (Oral Session)

Chair: Kearney, Robert Edward — McGill Univ.
Co-Chair: Galiana, Henrietta L. — McGill Univ.

14:30-14:45 SaC09.1

A Painless and Constraint-Free Method to Estimate Viscoelastic Passive Dynamics of Limbs' Joints to Support Diagnosis of Neuromuscular Diseases, pp. 5362-5365.

Venture, Gentiane — Univ. of Tokyo
Nakamura, Yoshihiko — Univ. of Tokyo
Katsu, Yamane — Univ. of Tokyo
hirashima, masaya — Univ. of Tokyo

14:45-15:00 SaC09.2

Stability Analysis of the Lambda-Model During Fast Elbow Movements, pp. 5366-5369.

Lan, Li — Nanyang Tech. Univ.
Kuanyi, Zhu — Nanyang Tech. Univ.

15:00-15:15 SaC09.3

Recovery of Arm Movement after Stroke, pp. 5370-5372.

Mirbagheri, Mehdi — Northwestern Univ.
Tsao, Chengchi — Northwestern Univ.
Rymer, William Zev — Northwestern & Rehab Inst. of Chicago

15:15-15:30 SaC09.4

Electromyographic Hyperactivation of Skeletal Muscles by Time-Modulated Mechanical Stimulation, pp. 5373-5376.

Mischi, Massimo — Eindhoven Univ. of Tech.
Kaashoek, Irene — TU Eindhoven

15:30-15:45 SaC09.5

Modulation of Vergence During the Vestibulo-Ocular Reflex, pp. 5377-5380.

Khojasteh, Elham — McGill Univ.
Galiana, Henrietta L. — McGill Univ.

SaC10 — Rhône 1

Molecular and Cellular Biomechanics I (Oral Session)

Chair: Simpson, Michael — Oak Ridge National Lab.

14:30-14:45 SaC10.1

Vertically Aligned Carbon Nanofiber Arrays: An Electrical and Genetic Substrate for Tissue Scaffolding, pp. 5381-5383.

McKnight, Timothy — Oak Ridge National Lab.
Ericson, Nance — Oak Ridge National Lab.
Jones, Steven — Oak Ridge Inst. of Science and Engineering
Melechko, Anatoli — Oak Ridge National Lab.
Simpson, Michael — Oak Ridge National Lab.

14:45-15:00 SaC10.2

Effects of Prestin on Membrane Mechanics and Electromechanics, pp. 5384-5386.

Anvari, Bahman — Univ. of California, Riverside
Zhang, Rui — Rice Univ.
Qian, Feng — Rice Univ.
Rajagopalan, Lavanya — Baylor Coll. of Medicine
Pereira, Fred A. — Baylor Coll. of Medicine
Brownell, William — Baylor Coll. of Medicine

15:00-15:15 SaC10.3

Investigating the Effects of Fluid Shear Forces on Cellular Responses to Profiled Surfaces In-Vitro: A Computational and Experimental Invesitigation, pp. 5387-5390.

Brown, Alan — Univ. of Ulster
Meenan, Brian — Univ. of Ulster

15:15-15:30 SaC10.4

Influences of Adhesion Area and Biological Sample Size on the Estimation of Young's Modulus and Poisson's Ratio Assessed by Micropipette Aspiration Technique, pp. 5391-5394.

Boudou, Thomas — TIMC IMAG
Ohayon, Jacques — TIMC IMAG
Picart, Catherine — Univ. Montpellier 2
Tracqui, Philippe — TIMC IMAG

15:30-15:45 SaC10.5

Poloxamer 188 Reduces Axonal Beading Following Mechanical Trauma to Cultured Neurons, pp. 5395-5398.

Kilinc, Devrim — Drexel Univ.
Gallo, Gianluca — Drexel Univ. Coll. of Medicine
Barbee, Kenneth A. — Drexel Univ.

15:45-16:00 SaC10.6

Engineering of a Straighter Septum: Numerical Model of Mechanical Stress Relaxation in Laser-Heated Septal Cartilage, pp. 5399-5402.

Protsenko, Dmitriy — Univ. of California, Irvine
Wong, Brian — Univ. of California, Irvine

SaC11 — Tęte d'Or 1

Decision Support Systems III (Oral Session)

Chair: Taktak, Azzam Fouad George — Royal Liverpool Univ. Hospital

14:30-14:45 SaC11.1

Preoperative Prediction of Malignancy of Ovarian Tumours Using Modified Sequential Non-Uniform Procedure, pp. 5403-5406.

Stalbovskaya, Viktoriya — Univ. of Plymouth
Ifeachor, Emmanuel — Univ. of Plymouth
Van Huffel, Sabine — Katholieke Univ. Leuven
Timmerman, Dirk — K.U.Leuven

14:45-15:00 SaC11.2

Quantification and Classification of High-Resolution Magic Angle Spinning Data for Brain Tumor Diagnosis, pp. 5407-5410.

Poullet, Jean-Baptiste — Katholieke Univ. Leuven
Martinez-Bisbal, M Carmen — Univ. de Valencia
Valverde, Dani — Univ. Aut`onoma de Barcelona
Monleon, Daniel — Hospital Clinico Univ. de Valencia
Celda, Bernardo — Univ. de Valencia
Arus, Carles — Univ. Autonoma de Barcelona
Van Huffel, Sabine — Katholieke Univ. Leuven

15:00-15:15 SaC11.3

Integration of Clinical and Microarray Data with Kernel Methods, pp. 5411-5415.

Daemen, Anneleen — Katholieke Univ. Leuven
Gevaert, Olivier — Katholieke Univ. Leuven
De Moor, Bart — Katholieke Univ. Leuven

15:15-15:30 SaC11.4

Development of a Rule Based Prognostic Tool for HER 2 Positive Breast Cancer Patients, pp. 5416-5419.

Lisboa, Paulo — Liverpool John Moores Univ.
Aung, Min — Liverpool John Moores Univ.
Jarman, Ian — Liverpool John Moores Univ.
Etchells, Terence — Liverpool John Moores Univ.
bourdes, valerie — ICTA Group
Bonnevay, Stephane — Univ. Lyon 1
chabaud, sylvie — Centre Léon-Bérard
Bachelot, Thomas — Centre Léon-Bérard
Perol, David — Centre Léon-Bérard
Negrier, Sylvie — Centre Léon-Bérard

15:30-15:45 SaC11.5

Continuous and Discrete Time Survival Analysis: Neural Network Approaches, pp. 5420-5423.

Eleuteri, Antonio — Royal Liverpool Univ. Hospital
Aung, Min — Liverpool John Moores Univ.
Taktak, Azzam Fouad George — Royal Liverpool Univ. Hospital
Damato, Bertil — Royal Liverpool Univ. Hospital
Lisboa, Paulo — Liverpool John Moores Univ.

15:45-16:00 SaC11.6

Breast Cancer Predictions by Neural Networks Analysis: A Comparison with Logistic Regression, pp. 5424-5427.

bourdes, valerie — ICTA Group
Bonnevay, Stephane — Univ. Lyon 1
Lisboa, Paulo — Liverpool John Moores Univ.
Aung, Min — Liverpool John Moores Univ.
chabaud, sylvie — Centre Léon-Bérard
Bachelot, Thomas — Centre Léon-Bérard
Perol, David — Centre Léon-Bérard
Negrier, Sylvie — Centre Léon-Bérard

SaC12 Rhône 2

Advances in Neural Engineering (Minisymposium)

Chair: Akay, Metin — Arizona State Univ.
Co-Chair: Durand, Dominique — Case Western Res. Univ.
Organizer: Akay, Metin — Arizona State Univ.
Organizer: Durand, Dominique — Case Western Res. Univ.

14:30-14:45 SaC12.1

Recovery of Peripheral Nerve Signals through Blind Separation (I), pp. 5428-5428.
Durand, Dominique — Case Western Res. Univ.

14:45-15:00 SaC12.2

Complexity Measures of the Central Respiratory Networks During Wakefulness and Sleep in Piglets (I), pp. 5429-5430.
Dragomir, Andrei — Arizona State Univ.
Akay, Metin — Arizona State Univ.

15:00-15:15 SaC12.3

Innovating Signal Processing for Spike Train Data (I), pp. 5431-5431.
Paiva, António R. C. — Univ. of Florida
Park, Il — Univ. of Florida
Principe, Jose — Univ. of Florida

SaC13 Roseraie 1,2

From Idea to Product – Commercialization Issues Illustrated in an Example (Workshop) (Minisymposium)

Chair: Birkett, Liam — Intellectual Property and Business Development Consultant
Organizer: Such, Olaf — Philips

14:30-14:45 SaC13.1

From Idea to Product – Commercialization Issues Illustrated in an Example (I), pp. 5432-5432.
Birkett, Liam — Intellectual Property and Business Development Consultant

SaP2A1 Forum 5&6

PCA and ICA in Biomedical Signals IV (Poster Session)

16:30-17:30 SaP2A1.1

On the Independent Component Analysis of Evoked Potentials through Single or Few Recording Channels, pp. 5433-5436.
Wang, Suogang — Univ. of Southampton
James, Christopher — Univ. of Southampton

16:30-17:30 SaP2A1.2

Magnetoencephalogram Blind Source Separation and Component Selection Procedure to Improve the Diagnosis of Alzheimer's Disease Patients, pp. 5437-5440.
Escudero, Javier — Univ. of Valladolid
Hornero, Roberto — Univ. of Valladolid
Abásolo, Daniel — Univ. of Valladolid
Fernandez, Alberto — Univ. Complutense de Madrid
Poza, Jesús — Univ. de Valladolid

16:30-17:30 SaP2A1.3

Greedy Kernel PCA Applied to Single-Channel EEG Recordings, pp. 5441-5444.
Tome, Ana Maria — Univ. de Aveiro
Teixeira, Ana Rita — Univ. de Aveiro
Lang, Elmar W. — Univ. of Regensburg
Martins da Silva, Antonio — Hospital Santo Antonio and ICBAS/IBMC-Univ. of Porto

16:30-17:30 SaP2A1.4

EEG Ocular Artefacts and Noise Removal, pp. 5445-5448.
Romo-Vazquez, Rebeca — Nancy-Univ.
Ranta, Radu — Nancy-Univ.
Louis-Dorr, Valerie — Nancy-Univ.
Maquin, Didier — Nancy-Univ.

16:30-17:30 SaP2A1.5

Extraction of Steady State Visually Evoked Potential Signal and Estimation of Distribution Map from EEG Data, pp. 5449-5452.
Washizawa, Yoshikazu — RIKEN
Yamashita, Yukihiko — Tokyo Inst. of Tech.
Tanaka, Toshihisa — Tokyo Univ. of Agriculture and Tech.
Cichocki, Andrzej — BSI RIKEN

16:30-17:30 SaP2A1.6

Impact Analysis of Body Movement in Ambulatory ECG, pp. 5453-5456.
Pawar, Tanmay — Indian Inst. of Tech. - Bombay
N.S., Anantakrishnan — Indian Inst. of Tech. Bombay
Chaudhuri, Subhasis — Indian Inst. of Tech. - Bombay
Duttagupta, Siddhartha — Indian Inst. of Tech. - Bombay

16:30-17:30 SaP2A1.7

Fast Extraction of Somatosensory Evoked Potential Based on Second Order Blind Identification, pp. 5457-5460.
Liu, Hongtao — The Univ. of Hong Kong
Hu, Yong — The Univ. of Hong Kong
Chang, Chunqi — The Univ. of Hong Kong
Luk, KDK — Department of Orthopaedics and Traumatology, The Univ. of H

16:30-17:30 SaP2A1.8

Topography-Time-Frequency Atomic Decomposition for Event-Related M/EEG Signals, pp. 5461-5464.

Bénar, Christian G. — INSERM
Clerc, Maureen — ENPC, ENS, INRIA
Papadopoulo, Théodore — INRIA Sophia-Antipolis

16:30-17:30 SaP2A1.9

In Vivo Comparison between the Principal Components Analysis and the Karhunen-Ločve Transform As Methods Used for the De-Noising of Laser Doppler Reactive Hyperemia Signals, pp. 5465-5468.

Mansouri, Chemseddine — Groupe ISAIP-ESAIP
Humeau, Anne — Groupe ISAIP-ESAIP and Univ. d'Angers
L'huillier, Jean Pierre — ENSAM- ANGERS

16:30-17:30 SaP2A1.10

Task-Related Principal Component Analysis: Formalism and Illustration, pp. 5469-5472.

Miller, Kai J — Univ. of Washington
Hebb, Adam O. — Univ. of Washington
Ojemann, Jeffrey G — Univ. of Washington
Rao, Rajesh PN — Univ. of Washington
denNijs, Marcel — Univ. of Washington

16:30-17:30 SaP2A1.11

Space-Time ICA versus Ensemble ICA for Ictal EEG Analysis with Component Differentiation Via Lempel-Ziv Complexity, pp. 5473-5476.

James, Christopher — Univ. of Southampton
Abásolo, Daniel — Univ. of Valladolid
Gupta, Disha — Univ. of Southampton

16:30-17:30 SaP2A1.12

Feature Extraction for Snore Sound Via Neural Network Processing, pp. 5477-5480.

Emoto, Takahiro — Takamatsu National Coll. of Tech.
Abeyratne, Udantha R — Univ. of Queensland
Akutagawa, Masatake — The Univ. of Tokushima
Nagashino, Hirofumi — The Univ. of Tokushima
Kinouchi, Yohsuke — The Univ. of Tokushima

16:30-17:30 SaP2A1.13

Independent Component Analysis for Extraction of Critical Features from Tongue Movement Ear Pressure Signals, pp. 5481-5484.

Vaidyanathan, Ravi — Univ. of Southampon
James, Christopher — Univ. of Southampton

16:30-17:30 SaP2A1.14

Subspace Approaches for Fmri Time Series Estimation, pp. 5485-5488.

Niskanen, Eini — Univ. of Kuopio
Tarvainen, Mika — Univ. of Kuopio
Könönen, Mervi — Kuopio Univ. Hospital
Soininen, Hilkka — Kuopio Univ. Hospital
Karjalainen, Pasi — Univ. of Kuopio

16:30-17:30 SaP2A1.15

Manifold Learning Applied on EEG Signal of the Epileptic Patients for Detection of Normal and Pre-Seizure States, pp. 5489-5492.

Ataee, Pedram — Univ. of Tehran
yazdani, ashkan — Univ. of tehran
Setarehdan, Seyed Kamaledin — Univ. of Tehran
Ahmadi Noubari, Hossein — Univ. of Tehran

16:30-17:30 SaP2A1.16

Extraction and Localization of Alpha Activity of the Brain in EEG and Fmri Using Constrained ICA, pp. 5493-5496.

Ahn, Si Hyung — Kyung Hee Univ.
Lee, Won Hee — Kyung Hee Univ.
Kim, Tae-Seong — Kyung Hee Univ.
Lee, Soo Yeol — Kyung Hee Univ.

16:30-17:30 SaP2A1.17

Spatial Density Reduction in the Study of the ECG Signal Using Independent Component Analysis, pp. 5497-5500.

Shayan-Arani, Amirali — Univ. of California, San Diego
Zhu, Yi — Univ. of California, San Diego
Zhang, Wanping — Univ. of California, San Diego
Jung, Tzyy-Ping — Univ. of California San Diego
Duann, Jeng-Ren — Univ. of California San Diego
Makeig, Scott — Univ. of California San Diego
Cheng, Chung-Kuan — Univ. of California, San Diego

16:30-17:30 SaP2A1.18

Estimation of Effects of Visually-Induced Motion Sickness Using Independent Component Analysis, pp. 5501-5504.

Abe, Makoto — Graduate School of Engineering, Tohoku Univ.
Yoshizawa, Makoto — Tohoku Univ.
Sugita, Norihiro — Tohoku Univ.
Tanaka, Akira — Fukushima Univ.
Yambe, Tomoyuki — Tohoku Univ.

16:30-17:30 SaP2B1.1
Comparison between Manual and Semi-Automatic Segmentation of Nasal Cavity and Paranasal Sinuses from CT Images, pp. 5505-5508.
Kathrin, Tingelhoff — Bonn Univ.
Moral, Analia Ines — Tech. Univ. of Braunschweig
kunkel, Maria Elizete — Tech. Univ. Braunschweig
Markus, Rilk — TU BS
Wagner, Ingo — Bonn Univ.
Eichhorn, Klaus W.G. — Univ. of Bonn, Germany
Wahl, Friedrich — Tech. Univ. of Braunschweig
Bootz, F — Bonn Univ.

16:30-17:30 SaP2B1.2
Design of a Digital Phantom of the Neonatal Brain, pp. 5509-5512.
Kazemi, Kamran — Univ. of Picardie Jules Verne
Grebe, Reinhard — Univ. of Picardie Jules Verne
Abrishami Moghadam, Hamid — Univ. of Picardie Jules Verne
Lagadec, Pierre — Univ. of Picardie Jules Verne
Gondry-Jouet, Catherine — Centre Hospitalier Univ. d'Amiens
Wallois, Fabrice — Univ. of Picardie Jules Verne

16:30-17:30 SaP2B1.3
Automatic Segmentation of Chromosomes in Q-Band Images, pp. 5513-5516.
Grisan, Enrico — Univ. of Padova
Poletti, Enea — Univ. of Padova
Tomelleri, Christopher — Univ. di Padova, DEI
Ruggeri, Alfredo — Univ. of Padova

16:30-17:30 SaP2B1.4
Computer Assisted Detection of Cancer Cells in Minimal Samples of Lung Cancer, pp. 5517-5520.
Ortiz-de-Solorzano, Carlos — Centre for Applied Medical Res. (CIMA)
Ucar-Vargas, Beatriz — Centre for Applied Medical Res. (CIMA)
Pengo, Thomas — Centre for Applied Medical Res. (CIMA)
Zudaire, Isabel — Centre for Applied Medical Res. (CIMA)
Montuenga, Luis — Centre for Applied Medical Res. (CIMA)
Muńoz-Barrutia, Arrate — FIMA Foundation for Applied Medical Res.

16:30-17:30 SaP2B1.5
Context-Preserving Rendering of Medical Segmentation Data, pp. 5521-5524.
Hughes, David — Univ. of Wales, Bangor
Lim, Ik Soo — Univ. of Wales

16:30-17:30 SaP2B1.6
Stem-Cell Localization: A Deconvolution Problem, pp. 5525-5528.
N. Kachouie, Nezamoddin — Univ. of Waterloo
Fieguth, Paul — Univ. of Waterloo

16:30-17:30 SaP2B1.7
A Region Analysis Approach for Segmenting Neural-Cell Images, pp. 5529-5532.
Yu, Donggang — JCU
Pham, Tuan D. — James Cook Univ.
Crane, Denis — Griffith Univ.

16:30-17:30 SaP2B1.8
Bone Mineral Density Estimation Using the Filling Factor of the Radius X-Ray Image, pp. 5533-5535.
Lee, Sooyeul — Electronics & Telecom Res. Inst.
Jeong, Ji-Wook — Electronics and Telecommunications Res. Inst.
Lee, Jeong Won — Electronics & Telecom Res. Inst.
Yoo, Done-Sik — ETRI (Electronics & Telecom Res. Inst.
Kim, Seunghwan — Electronics & Telecom Res. Inst.

16:30-17:30 SaP2B1.9
Shape Classification Techniques for Discrete 3D Porous Media Application to Trabecular Bone, pp. 5536-5539.
Aufort, Gabriel — Univ. d'Orléans
JENNANE, Rachid — Univ. d'Orléans
HARBA, Rachid — Univ. d'Orléans
BENHAMOU, Claude-Laurent — Centre hospitalier Régional d'Orléans

16:30-17:30 SaP2B1.10
An Efficient Method of Automatic Pulmonary Parenchyma Segmentation in CT Images, pp. 5540-5542.
Chen, Zhaoxue — Univ. of Shanghai for Science and Tech.
sun, xiwen — TongJi Univ.
Nie, Shengdong — Univ. of Shanghai for Science and Tech.

16:30-17:30 SaP2B1.11
Multidimensional Models for Methodological Validation in Multifractal Analysis, pp. 5543-5546.
Lopes, Renaud — Inserm, U703 and Univ. of Lille1
DUBOIS, Patrick — Inserm
Bhouri, Imen — TIM, Faculté des sciences
PUECH, Philippe — CHRU de Lille
MAOUCHE, Salah — UST Lille
Betrouni, Nacim — Inst. de Tech. Médicale

16:30-17:30 SaP2B1.12

Brain MR Perfusion Image Segmentation Using Independent Component Analysis and Hierarchical Clustering, pp. 5547-5550.

Lu, Chia-Fung — National Yang-Ming Univ.
Chou, Yen-Chun — National Yang-Ming Univ.
Guo, Wan-Yuo — Taipei Veterans General Hospital
Wu, Yu-Te — National Yang-Ming Univ.

16:30-17:30 SaP2B1.13

Segmentation of Lung Lobes in Isotropic CT Images Using Wavelet Transformation, pp. 5551-5554.

Wei, Qiao — Univ. of Calgary
Hu, Yaoping — The Univ. of Calgary
Gelfand, Gary — Foothills Medical Center
MacGregor, J. H. — Foothills Medical Center

16:30-17:30 SaP2B1.14

Evaluation of Segmentation Algorithms in Coronary Angiography, pp. 5555-5558.

Brieva, Jorge — Tecnologico De Monterrey
Ponce, Pedro — Itesm -campus ccm Mexico

16:30-17:30 SaP2B1.15

A K-Means Segmentation Method for Finding 2-D Object Areas Based on 3-D Image Stacks Obtained by Confocal Microscopy, pp. 5559-5562.

Niemistö, Antti — Inst. for Systems Biology
Korpelainen, Tomi — Tampere Univ. of Tech.
Saleem, Ramsey — Inst. for Systems Biology
Yli-Harja, Olli — Tampere Univ. of Tech.
Aitchison, John — Inst. for Systems Biology
Shmulevich, Ilya — Inst. for Systems Biology

16:30-17:30 SaP2B1.16

Fast Brain MRI Segmentation Based on Two-Dimensional Survival Exponential Entropy and Particle Swarm Optimization, pp. 5563-5566.

NAKIB, AMIR — Univ. PARIS XII
Roman, sophie — Univ. PARIS XII
oulhadj, hamouche — Univ. PARIS XII
siarry, patrick — Univ. PARIS XII

16:30-17:30 SaP2B1.17

Prostate Cancer Computer-Assisted Diagnosis Software Using Dynamic Contrast-Enhanced MRI, pp. 5567-5570.

PUECH, Philippe — INSERM U703
Betrouni, Nacim — Inst. de Tech. Médicale
Viard, Romain — CHRU Lille
VILLERS, Arnauld — Univ. hospital of Lille
Leroy, Xavier — Univ. hospital of Lille
Lemaître, Laurent — Univ. hospital of Lille

16:30-17:30 SaP2B1.18

Automatic Vertebral Morphometry Assessment, pp. 5571-5574.

Casciaro, Sergio — Inst. of Clinical Physiology of National Res.
Massoptier, Laurent — Inst. of Clinical Physiology of National Res. Council

16:30-17:30 SaP2B1.19

Fuzzy Algorithms to Extract Vacuoles of Steatosis on Liver Histological Color Images, pp. 5575-5578.

ROULLIER, Vincent — Univ. of Angers
Cavaro-Ménard, Christine — Univ. d'Angers
Aubé, Christophe — CHU d'angers
calmon, guillaume — GE Healthcare

16:30-17:30 SaP2B1.20

Tissue Classification for MRI of Thigh Using a Modified FCM Method, pp. 5579-5584.

KANG, han — LAMIH UNR CNRS 8530
TALEB-AHMED, abdelmalik — Univ. de Valenciennes et du Hainaut Cambresis

16:30-17:30 SaP2B1.21

A Study on Shape Determinative Slices for the Masseter Muscle, pp. 5585-5588.

Ng, Hsiao Piau — National Univ. of Singapore / Agency for Science,Tech.
Foong, Kelvin Weng Chiong — National Univ. of Singapore
Ong, Sim Heng — National Univ. of Singapore
Liu, Jimin — Agency for Science, Tech. & Res.
Goh, Poh Sun — National Univ. of Singapore
Nowinski, L. Wieslaw — Agency for Science, Tech. & Res.

16:30-17:30 SaP2B1.22

Classification of Trabecular Bone Texture from MRI and CT Scan Images by Multi Resolution Analysis, pp. 5589-5592.

KHIDER, Mohamed — LAMIH UNR CNRS 8530
TALEB-AHMED, abdelmalik — Univ. de Valenciennes et du Hainaut Cambresis
DUBOIS, Patrick — Inserm

16:30-17:30 SaP2B1.23

A Standardized Method to Automatically Segment Amyloid Plaques in Congo Red Stained Sections from Alzheimer Transgenic Mice, pp. 5593-5596.

Teboul, Olivier — Commissariat ŕ l'Energie Atomique
Feki, Abdelmonem — Commissariat ŕ l'Energie Atomique
Dubois, Albertine — Commissariat ŕ l'Energie Atomique
Bozon, Bruno — CNRS UMR 8620
Faure, Alexis — CNRS UMR 8620
Hantraye, Philippe — Commissariat ŕ l'Energie Atomique
Dhenain, Marc — Commissariat ŕ l'Energie Atomique
Delatour, Benoit — CNRS UMR 8620
Delzescaux, Thierry — Commissariat ŕ l'Energie Atomique

16:30-17:30 SaP2B1.24

Hausdorff Distance Based 3D Quantification of Brain Tumor Evolution from MRI Images, pp. 5597-5600.

RUAN, Su — IUT de Troyes, Univ. de Reims
NICOLIER, Frédéric — IUT TROYES
LEBONVALLET, Stéphane — IUT TROYES
BAUDRIER, Etienne — CRESTIC

16:30-17:30 SaP2B1.25

Detection of Bleeding Patterns in WCE Video Using Multiple Features, pp. 5601-5604.

Lau, Phooi Yee — Inst. de Telecomunicaçőes
Correia, Paulo Lobato — Inst. Superior Tecnico - UTL

16:30-17:30 SaP2B1.26

A Medical Texture Local Binary Pattern (MTLBP) for TRUS Prostate Segmentation, pp. 5605-5608.

N. Kachouie, Nezamoddin — Univ. of Waterloo
Fieguth, Paul — Univ. of Waterloo

16:30-17:30 SaP2B1.27

Three-Dimensional Activation Sequence Imaging in a Rabbit Model, pp. 5609-5611.

Han, Chengzong — Univ. of Minnesota
Liu, Zhongming — Univ. of Minnesota
Liu, Chenguang — Univ. of Minnesota
Pogwizd, Steven — Univ. of Illinois at Chicago
He, Bin — Univ. of Minnesota

16:30-17:30 SaP2B1.28

Contour Detection of the Cornea from OCT Radial Images, pp. 5612-5615.

Graglia, Florian — Univ. of Marseille, Information and System Science Lab.
Mari, Jean-Luc — Univ. of Marseille, Information and System ScienceLaborator
Baikoff, Georges — Clinique of Marseille
Sequeira, Jean — Univ. of Marseille, Information and System Science Lab.

16:30-17:30 SaP2B1.29

Kernelized Fuzzy C-Means Method in Fast Segmentation of Demyelination Plaques in Multiple Sclerosis, pp. 5616-5619.

Kawa, Jacek — Silesian Univ. of Tech.
Pietka, Ewa — Silesian Univ. of Tech.

16:30-17:30 SaP2B1.30

Multi-Contrast MR for Enhanced Bone Imaging and Segmentation, pp. 5620-5623.

Dalvi, Rupin — Univ. of British Columbia
Abugharbieh, Rafeef — Univ. of British Columbia
Wilson, Derek Charles — Univ.
Wilson, David — Univ. of British Columbia

16:30-17:30 SaP2B1.31

Automatic Segmentation on Cell Image Fusing Gray and Gradient Information, pp. 5624-5627.

Liu, Boqiang — Shandong Univ.
Yin, Cong — Shandong Univ.
Liu, Zhongguo — Shandong Univ.
Zhang, Yanyan — Shandong Univ.

16:30-17:30 SaP2B1.32

A Fast and Automatic Segmentation Method of MR Brain Images Based on Genetic Fuzzy Clustering Algorithm, pp. 5628-5633.

Nie, Shengdong — Univ. of Shanghai for Science and Tech.
Zhang, Yingli — Univ. of Shanghai for Science and Tech.
Li, Wen — Univ. of Shanghai
Chen, Zhaoxue — Univ. of Shanghai for Science and Tech.

16:30-17:30 SaP2B1.33

Quantification of Microarchitecture Bone Junctions Based on a Dual Tree M-Band Wavelet Decomposition, pp. 5634-5637.

Ayadi, Walid — SUP'COM
Benazza-Benyahia, Amel — SUP'COM
Sevestre-Ghalila, Sylvie — U2S, ENIT / MAP5 Univ. Paris Descartes

16:30-17:30 SaP2B1.34

Computer-Aided Mass Detection on Digitized Mammograms Using Adaptive Thresholding and Fuzzy Entropy, pp. 5638-5640.

younesi, farzad — medical sciences/Univ. tehran
Riyahi-Alam, Nader — School of Medicine, Medical Sciences/Univ. of Tehran
aghaeizadeh zoroofi, reza — Univ. tehran
Ahmadian, Alireza — Tehran Univ. of Medical Sciences
Guiti, Massomeh — Tehran Univ. of Medical Sciences

16:30-17:30 SaP2B1.35

Segmentation of Folds in Tissue Section Images, pp. 5641-5644.

Palokangas, Sakari — Tampere Univ. of Tech.
Selinummi, Jyrki — Tampere Univ. of Tech.
Yli-Harja, Olli — Tampere Univ. of Tech.

16:30-17:30 SaP2B1.36

Live-Wire-Based 3D Segmentation Method, pp. 5645-5648.

Wieclawek, Wojciech — Silesian Univ. of Tech.
Pietka, Ewa — Silesian Univ. of Tech.

16:30-17:30 SaP2B1.37

Segmentation of Solid Nodules in Ultrasonographic Breast Image Based on Wavelet Transform, pp. 5649-5652.

Park, Sangyun — Graduate School, Seoul National Univ. Seoul, Korea
Kong, Hyoun-Joong — Seoul National Univ.
Moon, Woo Kyung — Seoul National Univ. Hospital
Kim, Hee Chan — Seoul National Univ.

SaP2B2 — Forum 5&6

Security, Transmission and Encoding of Medical Images (Poster Session)

Chair: Coatrieux, Gouenou — ENST Bretagne - Inserm
Co-Chair: Laine, Andrew — Columbia Univ.

16:30-17:30 SaP2B2.1

Mixed Reversible and RONI Watermarking for Medical Image Reliability Protection, pp. 5653-5656.

Coatrieux, Gouenou — ENST Bretagne - Inserm
Montagner, Julien — INSERM ; GET ENST Bretagne
Huang, Hui — INSERM, GET ENST Bretagne
Roux, Christian — ENST Bretagne - INSERM

16:30-17:30 SaP2B2.2

Security of Distributed Processing of Medical Image Data Using JINI Technology, pp. 5657-5660.

Ruminski, Jacek — Gdansk Univ. of Tech.

16:30-17:30 SaP2B2.3

Evaluation of Medical Image Watermarking with Tamper Detection and Recovery (AW-TDR), pp. 5661-5664.

Zain, Jasni Mohamad — Univ. Malaysia Pahang
Fauzi, Mohammed — Intl Islamic Univ. of Malaysia

16:30-17:30 SaP2B2.4

Context Adaptive Lossless and Near-Lossless Coding for Digital Angiographies, pp. 5665-5668.

Augusto Penna dos Santos, Rafael — UFRGS
Scharcanski, Jacob — UFRGS

16:30-17:30 SaP2B2.5

Interactive and Adaptive Progressive Transmission of Medical Images, pp. 5669-5672.

Lo, Jen-Lung — Cardiff Univ.
Sanei, Saeid — Cardiff Univ.
Nazarpour, Kianoush — Cardiff Univ.

SaP2C1 — Forum 5&6

Implantable and Communicative Sensors, Electrodes, System Integration III (Poster Session)

Co-Chair: Neves, Herc — IMEC

16:30-17:30 SaP2C1.1

Optimal Operating Frequency in Wireless Power Transmission for Implantable Devices, pp. 5673-5678.

Poon, Ada S Y — Univ. of Illinois at Urbana
O'Driscoll, Stephen — Stanford Univ.
Meng, Teresa — Stanford Univ.

16:30-17:30 SaP2C1.2

Analysis of Class-E Amplifier with Mixed Data Modulation for Biotelemetry, pp. 5679-5682.

Yuce, Mehmet Rasit — Univ. of Newcastle
Laskovski, Anthony N. Laskovski — Univ. of Newcastle

16:30-17:30 SaP2C1.3

In Vitro Investigation of Eddy Current Effect on Pacemaker Operation Generated by Low Frequency Magnetic Field, pp. 5683-5686.

Babouri, Abdesselam — LIEN, Univ. of Nancy 1

16:30-17:30 SaP2C1.4

Biomedical Stretchable Sytems Using Mid Based Stretchable Electronics Technology, pp. 5687-5690.

axisa, fabrice — IMEC
Bossuyt, Frederick — TFCG IMEC Ghent

16:30-17:30 SaP2C1.5

A Laboratory Study on a Capacitive Displacement Sensor As an Implant Microphone in Totally Implant Cochlear Hearing Aid Systems, pp. 5691-5694.

huang, ping — case western Res. Univ.
guo, jun — case western Res. Univ.
cliff a, megerian — case western Res. Univ.
Young, Darrin — Case Western Res. Univ.
Ko, Wen — Case Western Res. Univ.

16:30-17:30 SaP2C1.6

A Wide Range Charge-Balancing Circuit Using Floating-Gate Transistors, pp. 5695-5698.

Hu, Jingzhen — North Carolina State Univ.
Gordon, Christal — NCSU

16:30-17:30 SaP2C1.7

Development of a System for Finding Best Electrode Position for Myoelectric Hand Control for Derating of Upper Limb Amputee, pp. 5699-5702.

Konishi, Yuto — Osaka Electro-Communication Univ.
Mizobata, Yusuke — Osaka Electro-Communication Univ.
Yoshida, Masaki — Osaka Electro-Communication Univ.

16:30-17:30 SaP2C1.8

Evaluation of an Implantable ECG Monitoring Device in Vitro and in Vivo, pp. 5703-5706.

Riistama, Jarno — Tampere Univ. of Tech.
Lekkala, Jukka — Tampere Univ. of Tech.
Väisänen, Juho — Tampere Univ. of Tech.
Heinisuo, Sami Markus — Tampere Univ. of Tech.
Kaihilahti, Jutta — Univ. of Helsinki, Faculty of veterinary medicine

16:30-17:30 SaP2C1.9

Microfluidic Module System with Piezo Driven Microvalve for Synthesis of Radiopharmaceutical Products, pp. 5707-5710.

Scheuenpflug, Michael — TU München
Guenther, Daniel — TU München
Irlinger, Franz — TU München
Lueth, Tim — Tech. Univ. of Munich

SaP2C2 — Forum 5&6

Wearable and Portable Communicative Systems III (Poster Session)

16:30-17:30 SaP2C2.1

A Low-Cost Biomedical Signal Transceiver Based on a Bluetooth Wireless System, pp. 5711-5714.

Fazel-Rezai, Reza — Univ. of Manitoba
Pauls, Mark — Univ. of Manitoba
Slawinski, David — Univ. of Manitoba

16:30-17:30 SaP2C2.2

Wearable System-On-A-Chip Radiometer for Remote Temperature Sensing and Its Application to the Safeguard of Emergency Operators, pp. 5715-5718.

Fonte, Alessandro — Univ. of Pisa
Alimenti, Federico — Univ. of Perugia
Zito, Domenico — Univ. of Pisa
Neri, Bruno — Univ. of Pisa
De Rossi, Danilo — Univ. of Pisa
Lanata', Antonio — Univ. of Pisa
tognetti, alessandro — Univ. of Pisa

16:30-17:30 SaP2C2.3

Multisensor Approach to Walking Distance Estimation with Foot Inertial Sensing, pp. 5719-5722.

Alvarez, Juan Carlos — Univ. de Oviedo
Gonzalez, Rafael C. — Univ. de Oviedo
Álvarez Prieto, Diego — Univ. de Oviedo
Lopez, Antonio M. — Univ. de Oviedo
Rodríguez-Uría, Javier — Univ. de Oviedo

16:30-17:30 SaP2C2.4

A Wireless Tongue-Computer Interface Using Stereo Differential Magnetic Field Measurement, pp. 5723-5726.

Huo, Xueliang — North Carolina State Univ.
Wang, Jia — North Carolina State Univ.
Ghovanloo, Maysam — North Carolina State Univ.

SaP2C3 — Forum 5&6

Textile Sensors and Smart Fabrics II (Poster Session)

Co-Chair: Paradiso, Rita — Milior SpA

16:30-17:30 SaP2C3.1

Development of a Wireless Capacitive Sensor for Ambulatory ECG Monitoring Over Clothes, pp. 5727-5730.

Yama, Yoshihiro — TOKYO DENKI Univ.
Ueno, Akinori — Tokyo Denki Univ.
UCHIKAWA, Yoshinori — Tokyo Denki Univ.

16:30-17:30 SaP2C3.2

A Capacitive Sensor System for Measuring Laplacian Electromyogram through Cloth: A Pilot Study, pp. 5731-5734.

Ueno, Akinori — Tokyo Denki Univ.
UCHIKAWA, Yoshinori — Tokyo Denki Univ.
Noshiro, Makoto — Kitasato Univ.

16:30-17:30 SaP2C3.3

Electrical Properties of Textile Electrodes, pp. 5735-5738.

Rattfalt, Linda — Linköping Univ.
Chedid, Michel — Saab Training Systems
Hult, Peter — Linköpings Univ.
Lindén, Maria — Malardalen Univ.
Ask, Per — Linköpings Univ.

16:30-17:30 SaP2C3.4

Flexible Dry Surface-Electrodes for ECG Long-Term Monitoring, pp. 5739-5742.

Hoffmann, Klaus-Peter — Fraunhofer Inst. für Biomedizinische Tech.
Ruff, Roman — Fraunhofer Inst. für Biomedizinische Tech.

SaP2C4 Forum 5&6

Sensors and Systems Enabling Ehealth, Phealth, Mhealth II (Poster Session)

Chair: MAGLAVERAS, NIKOLAOS — Aristotle Univ. of Thessaloniki

16:30-17:30 SaP2C4.1

System to Assess Accuracy of Micromanipulation, pp. 5743-5746.

Tun Latt, Win — Nanyang Tech. Univ.
Tan, U-Xuan — Nanyang Tech. Univ. Singapore
Lin, Jing Kai Daniel — Nanyang Tech. Unviersity
Veluvolu, Kalyana C. — Nanyang Tech. Univ.
Shee, Chengyap — Nanyang Tech. Univ.
Ang, Wei Tech — Nanyang Tech. Univ.

16:30-17:30 SaP2C4.2

An Evaluation of the Predictive Power of Component Vector Angles for Seated Spinal Posture Monitoring, pp. 5747-5750.

Dunne, Lucy — Univ. Coll. Dublin
Walsh, Pauline — Univ. Coll. Dublin
smyth, barry — Univ. Coll. dublin
caulfield, brian — UCD

16:30-17:30 SaP2C4.3

Association of Heart Rates with Stress Response Inventory Scores in Different Age Groups, pp. 5751-5753.

Kim, Jinho — Information and Communications Univ.
Youn, Chan-Hyun — Information and communications Univ.
Woo, Jong-Min — paik hospital
Kim, Desok — Information and Communications Univ.
Jung, Suntae — Samsung Electronics, Inc.

16:30-17:30 SaP2C4.4

A Novel Blood Pressure Monitoring Device for Ubiquitous Healthcare Services, pp. 5754-5757.

Tatara, Naoe — Nippon Telegraph and Telephone
Koizumi, Hiroshi — Nippon Telegraph and Telephone Corp. (NTT)
Mino, Shinji — Nippon Telegraph and Telephone
Hayashida, Shoichi — NTT Electronics Corp.
Aihara, Kimihisa — NTT Advanced Tech. Corp.
Shimada, Junichi — Nippon Telegraph and Telephone
Uenishi, Yuji — NTT
Tochikubo, Osamu — Yokohama City Univ.

SaP2C5 Forum 5&6

Integrated Wearable Systems towards Biomedical Applications II (Poster Session)

Chair: Di Rienzo, Marco — Fondazione Don Carlo Gnocchi

16:30-17:30 SaP2C5.1

A Handheld Device for Simultaneous Detection of Electrical and Mechanical Cardio-Vascular Activities with Synchronized ECG and CW-Doppler Radar, pp. 5758-5761.

Muehlsteff, Jens — Philips
Thijs, Jeroen A.J. — Philips
Pinter, Robert — Philips
Morren, Geert — Philips
Muesch, Guido — Philips Tech. Res. Lab.

16:30-17:30 SaP2C5.2

A New Method for Intra Ocular Pressure in Vivo Measurement: First Clinical Trials, pp. 5762-5765.

DUBOIS, Patrick — Inserm
ZEMMOURI, Jaouad — OSYRIS
ROULAND, Jean François — CHRU
ELENA, Pierre Paul — IRIS-PHARMA
Lopes, Renaud — Inserm, U703 and Univ. of Lille1
PUECH, Philippe — CHRU de Lille

16:30-17:30 SaP2C5.3

Low Power IC Design of the Wireless Monitoring System of the Orthopedic Implants, pp. 5766-5769.

Chen, Hong — Tsinghua Univ.
Liu, Ming — Tsinghua Univ.
Jia, Chen — Tsinghua Univ.
Zhang, Chun — Department of Electronic Engineering, Tsinghua Univ. Beiji
Wang, Zhihua — Tsinghua Univ.

16:30-17:30 SaP2C5.4

Measurement System for Gesture Characterization During Chest Physiotherapy Act on Newborn Babies Suffering from Bronchiolitis, pp. 5770-5773.

MARECHAL, Luc — Univ. of Savoie
BARTHOD, Christine — SYMME
LOTTIN, Jacques — SYMME
GAUTIER, Gérard — SYMME
JEULIN, Jean-Claude — RB74

SaP2D1 Forum 5&6

Auditory and Visual Neuroprostheses II (Poster Session)

Chair: Suaning, Gregg — The Univ. of Newcastle
Co-Chair: Szeto, Andrew — San Diego State Univ.

16:30-17:30 SaP2D1.1

A Prototype Retinal Prosthesis for Visual Stimulation, pp. 5774-5777.

Abu-Faraj, Ziad — American Univ. of Science & Tech.
Abou Rjeily, Dany — American Univ. Coll. of Science and Tech.
Bou Nasreddine, Rayan — American Univ. of Science and Tech.
Andari, Majid — American Univ. of Science and Tech.
Taok, Habib — American Univ. of Science and Tech.

16:30-17:30 SaP2D1.2

Accurate Presentation of the Target Range with a 2-D Tactile Stimulator Array for Acoustic Vision Substitute System, pp. 5778-5781.

Taki, Hirofumi — Kyoto Univ.
Sato, Toru — Kyoto Univ.
Matsuda, Tetsuya — Kyoto Univ.

16:30-17:30 SaP2D1.3

Comparison of Voltage Parameters for the Stimulation of Normal and Degenerate Retina, pp. 5782-5785.

Ye, Jang Hee — Chungbuk National Univ. Medical School
Goo, Yong Sook — Chungbuk National Univ. Medical Sch

16:30-17:30 SaP2D1.4

Implantable Stimulator Failures: Causes, Outcomes, and Solutions, pp. 5786-5789.

Liu, Xiao — Univ. Coll. London
Demosthenous, Andreas — Univ. Coll. London
Donaldson, Nicholas de Neufville — Univ. Coll. London

16:30-17:30 SaP2D1.6

In Vivo Stimulation on Rabbit Retina Using CMOS LSI-Based Multi-Chip Flexible Stimulator for Retinal Prosthesis, pp. 5790-5793.

Tokuda, Takashi — Nara Inst. of Science & Tech.
Asano, Ryosuke — Nara Inst. of Science and Tech.
Sugitani, Sachie — Nara Inst. of Science and Tech.
Terasawa, Yasuo — NIDEK Co.
Nunoshita, Masahiro — Nara Inst. of Science and Tech.
Nakauchi, Kazuaki — Osaka Univ.
Fujikado, Takashi — Osaka Univ.
Tano, Yasuo — Osaka Univ.
Ohta, Jun — Nara Inst. of Science and Tech.

16:30-17:30 SaP2D1.7

Application of Particle Swarm System As a Novel Parameter Optimization Technique on Spatiotemporal Retina Model, pp. 5794-5797.

NIU, Xixian — Shanghai Jiao Tong Univ.
Qiu, Yihong — Shanghai Jiao Tong Univ.
Tong, Shanbao — Shanghai Jiao Tong Univ.
Zhu, Yisheng — Shanghai Jiaotong Univ. Shanghai, China

16:30-17:30 SaP2D1.7

The Reference Ear Modeling Method for Internally Feedback Controlled Digital Hearing Aid Chip, pp. 5798-5801.

KIM, SUNYOUNG — KAIST

SaP2D2 Forum 5&6

Molecular and Cellular Biomechanics II (Poster Session)

16:30-17:30 SaP2D2.1

High Resolution Regional Elasticity Mapping of the Human Prostate, pp. 5802-5805.

Murayama, Yoshinobu — Nihon Univ.
Omata, Sadao — Nihon Univ.
Yajima, Toshikuni — Nihon Univ. Coll. of engineering
Peng, Qiyu — Stanford Univ.
Shishido, Keichi — Fukushima Medical School
Peehl, Donna — Stanford Univ. School of Medicine
Constantinou, Chris — Stanford Univ. School of Medicine

16:30-17:30 SaP2D2.2

A Model of Vein Graft Intimal Hyperplasia, pp. 5806-5809.

Tran-Son-Tay, Roger — Univ. of Florida
Hwang, Minki — Univ. of Florida
Berceli, Scott — Univ. of Florida
Ozaki, C Keith — Univ. of Florida
Garbey, Marc — Univ. of Houston

16:30-17:30 SaP2D2.3

Measurement of Muscle Fiber Stiffness During Stretch with Two Continuous Different Velocities in Skeletal Muscle Fibers, pp. 5810-5813.

Kobayashi, Takakazu — Shibaura Inst. of Tech.
Masaaki, Iwai — Shibaura Inst. of Tech.
Nguyen Phan, Kien — Shibaura Inst. of Tech.

16:30-17:30 SaP2D2.4

Effects of Steep Pulsed Electric Fields (SPEF) on Mitochondrial Transmembrane Potential of Human Liver Cancer Cell, pp. 5814-5817.

Mi, Yan — Chongqing Univ.
Sun, Caixin — Chongqing Univ.
Yao, Chenguo — Chongqing Unversity
Li, CX — Chongqing Univ.
Mo, Dengbin — Chongqing Univ.
Tang, Liling — Chongqing Univ.
Liu, Huan — Chongqing Univ.

16:30-17:30 SaP2D2.5

Frequency Response Model and Simulation of Transmembrane Potentials on Cellular Inner and Outer Membranes, pp. 5818-5821.

Chen, Xin — Chongqing Univ.
Yao, Chenguo — Chongqing Unversity
Sun, Caixin — Chongqing Univ.
Li, CX — Chongqing Univ.
Mi, Yan — Chongqing Univ.
Li, Cong — Chongqing Medical Univ.
Liu, Huan — Chongqing Univ.

SaP2D3 — Forum 5&6

Cellular and Tissue Engineering II (Poster Session)

16:30-17:30 SaP2D3.1

Electric Impedance Assisted Micropipette Aspiration, pp. 5822-5825.

Kovanen, Katrin — Tampere Univ. of Tech.
Lukkari, Mikko — Tampere Univ. of Tech.
Purmonen, Sami — Univ. of Tampere
Ylikomi, Timo — Univ. of Tampere
Viitanen, Jouko — Tech. Res. Center of Finland
Kallio, Pasi — Tampere Univ. of Tech.

16:30-17:30 SaP2D3.2

The Dissociation Rate Affects the Directed Motion of the Molecular Motor, pp. 5826-5828.

Han, Yingrong — Hebei Univ. of Tech.
ZHAN, Yong — Hebei Univ. of Tech.
Zhao, Tongjun — Hebei Uniersity of Tech.
Zhang, Yuhong — Hebei Univ. of Tech.
Liu, Hui — Hebei Univ. of Tech.
Chen, Ya-Fei — Univ.
Mei, Jun-Ping — Univ.

16:30-17:30 SaP2D3.3

Effects of Low Level Red-Light Irradiation on the Proliferation of Mesenchymal Stem Cells Derived from Rat Bone Marrow, pp. 5829-5832.

Li, Wen-Tyng — Chung-Yuan Christian Univ.

16:30-17:30 SaP2D3.4

Effect of Low Intensity Ultrasounds on the Growth of Osteoblasts, pp. 5833-5836.

Chen, Show-Huie — Chung Yuan Christian Univ.
Chiu, Chun-Yi — Chung Yuan Christian Univ.
Yeh, Jui-Ming — chung Yuan Christian Univ.
Wang, Shyh-Hau — Chung Yuan Christian Univ.

16:30-17:30 SaP2D3.5

Effect of Ultrasound Doses on the Amyloid-¸; 25-35 Induced PC12 Apoptosis, pp. 5837-5840.

Chiu, Chun-Yi — Chung Yuan Christian Univ.
Chen, Show-Huie — Chung Yuan Christian Univ.
Wang, Shyh-Hau — Chung Yuan Christian Univ.

SaP2D4 — Forum 5&6

Biomaterials and Cell-Biomaterial Interactions II (Poster Session)

Chair: Migonney, Veronique — Univ. Paris

16:30-17:30 SaP2D4.1

Sterilization Using 365 Nm UV-LED, pp. 5841-5844.

Yagi, Noriyuki — The Univ. of Tokushima
Mori, Mirei — The Univ. of Tokushima
Hamamoto, Akiko — The Univ. of Tokushima
Akutagawa, Masatake — The Univ. of Tokushima
Tachibana, Souko — The Univ. of Tokushima
Takahashi, Akira — The Univ. of Tokushima
Ikehara, Toshitaka — Univ. of Tokushima
Kinouchi, Yohsuke — The Univ. of Tokushima
Nakano, Masayuki — The Univ. of Tokushima

16:30-17:30 SaP2D4.2

Effect of a Laser Irradiation on the Vascularisation of Safety and X-Ray Radiated Bone, pp. 5845-5848.

Desmons, Sophie — Univ. of LIlle 2, odontology
Delfosse, Caroline — Univ. of Lille2
Rochon, Philippe — Lille Univ. Hospital
Buys, Bruno — Inserm, IFR 114
Penel, Guillaume — Univ. of lille2
Mordon, Serge — Lille Univ. Hospital

16:30-17:30 SaP2D4.3

Biocompatibility and Wettability of Crystalline SiC and Si Surfaces, pp. 5849-5852.

Coletti, Camilla — Univ. of South Florida
Jaroszeski, Mark — Univ. of South Florida
Pallaoro, Alessia — IFN-CNR
Hoff, Andrew — Univ. of South Florida
Iannotta, Salvatore — IFN-CNR
Saddow, Stephen — Univ. of South Florida

16:30-17:30 SaP2D4.4

Biomimetic Synthesis of Calcium Phosphate Materials on Alkaline-_; Treated Titanium, pp. 5853-5856.

Salemi, Hoda — Islamic Azad Univ. and Sciencebranch,Tehran,Iran

16:30-17:30 SaP2D4.5

Immobilization of Fibronectin Onto a Large Area Nanoimprinted Polystyrene Patterns, pp. 5857-5859.

Lee, Wonbae — Korea Univ.
Ko, You-Jin — Korea Univ.
Lee, Kyu Back — Korea Univ.

16:30-17:30 SaP2D4.6

Generation of Patterned Cell Co-Cultures in Silicone Tubing Using a Microelectrode Technique and Electrostatic Assembly, pp. 5860-5863.

Kaji, Hirokazu — Tohoku Univ.
Sekine, Soichiro — Tohoku Univ.
Hashimoto, Masahiko — Tohoku Univ.
Kawashima, Takeaki — Tohoku Univ.
Nishizawa, Matsuhiko — Tohoku Univ.

SaP2D5 Forum 5&6

Personal Health Systems III (Poster Session)

16:30-17:30 SaP2D5.1

A Service Platform Architecture Design towards a Light Integration of Heterogeneous Systems in the Wellbeing Domain, pp. 5864-5867.

Yang, Yaojin — Nokia Res. Center
Aino, Ahtinen, Aino — Nokia Res. Center
Lähteenmäki, Jaakko, Johannes — VTT Tech. Res. Centre of Finland
Nyman, Petri — Afetco Ltd.
Paajanen, Henrik — Afetco OY
Teijo Peltoniemi, Teijo — Afetco Oy
Carlos Quiroz, Carlos — Nokia Res. Center

16:30-17:30 SaP2D5.2

Development of Easy Operating Arterial Stiffness Assessment Instrument for Homecare, pp. 5868-5871.

Wu, Hsien-Tsai — National Dong Hwa Univ.

16:30-17:30 SaP2D5.3

Development of a Portable Vital Sensing System for Home Telemedicine, pp. 5872-5877.

Ichihashi, Fumiyuki — Univ. of Tsukuba
Sankai, Yoshiyuki — Univ. of Tsukuba

16:30-17:30 SaP2D5.4

Drivers and Challenges of Personal Health Systems in Workplace Health Promotion (I), pp. 5878-5881.

Ilvesmäki, Antti — VTT Tech. Res. Centre of Finland

16:30-17:30 SaP2D5.5

Personal Health Systems and Value Creation Mechanisms in Occupational Health Care (I), pp. 5882-5885.

Auvinen, Ari-Matti — Helsinki Univ. of Tech.

16:30-17:30 SaP2D5.6

A Comparative Evaluation between Conditions of the Wrist Band Capacitively-Coupled ECG Recording through Signal-To-Noise Ratio, pp. 5886-5889.

Nakamura, Hideo — Osaka Electro-Communication Univ.
Shimada, Koichiro — Osaka Electro-Communication Univ.
Fujie, Tatsuro — Osaka Electro-Communication Univ.

16:30-17:30 SaP2D5.7

Wireless Thermal Sensor Network with Adaptive Low Power Design, pp. 5890-5893.

Lee, Ho-Yin — National Cheng Kung Univ.
Chen, Shih-Lun — National Cheng Kung Univ.
Chen, Chiung-An — National Cheng Kung Univ.
Luo, Ching-Hsing — National Cheng Kung Univ.

16:30-17:30 SaP2D5.8

A Wireless Medical Monitoring Over a Heterogeneous Sensor Network, pp. 5894-5898.

Yuce, Mehmet Rasit — Univ. of Newcastle
Ng, Peng Choong — Univ. of Newcastle
Lee, Chin Kang — Univ. of Newcastle
Khan, Jamil Y. — Univ. of Newcastle
Liu, Wentai — Univ. of California, Santa Cruz

16:30-17:30 SaP2D5.9

Target Source Detection Using an Improved Sensing Model in Wireless Sensor Networks (ISMWSNs), pp. 5899-5902.

Yang, Yongju — yonsei Univ.
Lee, Junghoon — Yonsei Univ.
JUNG, JIPMIN — YONSEI UNV.
Song, Sangha — Yonsei Univ.
Yoon, Hyung Ro — Yonsei Univ.
Yoon, Young-ro — Yonsei Univ.

16:30-17:30 SaP2D5.10

The Lavatory-Typed Health Monitoring System with Linear System Identification Scheme for Home Healthcare, pp. 5903-5906.

Nam, Ki Tae — Yonsei Univ.
Ko, Jun Seob — Yonsei Univ.
Park, Sung Bin — Yonsei Univ.
Yoon, Hyung Ro — Yonsei Univ.

16:30-17:30 SaP2D5.11

A Customizable Mobile Tool for Supporting Health Behavior Interventions, pp. 5907-5910.

Koskinen, Esa Tapani — Nokia

16:30-17:30 SaP2D5.12

An Approach Based on XML for Communication in Home Healthcare Systems, pp. 5911-5914.

Martin Moreno, Javier — Univ. of Alicante
Ruiz Fernandez, Daniel — Univ. of Alicante
Soriano Paya, Antonio — Univ. of Alicante

16:30-17:30 SaP2D5.13

Analysis of 1/f Fluctuations of Heart Rate Response While Walking or Listening to Sounds, pp. 5915-5918.

Tsuruoka, Masako — Univ. of Tokyo
TSURUOKA, Yuriko — The Inst. of Statistical Mathematics
Shibasaki, Ryosuke — Center for Spatial Information Science, Univ. of Tokyo
Yasuoka, Yoshifumi — Univ. of Tokyo

SaP2D6 — Forum 5&6

Educational Tools and Degrees in Biomedical Engineering (Poster Session)

16:30-17:30 SaP2D6.1

Microarray Simulator As Educational Tool, pp. 5919-5922.

Ruusuvuori, Pekka — Tampere Univ. of Tech.
Nykter, Matti — Tampere Univ. of Tech.
Mäkiraatikka, Eeva — Tampere Univ. of Tech.
Lehmussola, Antti — Tampere Univ. of Tech.
Korpelainen, Tomi — Tampere Univ. of Tech.
Erkkilä, Timo — Tampere Univ. of Tech.
Yli-Harja, Olli — Tampere Univ. of Tech.

16:30-17:30 SaP2D6.2

Education in Biomedical Informatics: Learning by Doing Bioimage Archiving, pp. 5923-5927.

Marceglia, Sara — Pol. di Milano
Bonacina, Stefano — Pol. di Milano
Mazzola, Luca — Pol. di Milano
Pinciroli, Francesco — Pol. di Milano

16:30-17:30 SaP2D6.3

A Third Generation Physiology Lab Course for Biomedical Engineering and Health Sciences, pp. 5928-5931.

Schmidt, Robert — Cleveland Medical Devices Inc.

16:30-17:30 SaP2D6.4

Biomedical Engineering Degrees at Lyon 1 University, pp. 5932-5935.

PERRIN, Emmanuel — Univ. Lyon 1
Berger-Vachon, Christian — UFR GEP
RAY, Cedric — Univ. Lyon 1
Canet-Soulas, Emmanuelle — Univ. Lyon 1
HARTMANN, Daniel — Univ. Lyon 1
OUDIN-DARDUN, Fabienne — Univ. Lyon 1
Briguet, Andre — Univ. Claude Bernard LYON1, CPE

16:30-17:30 SaP2D6.5

Biomedical Engineering As Health Care Profession, pp. 5936-5939.

Lhotska, Lenka — Czech Tech. Univ. in Prague

16:30-17:30 SaP2D6.6

Biomedical Education for In-Hospital Engineers (I), pp. 5940-5941.

Langevin, François — Compiegne Univ. of Tech.
Donadey, Alain — Compiegne Univ. of Tech.
Hadjes, Pierre — Compiegne Univ. of Tech.
Blagosklonov, Oleg — CHU Jean Minjoz

SaD01 — Gratte Ciel 1

Nonlinear Dynamic Analysis of Biomedical Signals I (Oral Session)

Co-Chair: Nollo, Giandomenico — Univ. of Trento

17:30-17:45 SaD01.1

Characterization of Sample Entropy in the Context of Biomedical Signal Analysis, pp. 5942-5945.

Cuesta-Frau, David — Pol. Univ. of Valencia

17:45-18:00 SaD01.2

Multiscale Regularity Analysis of the Heart Rate Variability: Stratification of Cardiac Death Risk, pp. 5946-5949.

Valencia Murillo, Jose Fernando — Tech. Univ. of Catalonia
Vallverdu, Montserrat — Tech. Univ. of Catalonia
Cygankiewicz, Iwona — Medical Univ. of Lodz
Voss, Andreas — Univ. of Applied Sciences Jena
Vazquez, Rafael — Hospital Univ. Nuestra Seńora de Valme
Bayes de Luna, Antonio — Hospital de la Santa Creu i Sant Pau
Caminal, Pere — Tech. Univ. of Catalonia (UPC)

18:00-18:15 SaD01.3

Mapping Heart Dynamics by Using Nonlinear Indicators, pp. 5950-5953.

Bonasera, Aldo — Istituto Nazionale di Fisica Nucleare
Bucolo, Maide — Univ. degli Studi di Catania
Caponetto, Riccardo — Univ. of Catania
Fortuna, Luigi — Univ. of Catania
Sapuppo, Francesca — Univ. degli Studi di Catania
Virzě, Maria Celvisia — Univ. of Catania

18:15-18:30 SaD01.4

Mutual Nonlinear Prediction of Cardiovascular Variability Series: Comparison between Exogenous and Autoregressive Exogenous Models, pp. 5954-5957.

Faes, Luca — Univ. of Trento
Porta, Alberto — Univ. degli Studi di Milano
Nollo, Giandomenico — Univ. of Trento

18:30-18:45 SaD01.5

The Strength of QT-RR Coupling Decreases During Graded Head-Up Tilt, pp. 5958-5961.

Porta, Alberto — Univ. degli Studi di Milano
Tobaldini, Eleonora — Univ. degli Studi di Milano
Montano, Nicola — Univ. degli Studi di Milano
Gnecchi-Ruscone, Tomaso — Ospedale S.L. Mandic

18:45-19:00 SaD01.6

Developing Robust Recurrence Plot Analysis Techniques for Investigating Infant Respiratory Patterns, pp. 5962-5966.

Terrill, Philip Ian — Univ. of Queensland
Wilson, Stephen — Univ. of Queensland
Cooper, David — Mater Misericordiae Children's Hospital
Suresh, Sadasivam — Mater Children's Hospital

SaD02 Gratte Ciel 2

Signal Processing in Proteomics and Biological Data (Oral Session)

Chair: Carrault, Guy — Univ. de Rennes 1

17:30-17:45 SaD02.1

Nonlinear Modeling of Glucose Metabolism: Comparison of Parametric vs. Nonparametric Methods, pp. 5967-5970.

Mitsis, Georgios D. — National Tech. Univ. of Athens
Marmarelis, Vasilis — Univ. of Southern California

17:45-18:00 SaD02.2

An Insulin Infusion Advisory System for Type 1 Diabetes Patients Based on Non-Linear Model Predictive Control Methods, pp. 5971-5974.

Zarkogianni, Konstantia — National Tech. Univ. of Athens
Mougiakakou, Stavroula — National Tech. Univ. of Athens
Prountzou, Aikaterini — National Tech. Univ. of Athens
Vazeou, Andriani — Faculty of Nursing, Univ. of Athens
Bartsocas, Christos — Faculty of Nursing, Univ. of Athens
Nikita, Konstantina — National Tech. Univ. of Athens

18:00-18:15 SaD02.3

Effects of Residual Fluorescence on Time-Resolved Signals Simulated with the Finite Element Method in Biological Tissues, pp. 5975-5978.

Kervella, Marine — Groupe ISAIP-ESAIP
Humeau, Anne — Groupe ISAIP-ESAIP and Univ. d'Angers
L'huillier, Jean Pierre — ENSAM- ANGERS

18:15-18:30 SaD02.4

Bayesian Estimation for Molecular Profile Reconstruction in Proteomics Based on Liquid Chromatography and Mass Spectrometry, pp. 5979-5982.

STRUBEL, Gregory — CEA LETI MINATEC
GIOVANNELLI, Jean-Francois — CNRS-Supelec-UPS
PAULUS, Caroline — CEA LETI MINATEC
Gerfault, Laurent — CEA LETI
Grangeat, Pierre — CEA LETI, MINATEC

18:30-18:45 SaD02.5

Chromatographic Alignment Combined with Chemometrics Profile Reconstruction Approaches Applied to LC-MS Data, pp. 5983-5986.

PAULUS, Caroline — CEA LETI MINATEC
Bonnet, Stéphane — CEA Léti MINATEC
Gerfault, Laurent — CEA LETI
Mery, Emeline — CEA LETI
STRUBEL, Gregory — CEA LETI MINATEC
Ricoul, Florence — CEA LETI
Grangeat, Pierre — CEA LETI, MINATEC

18:45-19:00 SaD02.6

A Novel Ensemble Strategy for Classification of Prostate Cancer Protein Mass Spectra, pp. 5987-5990.

Assareh, Amin — Amirkabir Univ. of Tech.
Moradi, Mohammad Hassan — Amirkabir Univ. of Tech.
Esmaeili, Vahid — Sharif Univ. of Tech.

19:00-19:15 SaD02.7

A Framework for Group Analysis of Fmri Data Using Dynamic Bayesian Networks, pp. 5991-5994.

Li, Junning — Univ. of British Columbia
Wang, Z. Jane — Univ. of British Columbia
McKeown, Martin — Univ. of British Columbia

SaD03 Bellecour 1
Cardiac Imaging I (Oral Session)

Chair: Magnin, Isabelle — INSA

17:30-17:45 SaD03.1

From 3D to 4D Imaging: Is That Useful for Interventional Cardiac Electrophysiology?, pp. 5995-5998.

FENICI, Riccardo — Catholic Univ. of Sacred Heart
BRISINDA, Donatella — Catholic Univ. of Sacred Haert

17:45-18:00 SaD03.2

A New Fully-Digital Anthropomorphic and Dynamic Thorax/Heart Model, pp. 5999-6002.

HADDAD, Rana — INSA de Lyon
Clarysse, Patrick — CNRS UMR#5220, Inserm U630, Univ. of Lyon
Magnin, Isabelle — INSA

18:00-18:15 SaD03.3

3D Multi-Object Segmentation of Cardiac MSCT Imaging by Using a Multi-Agent Approach, pp. 6003-6006.

FLEUREAU, Julien — INSERM, U642, Univ. de Rennes 1
GARREAU, Mireille — INSERM, U642, Univ. de Rennes 1
Boulmier, Dominique — CHU Rennes
Hernández, Alfredo I — INSERM U642 LTSI.

18:15-18:30 SaD03.4

Towards in Vivo Diffusion Tensor MRI on Human Heart Using Edge-Preserving Regularization, pp. 6007-6010.

Frindel, Carole — UMR CNRS 5220 - INSERM U630
robini, marc — CNRS UMR 5220
Rapacchi, Stanislas — UMR CNRS 5220 ; INSERM U630
ZHU, Yuemin — -
Croisille, Pierre — UMR CNRS 5220 ; INSERM U630
Stephant, Eric — UMR CNRS 5220 - Unité INSERM 630

18:30-18:45 SaD03.5

Assessment of Ventricular Mechanical Dyssynchrony by Short-Axis MRI, pp. 6011-6014.

Mischi, Massimo — Eindhoven Univ. of Tech.
van den Bosch, Harrie — Catharina Hospital
Jansen, Annemieke — Catharina Hospital Eindhoven
Aarts, Ronald — Philips
Korsten, Erik — Eindhoven Univ. of Tech.

SaD04 Bellecour 3
Image Segmentation I (Oral Session)

Chair: TREUILLET, Sylvie — Univ. Blaise Pascal de Clermont-Ferrand
Co-Chair: Ruggeri, Alfredo — Univ. of Padova

17:30-17:45 SaD04.1

3D Reconstruction of Head MRI Based on One Class Support Vector Machine with Immune Algorithm, pp. 6015-6018.

Wang, Lei — Hebei Univ. of Tech.
Xu, Guizhi — Hebei Univ. of Tech.
Guo, Lei — Hebei Univ. of Tech.
Liu, Xuena — Hebei Univ. of Tech.
Yang, Shuo — Hebei Univ. of Tech.

17:45-18:00 SaD04.2

Research on the Segmentation of MRI Image Based on Multi-Classification Support Vector Machine, pp. 6019-6022.

Guo, Lei — Hebei Univ. of Tech.
Liu, Xuena — Hebei Univ. of Tech.
Wu, Youxi — Hebei Univ. of Tech.
Yan, Weili — Hebei Univ. of Tech.
Shen, Xueqin — Hebei Univ. of Tech.

18:00-18:15 SaD04.3

A Semi-Automatic Clustering-Based Level Set Method for Segmentation of Endocardium from MSCT Images, pp. 6023-6026.

Su, Qi — The Univ. of Hong Kong
Wong, Kwan-Yee K. — The Univ. of Hong Kong
Fung, George S. K. — The Univ. of Hong Kong

18:15-18:30 SaD04.4

Segmentation of Cells from 3-D Confocal Images of Live Zebrafish Embryo, pp. 6027-6030.

Zanella, Cecilia — Bologna Univ.
Rizzi, Barbara — Bologna Univ.
Melani, Camilo — Univ. de Buenos Aires
Campana, Matteo — Bologna Univ.
Bourgine, Paul — Ec. Pol.
Mikula, Karol — Slovak Univ. of Tech.
Peyrieras, Nadine — CNRS
Sarti, Alessandro — Univ. of Bologna

18:30-18:45 SaD04.5

Supervised Tissue Classification from Color Images for a Complete Wound Assessment Tool, pp. 6031-6034.

WANNOUS, Hazem — Orleans Univ.
TREUILLET, Sylvie — Univ. Blaise Pascal de Clermont-Ferrand
LUCAS, Yves — Orleans Univ.

18:45-19:00 SaD04.6

Corneal Endothelium Cell Field Analysis by Means of Interacting Bayesian Shape Models, pp. 6035-6038.

Foracchia, Marco — Univ. of Padova
Ruggeri, Alfredo — Univ. of Padova

SaD05 Tęte d'Or Lounge

Implantable and Communicative Sensors, Electrodes, System Integration I (Oral Session)

Chair: Neves, Herc — IMEC
Co-Chair: Delbeke, Jean — Univ. catholique de Louvain

17:30-17:45 SaD05.1

Development and Characterization of Choline and L-Glutamate Biosensor Integrated on Silicon Microprobes for In-Vivo Monitoring, pp. 6039-6042.

Frey, Olivier — Univ. of Neuchatel
van der Wal, Peter — Univ. of Neuchatel
de Rooij, Nicolaas-F. — Univ. of Neuchatel
Koudelka, Milena — Univ. of Neuchatel

17:45-18:00 SaD05.2

Diamond Microelectrodes and CMOS Microelectronics for Wireless Transmission of Fast-Scan Cyclic Voltammetry, pp. 6043-6046.

Roham, Masoud — Case Western Res. Univ.
Halpern, Jeffrey — Case Western Res. Univ.
Martin, Heidi — Case Western Res. Univ.
Chiel, Hillel — Case Western Res. Univ.
Mohseni, Pedram — Case Western Res. Univ.

18:00-18:15 SaD05.3

Sputtered Iridium Oxide for Stimulation Electrode Coatings (I), pp. 6047-6050.

Mokwa, Wilfried — RWTH Aachen Univ.
Wessling, Boerge — RWTH Aachen Univ.
Schnakenberg, Uwe — RWTH Aachen Univ.

18:15-18:30 SaD05.4

Analysis of Specific Absorption Rate and Current Density in an Energy Transmission System for a Wireless Capsule Endoscope, pp. 6051-6054.

Shiba, Kenji — Hiroshima Univ.
Nagato, Tomohiro — Hiroshima Univ. Japan
Tsuji, Toshio — Hiroshima Univ.
Koshiji, Kohji — Tokyo Univ. of Science

18:30-18:45 SaD05.5

A Compact Nanopower Low Output Impedance CMOS Operational Amplifier for Wireless Intraocular Pressure Recordings, pp. 6055-6058.

Dresher, Russell — Purdue Univ.
Irazoqui, Pedro — Purdue Univ.

18:45-19:00 SaD05.6

Flexible Electrode Technology for Peripheral Nerve Interfacing (I), pp. 6059-6059.

Durand, Dominique — Case Western Res. Univ.

19:00-19:15 SaD05.7

Innovative Approaches to Continuous Glucose Monitoring, pp. 6060-6063.

Shenkman, Louis — Tel Aviv Univ. and Meir Hospital Center
Koukaki, Marina — Inst. of Molecular Biology and Biotechnology (IMBB)
Karamanou, Spyridoula — Inst. of Molecular Biology and Biotechnology (IMBB)
Economou, Anastassios — Inst. of Molecular Biology and Biotechnology (IMBB)

SaD06 Tęte d'Or 2

Technologies and Systems for in Vitro Analysis and Detection (Oral Session)

Co-Chair: ALDERMAN, JOHN — TYNDALL

17:30-17:45 SaD06.1

Functional Specifications of an Integrated Proteomics Information Management and Analysis Platform, pp. 6064-6068.

Tsiknakis, Manolis — Foundation for Res. and Tech. Hellas - FORTH
Grangeat, Pierre — CEA LETI, MINATEC
Binz, Pierre Alain — GENEVA BIOINFORMATICS (GeneBio) SA
Potamias, George — Foundation for Res. and Tech. - Hellas
Lisacek, Frederique — Swiss Bioinformatics Group
Gerfault, Laurent — CEA LETI
PAULUS, Caroline — CEA LETI MINATEC
Manakanatas, Dimitris — Foundation for Res. and Tech. - Hellas
Kondylakis, Vaggelis — Foundation for Res. and Tech. - Hellas
Kondylakis, Haris — Foundation for Res. and Tech. - Hellas
Perez, Manuel — Athos Origin SA
Plexousakis, Dimitris — Foundation for Res. and Tech. - Hellas

17:45-18:00 SaD06.2

A 64-Channel ASIC for In-Vitro Simultaneous Recording and Stimulation of Neurons Using Microelectrode Arrays, pp. 6069-6072.

Billoint, Olivier — CEA-LETI
Rostaing, Jean-Pierre — CEA-LETI
Charvet, Guillaume — CEA Grenoble
Yvert, Blaise — CNRS & Univ. Bordeaux 1&2

18:00-18:15 SaD06.3

Localized High-Resolution MR Imaging of Rat Brain Architecture Using Micro-Fabricated Receive-Only RF Coil, pp. 6073-6076.

Hsieh, Meng-Chi — National Taiwan Univ.
Kuo, Li-Wei — National Taiwan Univ.
Wu, Edzer — National Taiwan Univ.
Chen, Jyh-Horng — National Taiwan Univ.

18:15-18:30 SaD06.4

Geometry-Dependent Behavior of Fibroblast Cells in Three-Dimensional Silicon Microstructures, pp. 6077-6080.

Nikkhah, Mehdi — Virginia Tech.
Strobl, Jeannine — Edward Via Virginia Coll. of Osteopathic Medicine
Agah, Masoud — Virginia Tech.

18:30-18:45 SaD06.5

Using Microelectronics Technology to Communicate with Living Cells, pp. 6081-6084.

Heer, Flavio — ETH Zurich
Hafizovic, Sadik — ETH Zurich
Frey, Urs — ETH Zurich
Roscic, Branka — ETH Zurich
Ugniwenko, Tanja — Univ. of Kaiserslautern
Blau, Axel — Univ. of Kaiserslautern
Hierlemann, Andreas — ETH Zurich

18:45-19:00 SaD06.6

High-Resolution MEA Platform for In-Vitro Electrogenic Cell Networks Imaging, pp. 6085-6088.

Imfeld, Kilian — Univ. of Neuchatel
Garenne, Andre — Univ. Bordeaux 2
Simon, Neukom — CSEM SA
Maccione, Alessandro — Univ. of Genova
Martinoia, Sergio — Univ. of Genova
Koudelka, Milena — Univ. of Neuchatel
Berdondini, Luca — Univ. of Neuchâtel

SaD07 Bellecour 2

Sleep Disorders I (Oral Session)

Chair: Behbehani, Khosrow — Univ. of Texas at Arlington

17:30-17:45 SaD07.1

Obstructive Sleep Apnea Syndrome Analysis in Children by Decreases in the Amplitude Fluctuations of Pulse Photoplethysmography: Role of Recording Duration and Heart Rate Variability, pp. 6089-6092.

Gil, Eduardo — Zaragoza Univ.
Vergara, Jose Maria — Miguel Servet Children Hospital
Bianchi, Anna Maria — Pol. di Milano
Laguna, Pablo — Zaragoza Univ.

17:45-18:00 SaD07.2

Automatic Classification of Subjects with and without Sleep Apnea through Snoring Analysis, pp. 6093-6096.

Solŕ-Soler, Jordi — Univ. Pol. de Catalunya
Jané, Raimon — Univ. Pol. de Catalunya
Fiz Fernandez, José Antonio — Hospital Univ. Germans Trias i Pujol
Morera Prat, Jose — Hospital Univ. Germans Trias i Pujol

18:00-18:15 SaD07.3

Detecting Electroencephalography Variations Due to Sleep Disordered Breathing Events, pp. 6097-6100.

Xavier, Priya — UTA
Behbehani, Khosrow — Univ. of Texas at Arlington
Burk, John R. — Sleep Consultants Inc.
Watenpaugh, Donald — Sleep Consultants Inc.

18:15-18:30 SaD07.4

A Method to Detect Obstructive Sleep Apnea Using Neural Network Classification of Time-Frequency Plots of the Heart Rate Variability, pp. 6101-6104.

Al-Abed, Mohammad — Univ. of Texas at Arlington
Burk, John R. — Sleep Consultants Inc.
Lucas, Edgar A — Sleep Consultants Inc.
Manry, Michael — The Univ. of Texas at Arlington
Behbehani, Khosrow — Univ. of Texas at Arlington

18:30-18:45 SaD07.5

Detection of Sleep Apnea from Surface ECG Based on Features Extracted by an Autoregressive Model, pp. 6105-6108.

Mendez, Martin — Pol. di Milano
Ruini, Davide — Bicocca Univ.
Villantieri, Omar Paolo — Pol. di Milano
Matteucci, Matteo — Pol. di Milano
Penzel, Thomas — Charite Univ. Hospital
Cerutti, Sergio — Pol. Univ. of Milan
Bianchi, Anna Maria — Pol. di Milano

SaD08 — Gratte Ciel Lounge

Control of Posture and Balance (Oral Session)

Chair: ÓLaighin, Gearóid — National Univ. of Ireland, Galway
Co-Chair: Demongeot, Jacques — Lab. TIMC-IMAG, UMR CNRS 5525

17:30-17:45 SaD08.1

Visual-Based Sensory Motor Learning During Dynamic Balance Tasks Viewed in a Virtual Environment, pp. 6109-6112.

Betker, Aimee L. — Univ. of Manitoba
Moussavi, Zahra — Univ. of Manitoba
Szturm, Tony — Univ. of Manitoba

17:45-18:00 SaD08.2

Pressure Sensor-Based Tongue-Placed Electrotactile Biofeedback for Balance Improvement - Biomedical Application to Prevent Pressure Sores Formation and Falls, pp. 6113-6116.

Vuillerme, Nicolas — UMR UJF CNRS 5525
Chenu, Olivier — Lab. TIMC-IMAG, UMR CNRS 5525
Pinsault, Nicolas — Lab. TIMC-IMAG, UMR CNRS 5525
Moreau-Gaudry, Alexandre — Univ. Joseph Fourier - Grenoble Univ. Hospital
Fleury, Anthony — Univ. Joseph Fourier
Demongeot, Jacques — Lab. TIMC-IMAG, UMR CNRS 5525
Payan, Yohan — Lab. TIMC-IMAG, UMR CNRS 5525

18:00-18:15 SaD08.3

Kinematics and Dynamic Complexity of Postural Transitions in Frail Elderly Subjects, pp. 6117-6120.

Ganea, Raluca Lidia — Ec. Pol. Federale de Lausanne
Paraschiv-Ionescu, Anisoara — Ec. Pol. Federale
Salarian, Arash — Ec. Pol. Federale
Büla, Christophe — CHUV CUTR Sylvana
Martin, Estelle — CHUV CUTR Sylvana
Rochat, Stephane — CHUV CUTR Sylvana
Hoskovec, Constanze — CHUV CUTR Sylvana
Piot-Ziegler, Chantal — Univ. of Lausanne
Aminian, Kamiar — Ec. Pol. Federale

18:15-18:30 SaD08.4

Evaluation of the Risk of Falling in Institution-Dwelling Elderly: Clinical Tests versus Biomechanical Analysis of Stepping-Up, pp. 6121-6124.

Michel-Pellegrino, Valérie — Univ. de Tech. de Troyes
Hewson, David J — Univ. de Tech. de Troyes
Drieux, Michčle — EHPAD
Duchęne, Jacques — UTT

18:30-18:45 SaD08.5

Stability Limits in the Assessment of Postural Control through the Time-To-Boundary Function, pp. 6125-6128.

Schmid, Maurizio — Univ. Roma TRE
Conforto, Silvia — Univ. Roma TRE

SaD09 — Gratte Ciel 3

Myo-Electric Control of Prostheses (Oral Session)

17:30-17:45 SaD09.1

EMG Spike Time Difference Based Feedback Control, pp. 6129-6132.

BUTALA, JAYDRATH — Univ. OF SASKATCHEWAN
Arkles, Anthony — Univ. of Saskatchewan
Gray, John — Univ. of Saskatchewan

17:45-18:00 SaD09.2

Simultaneous, Proportional, Multi-Axis Prosthesis Control Using Multichannel Surface EMG, pp. 6133-6136.

Yatsenko, Dimitri — Univ. of Utah
McDonnall, Daniel — Ripple, LLC
Guillory, Kenneth Shane — Ripple LLC

18:00-18:15 SaD09.3

A Control System for a Powered Prosthesis Using Positional and Myoelectric Inputs from the Shoulder Complex, pp. 6137-6140.

Losier, Yves — Inst. of Biomedical Engineering, Univ. of New
Englehart, Kevin — Univ. of New Brunswick
Hudgins, Bernard — Univ. of New Brunswick

18:15-18:30 SaD09.4

A New Biomechanical Hand Prosthesis Controlled by Surface Electromyographic Signals, pp. 6141-6144.

Andrade, Nei Augusto — Univ. of Brasilia
Borges, Geovany Araujo — Univ. of Brasilia
Assis de Oliveira Nascimento, Francisco — Univ. of Brasilia
Romariz, Alexandre Ricardo Soares — Univ. of Brasilia
da Rocha, Adson F. — Univ. of Brasilia

18:30-18:45 SaD09.5

Towards the Control of Individual Fingers of a Prosthetic Hand Using Surface EMG Signals, pp. 6145-6148.

Tenore, Francesco — Johns Hopkins Univ.
Ramos Murguialday, Ander — Fatronik; Tech. Univ. Munich;Johns Hopkins Univ.
Fahmy, Amir — Johns Hopkins Univ.
Acharya, Soumyadipta — Johns Hopkins Univ.
Etienne-Cummings, Ralph — Johns Hopkins Univ.
Thakor, Nitish — Johns Hopkins Univ.

SaD10 — Rhône 1

Invited Session: Challenges and Business Models for Personal Health Systems (Minisymposium)

Chair: Korhonen, Ilkka — VTT
Organizer: Korhonen, Ilkka — VTT

17:30-17:45 SaD10.1

Personal Health Systems: How Can Successful Research Reach Implementation? (I), pp. 6149-6149.

Gatzoulis, Loukianos — European Commission
Iakovidis, Ilias — European Commission

17:45-18:00 SaD10.2

Distributed Diagnosis and Home Healthcare, Its Opportunities and Challenges (I), pp. 6150-6150.

Kim, Yongmin — Univ. of Washington
Kim, Eung-Hun — Univ. of Washington

18:00-18:15 SaD10.3

The Business Case for Home Telecare: A Comparative Analysis between the USA, Europe and Australasia (I), pp. 6151-6151.

Celler, Branko George — Univ. of New South Wales
Lovell, Nigel H — Univ. of New South Wales
Basilakis, Jim — Univ. of NSW

18:15-18:30 SaD10.4

Personal Health Systems – Need, Market Place and Challenges to Their Wide Scale Adoption (I), pp. 6152-6153.

Korhonen, Ilkka — VTT
Saranummi, Niilo — VTT Tech. Res. Centre

18:30-18:45 SaD10.5

Some Perspectives on Affordable Healthcare Systems in China (I), pp. 6154-6154.

Zhang, Yuan-Ting — The Chinese Univ. of Hong Kong
Yan, Yongsheng — The Chinese Univ. of Hong Kong
Poon, Carmen CY — The Chinese Univ. of Hong Kong

SaD11 — Tęte d'Or 1

Biomedical Engineering and Society (Minisymposium)

Chair: Flexman, Jennifer A. — Univ. of Washington
Co-Chair: Lazareck, Lisa Joanna — Univ. of Oxford
Organizer: Flexman, Jennifer A. — Univ. of Washington

17:30-17:45 SaD11.1

Biomedical Engineering and Society: Policy and Ethics (I), pp. 6155-6157.

Flexman, Jennifer A. — Univ. of Washington
Lazareck, Lisa Joanna — Univ. of Oxford

SaD12 — Rhône 2

Improving Outcomes with Interoperable EHRs and Secure Global Health Information Infrastructure (Minisymposium)

Chair: Coatrieux, Gouenou — ENST Bretagne - Inserm
Co-Chair: Kun, Luis — IRMC-NDU
Organizer: Kun, Luis — IRMC-NDU
Organizer: Beuscart, Régis — Univ. hospital of Lille
Organizer: Coatrieux, Gouenou — ENST Bretagne - Inserm
Organizer: Sloane, Elliot B. — Villanova Univ.

17:30-17:45 SaD12.1

Improving Outcomes with Interoperable EHRs and Secure Global Health Information Infrastructure (I), pp. 6158-6159.

Kun, Luis — IRMC-NDU
Beuscart, Régis — Univ. hospital of Lille
Coatrieux, Gouenou — ENST Bretagne - Inserm
Quantin, Catherine — Dijon Univ. Hospital

17:45-18:00 SaD12.2

Interoperability Issues Regarding Patient Identification in Europe (I), pp. 6160-6160.

Quantin, Catherine — Dijon Univ. Hospital
Allaert, François-André — CHU de Dijon
Fassa, Maniane — CHU Dijon
Avillach, Paul — Univ. Bordeaux
Fieschi, Marius — Univ. Marseille
Cohen, Olivier — HC Forum

SaD13 — Roseraie 1,2

Laws, Standards and Taxonomies (Minisymposium)

Chair: Carey, Carole — U.S. Food and Drug Administration
Co-Chair: Mezzour, Saad — Medtronic
Organizer: Carey, Carole — U.S. Food and Drug Administration
Organizer: Sloane, Elliot B. — Villanova Univ.

17:30-17:45 SaD13.1

Telemonitoring Systems Interoperability Challenge: _; N Updated Review of the Applicability of ISO/IEEE 11073 Standards for Interoperability in Telemonitoring (I), pp. 6161-6165.

Galarraga, Miguel — Public Univ. of Navarra
Serrano, Luis — Public Univ. of Navarra
Martínez Ruiz, Ignacio — Univ. of Zaragoza
de Toledo, Paula — Univ. Pol. de Madrid
Reynolds, Melvin Ian — AMS Consulting

17:45-18:00 SaD13.2

Issues and Design Solutions Associated with Performing MRI Scans on Patients with Active Implantable Medical Devices (I), pp. 6166-6169.

Stevenson, Robert — Greatbatch, Inc.
Frysz, Christine A. — Greatbatch, Inc
Dabney, Warren — Greatbatch, Inc.

18:00-18:15 SaD13.3

Regulations and Standards for Wireless Applications in Ehealth (I), pp. 6170-6173.

Chadwick, Peter E. — Zarlink Semiconductor

18:15-18:30 SaD13.4

Developing a Standard for Personal Health Devices Based on 11073 (I), pp. 6174-6176.

Clarke, Malcolm — Brunel Univ.
Bogia, Doug — Intel Corp.
Hassing, Kai — Philips Medizin Systeme Böblingen GmbH
Steubesand, Lars — Philips Medizin Systeme Böblingen GmbH
Chen, Tony — Sharp Lab. of America
Ayyagari, Deepak — Sharp Lab. of America

18:30-18:45 SaD13.5

Using Standards to Automate Electronic Health Records (EHRs) and to Create Integrated Healthcare Enterprises (I), pp. 6177-6178.

Sloane, Elliot B. — Villanova Univ.
Carey, Carole — U.S. Food and Drug Administration

SuA01 — Gratte Ciel 1

Nonlinear Dynamic Analysis of Biomedical Signals II (Oral Session)

Co-Chair: Porta, Alberto — Univ. degli Studi di Milano

08:30-08:45 SuA01.1

Analysis of Spontaneous MEG Activity in Patients with Alzheimer's Disease Using Spectral Entropies, pp. 6179-6182.

Poza, Jesús — Univ. de Valladolid
Hornero, Roberto — Univ. of Valladolid
Abásolo, Daniel — Univ. of Valladolid
Fernandez, Alberto — Univ. Complutense de Madrid
Escudero, Javier — Univ. of Valladolid

08:45-09:00 SuA01.2

Analysis of MEG Recordings from Alzheimer's Disease Patients with Sample and Multiscale Entropies, pp. 6183-6186.

Gomez, Carlos — Univ. of Valladolid
Hornero, Roberto — Univ. of Valladolid
Abásolo, Daniel — Univ. of Valladolid
Fernandez, Alberto — Univ. Complutense de Madrid
Escudero, Javier — Univ. of Valladolid

09:00-09:15 SuA01.3

Connectivity Analysis of EEG under Drug Therapy, pp. 6187-6190.

Alonso, Joan Francesc — Tech. Univ. of Catalonia (UPC)
Mañanas, Miquel Angel — Tech. Univ. of Catalonia (UPC)
Romero, Sergio — Tech. Univ. of Catalonia (UPC)
Riba, Jordi — Hospital de la Santa Creu i Sant Pau
Barbanoj, Manuel — Farmacología Clínica. Hospital de la Santa Creu i Sant Pau
Hoyer, Dirk — Friedrich Schiller Univ.

09:15-09:30 SuA01.4

Electroencephalogram Background Activity Characterization with Approximate Entropy and Auto Mutual Information in Alzheimer's Disease Patients, pp. 6191-6194.

Abásolo, Daniel — Univ. of Valladolid
Hornero, Roberto — Univ. of Valladolid
Espino, Pedro — Hospital Clínico San Carlos
Escudero, Javier — Univ. of Valladolid
Gomez, Carlos — Univ. of Valladolid

09:30-09:45 SuA01.5

Bispectral Analysis of Snore Signals for Obstructive Sleep Apnea Detection, pp. 6195-6198.

Ng, Andrew Keong — Nanyang Tech. Univ.
Wong, Kim Yong — Nanyang Tech. Univ.
Tan, Chin Hao — Nanyang Tech. Univ.
Koh, Tong San — Nanyang Tech. Univ.

09:45-10:00 SuA01.6

Nonlinear Analysis and Classification of Vocal Disorders, pp. 6199-6202.

Seyed Aghazadeh, Babak — Tehran Univ.
Khadivi Heris, Hossein — Tehran Univ.
Nikkhah-Bahrami, Mansour — Tehran Univ.

SuA02 — Gratte Ciel 2

PCA and ICA in Biomedical Signals II (Oral Session)

Chair: Laguna, Pablo — Zaragoza Univ.
Co-Chair: Cerutti, Sergio — Pol. Univ. of Milan

08:30-08:45 SuA02.1

Fast Multichannel Blind System Identification Using Laguerre Filters, pp. 6203-6206.

Dempsey, Erika — Univ. of Calgary
Westwick, David — Univ. of Calgary

08:45-09:00 SuA02.2

Pre-Processing and Source Separation Methods for Raman Spectra Analysis of Biomedical Samples, pp. 6207-6210.

Gobinet, Cyril — Univ. de Reims Champagne-Ardenne
Vrabie, Valeriu — Univ. de Reims Champagne-Ardenne
Tfayli, Ali — Univ. de Reims Champagne-Ardenne
Piot, Olivier — Univ. de Reims Champagne-Ardenne
Huez, Régis — Univ. de Reims Champagne-Ardenne
Manfait, Michel — Univ. de Reims Champagne-Ardenne

09:00-09:15 SuA02.3

A Robust Minimum Variance Beamforming Approach for the Removal of the Eye-Blink Artifacts from EEGs, pp. 6211-6214.

Nazarpour, Kianoush — Cardiff Univ.
Wongsawat, Yodchanan — The Univ. of Texas, Arlington
Sanei, Saeid — Cardiff Univ.
Oraintara, Soontorn — Univ. of Texas at Arlington
Chambers, Jonathon A. — Cardiff Univ.

09:15-09:30 SuA02.4

Multivariate Analysis in Clinical Monitoring: Detection of Intraoperative Hemorrhage and Light Anesthesia, pp. 6215-6218.

Yang, Ping — Univ. of British Columbia
Dumont, Guy — Univ. of British Columbia
Ford, Simon — Univ. of British Columbia
Ansermino, J. Mark — British Columbia's Children's Hospital

09:30-09:45 SuA02.5

Spatio-Temporal Analysis of Mixed AEF and SEF Using Dynamic Singular Value Decomposition, pp. 6219-6222.

Kim, Bong-Soo — Tokyo Denki Univ.
UCHIKAWA, Yoshinori — Tokyo Denki Univ.

09:45-10:00 SuA02.6

Objective Source Selection in Blind Source Separation of AEPs in Children with Cochlear Implants, pp. 6223-6226.

Castaneda-Villa, Norma — Southampton Univ.
James, Christopher — Univ. of Southampton

10:00-10:15 SuA02.7

On Estimating the Signal Subspace Dimension of High-Density Multichannel Magnetoencephalogram Measurements, pp. 6227-6230.

Hesse, Christian — F.C. Donders Centre for Cognitive Neuroimaging

SuA03 — Bellecour 1

Methods in Biological Imaging I (Oral Session)

Co-Chair: Ortiz-de-Solorzano, Carlos — Centre for Applied Medical Res. (CIMA)

08:30-08:45 SuA03.1

Fast Self-Collision Detection and Simulation of Bifurcated Stents to Treat Abdominal Aortic Aneurysms (AAA), pp. 6231-6234.

Egger, Jan — Univ. of Marburg
Mostarkic, Zvonimir — Univ. of Marburg
Maier, Florian — Univ. Karlsruhe (TH)
Kaftan, Jens N. — RWTH Aachen Univ.
Grosskopf, Stefan — Siemens AG Medical Solutions
Freisleben, Bernd — Univ. of Marburg

08:45-09:00 SuA03.2

Automatic Analysis of Microrna Microarray Images Using Mathematical Morphology, pp. 6235-6238.

meyenhofer, Felix — Univ. of Geneva
Schaad, Olivier — Univ. of Geneva
Descombes, Patrick — Univ. of Geneva
Kocher, Michel — Univ. of Applied Sciences Geneva

09:00-09:15 SuA03.3

A Comparative Study of Adaptive Registration Methods for Two Dimensional Gel Electrophoresis Images, pp. 6239-6242.

XIN, Huamei — INSA LYON
ZHU, Yuemin — -
WU, Longfei — l'Univ. de la Méditerranée

09:15-09:30 SuA03.4

Digital Holographic Microscopy Applied to Life Sciences, pp. 6243-6246.

Depeursinge, Christian Depeursinge — Ec. Pol. fédérale de Lausanne
Colomb, Tristan, Tristan Colomb — CHUV
Yves, Emery — Lyncée Tec SA
kuehn Jonas, Jonas Kuehn — Ec. Pol. fédérale de Lausanne
Charričre, Florian, Florian Charričre — Ec. Pol. fédérale de Lausanne
Marquet, Pierre, Pierre Marquet — CHUV
Rappaz, Benjamin, Benjamin Rappaz — Ec. Pol. Fédérale de Lausanne

09:30-09:45 SuA03.5

Non-Negative Matrix Factorization Spectral Unmixing of M-FISH Images, pp. 6247-6250.

Muńoz-Barrutia, Arrate — Centre for Applied Medical Res.
García-Muńoz, Javier — Centre for Applied Medical Res.
Ucar-Vargas, Beatriz — Centre for Applied Medical Res. (CIMA)
Fernández-García, Ignacio — Centre for Applied Medical Res.
Ortiz-de-Solorzano, Carlos — Centre for Applied Medical Res. (CIMA)

09:45-10:00 SuA03.6

3-D Zebrafish Embryo Image Filtering by Nonlinear Partial Differential Equations, pp. 6251-6254.

Rizzi, Barbara — Bologna Univ.
Campana, Matteo — Bologna Univ.
Zanella, Cecilia — Bologna Univ.
Melani, Camilo — Univ. de Buenos Aires
Cunderlik, Robert — Slovak Univ. of Tech. Faculty of Civil
Krivŕ, Zuzana — Slovak Univ. of Tech.
Bourgine, Paul — Ec. Pol.
Mikula, Karol — Slovak Univ. of Tech.
Peyrieras, Nadine — CNRS
Sarti, Alessandro — Univ. of Bologna

SuA04 — Bellecour 3

Fuzzy and Statistical Segmentation (Oral Session)

Chair: Roux, Christian — ENST Bretagne - INSERM

08:30-08:45 SuA04.1

Combining MIP Images and Fuzzy Set Principles for Vessels Segmentation: Application to TOF MRA and CE-MRA, pp. 6255-6258.

Vermandel, Maximilien — Univ. de Lille
Betrouni, Nacim — Inst. de Tech. Médicale
Viard, Romain — CHRU Lille
DEWALLE, ANNE-SOPHIE — Univ. des Sciences et Tech. de Lille
Blond, Serge — Service de Neurochirugie - Hôp. Salengro
Rousseau, Jean — INSERM - Univ. de Lille 2

08:45-09:00 SuA04.2

Lung Tissue Classification Using Wavelet Frames, pp. 6259-6262.

Depeursinge, Adrien — Univ. and Univ. Hospitals of Geneva (HUG)
Sage, Daniel — Swiss Federal Inst. of Tech. Lausanne (EPFL)
Hidki, Asmâa — Univ. and Univ. Hospitals of Geneva (HUG)
Platon, Alexandra — Univ. and Univ. Hospitals of Geneva (HUG)
Poletti, Pierre-Alexandre — Univ. and Univ. Hospitals of Geneva (HUG)
Unser, Michael — EPFL
Müller, Henning — Univ. and Univ. Hospitals of Geneva (HUG)

09:00-09:15 SuA04.3

Segmentation of Brain Parenchyma Using Bilateral Filtering and Region Growing, pp. 6263-6266.

Hwang, Jinyoung — Korea Advanced Inst. of Science and Tech.
Han, Yeji — Korea Advanced Inst. of Science and Tech.
Park, HyunWook — Korea Advanced Inst. of Science and Tech.

09:15-09:30 SuA04.4

An Unified Framework for Bayesian Denoising for Several Medical and Biological Imaging Modalities, pp. 6267-6270.

Sanches, João — Inst. Superior Técnico / Inst. de SistemaseRobótica
Nascimento, Jacinto — Inst. Superior Técnico
Marques, Jorge — Inst. Superior Tecnico andInstituteforSystemsandRobotics

09:30-09:45 SuA04.5

Shape Characterization of Extracted and Simulated Tumor Samples Using Topological and Geometric Measures, pp. 6271-6277.

Rohrschneider, Markus — Univ. of Leipzig
Scheuermann, Gerik — Univ. of Leipzig
Hoehme, Stefan — Univ. of Leipzig
Drasdo, Dirk — INRIA (French National Inst. for Res. in Computer Scienc

SuA05 — Tęte d'Or Lounge

Sensors and Systems Enabling Ehealth, Phealth, Mhealth I (Oral Session)

Chair: Celler, Branko George — Univ. of New South Wales
Co-Chair: MAGLAVERAS, NIKOLAOS — Aristotle Univ. of Thessaloniki

08:30-08:45 SuA05.1

Miniature Wireless Inertial Sensor for Measuring Human Motions, pp. 6278-6281.

Van Acht, Victor — Philips Res.
Bongers, Edwin — Philips Res.
Lambert, Niek — Philips Res.
Verberne, Rene — Philips Res.

08:45-09:00 SuA05.2

Heart Rate Detection from an Electronic Weighing Scale, pp. 6282-6285.

González-Landaeta, Rafael — Castelldefels School of Tech. Tech. Univ.
Casas, Oscar — Tech. Univ. of Catalonia
Pallfs-Areny, Ramon — Univ. Pol. de Catalunya

09:00-09:15 SuA05.3

Continuous Activity Monitoring and Intelligent Contextual Prompting to Improve Medication Adherence, pp. 6286-6289.

Lundell, Jay — Intel Corp.
Hayes, Tamara — Oregon Health and Science Univ.
Vurgun, Sengul — Intel Corp.
Ozertem, Umut — O.H.S.U.
Kimel, Janna — Intel
Kaye, Jeffrey A. — Oregon Health and Science Univ.
Guilak, Farzin — Intel Corp.
Pavel, Michael — Oregon Health and Science Univ.

09:15-09:30 SuA05.4

Analysis of Feature Space for Monitoring Persons with Parkinson's Disease with Application to a Wireless Wearable Sensor System, pp. 6290-6293.

Patel, Shyamal — Harvard Medical School
Lorincz, Konrad — Harvard Univ.
Hughes, Richard — Harvard Medical School
Huggins, Nancy — Harvard Medical School
Growdon, John H. — Harvard Medical School
Welsh, Matt — Harvard Univ.
Bonato, Paolo — Harvard Medical School

09:30-09:45 SuA05.5

An Improved Method to Continuously Monitor the Electrode-Skin Impedance During Bioelectric Measurements, pp. 6294-6297.

Degen, Thomas Werner — HSR Univ. of Applied Sciences Rapperswil
Loeliger, Teddy — HSR Univ. of Applied Sciences Rapperswil

09:45-10:00 SuA05.6

Health Care Applications Based on Mobile Phone Centric Smart Sensor Network, pp. 6298-6301.

Quero, Jose M. — Univ. de Sevilla
Tarrida, Cristina L. — Univ. de Sevilla
Santana, J.J. — Cardiplus S. L.
Ermolov, V. — Nokia
Jantunen, I. — Nokia
Laine, H. — Nokia
Eichholz, J. — Fraunhofer-ISIT

SuA06 — Tęte d'Or 2

Microfluidic Techniques and Systems (Oral Session)

Co-Chair: NICOLAS, Laurent — CNRS - Ec. Centrale de Lyon

08:30-08:45 SuA06.1

Integrated Microfluidic Systems for Sample Preparation and Detection of Respiratory Pathogen Bordetella Pertussis, pp. 6302-6305.

de la Rosa, Carlos — Univ. of Calgary
Prakash, Ranjit — U of C
Tilley, Peter A. — U of C
Fox, Julie D. — U of C
Kaler, Karan V.I.S. — Univ. of Calgary

08:45-09:00 SuA06.2

Low Power Laser Induced Microfluidic Mixing through Localized Surface Plasmon, pp. 6306-6309.

Miao, Xiaoyu — Univ. of Washington
Wilson, Ben — Univ. of Washington
Lin, Lih Yuan — Univ. of Washington

09:00-09:15 SuA06.3

Selecting an Electrode Structure for Cell Sorting by Differential Dielectric Affinity, pp. 6310-6313.

Frenea-Robin, Marie — UMR CNRS 5005
Laforęt, Julie — Ec. Centrale de Lyon / Lab. Ampčre
Robin, Gaël — Univ. Claude Bernard Lyon 1
Le Pioufle, Bruno — LIMMS CNRS-IIS,
NICOLAS, Laurent — CNRS - Ec. Centrale de Lyon

09:15-09:30 SuA06.4

An Innovative Opto-Sensing Workbench for Bio-Microfluidics Monitoring and Control, pp. 6314-6317.

Bucolo, Maide — Univ. degli Studi di Catania
Fortuna, Luigi — Univ. of Catania
Sapuppo, Francesca — Univ. degli Studi di Catania

09:30-09:45 SuA06.5

Microfluidic Liquid Filters for Leukocyte Isolation, pp. 6318-6321.

SooHoo, Jeffrey — NC State Univ. and UNC Chapel Hill
Walker, Glenn — North Carolina State Univ.

09:45-10:00 SuA06.6

Low Cost Production of Disposable Microfluidics by Blister Packaging Technology, pp. 6322-6325.

Disch, Alexander — Univ. of Freiburg
Müller, Claas — Univ. of Freiburg
Reinecke, Holger — Univ. of Freiburg

SuA07 — Bellecour 2

Modeling of Biological Systems I (Oral Session)

Chair: Demongeot, Jacques — Lab. TIMC-IMAG, UMR CNRS 5525

08:30-08:45 SuA07.1

An Anatomically Based Finite Element Model of the Lower Limbs in the Seated Posture, pp. 6326-6329.

Cox, Sarah — Univ. of Auckland
Mithraratne, Kumar — Univ. of Auckland
Smith, Nicolas — Univ. of Auckland

08:45-09:00 SuA07.2

Modeling Transport of Interstitial Potassium in Regional Myocardial Ischemia: Effect on the Injury Current, pp. 6330-6333.

Potse, Mark — Univ. de Montréal
Coronel, Ruben — Acad. Medical Center, Univ. of Amsterdam
LeBlanc, A.-Robert — Univ. de Montréal
Vinet, Alain — Univ. de Montréal

09:00-09:15 SuA07.3

Influence of Intermittent Compression Cuff Design on Calf Deformation: Computational Results, pp. 6334-6337.

Narracott, Andrew James — Univ. of Sheffield
John, Gareth William — Cardiff Univ.
Hose, David R. — Univ. of Sheffield
Morris, Rhys John — Univ. Hospital of Wales
Woodcock, John P — Cardiff Univ.
Lawford, Patricia Veronica — Univ. of Sheffield

09:15-09:30 SuA07.4

Primitive Genome and RNA Relics, pp. 6338-6342.

Demongeot, Jacques — Lab. TIMC-IMAG, UMR CNRS 5525

09:30-09:45 SuA07.5

MANTIS: A Data Mining Methodology for Effective Translation Initiation Site Prediction, pp. 6343-6347.

Tzanis, George — Aristotle Univ. of Thessaloniki
Berberidis, Christos — Aristotle Univ. of Thessaloniki
Vlahavas, Ioannis — Aristotle Univ. of Thessaloniki

09:45-10:00 SuA07.6

Local Control of Temperature in a Theoretical Human Model of Selective Brain Cooling, pp. 6348-6351.

Neimark, Matthew — Columbia Univ.
Konstas, Angelos-Aristeidis — Columbia Univ.
Choi, Jae H. — Columbia Univ.
Laine, Andrew — Columbia Univ.
Pile-Spellman, John — Columbia Univ.

SuA08 — Gratte Ciel Lounge

Auditory and Visual Neuroprostheses I (Oral Session)

Chair: Szeto, Andrew — San Diego State Univ.
Co-Chair: Suaning, Gregg — The Univ. of Newcastle

08:30-08:45 SuA08.1

An Improved Speech Processor for Cochlear Implant Based on Active Nonlinear Model of Biological Cochlea, pp. 6352-6355.

Kim, Kyung Hwan — Yonsei Univ.
Kim, Doo Hee — Yonsei Univ.

08:45-09:00 SuA08.2

"RecognizeCane": The New Concept of a Cane Which Recognizes the Most Common Objects and Safety Clues, pp. 6356-6359.

Scherlen, Anne-Catherine — ENISE
Dumas, Jean Claude — ENISE
Guedj, Benjamin — ENISE
Vignot, Alexandre — ENISE

09:00-09:15 SuA08.3

RFID Based Indoor Navigational Aid for Persons with Severe Visual Impairments, pp. 6360-6363.

Szeto, Andrew — San Diego State Univ.
SHARMA, SATISH — SAN DIEGO STATE Univ.

09:15-09:30 SuA08.4

A Non-Invasive Retinal Prosthesis - Testing the Concept, pp. 6364-6367.

Nikolic, Konstantin — Imperial Coll. London
Grossman, Nir — Imperial Coll. London
Huang, Yan — Sir Leon Bagrit Centre
Drakakis, Emmanuel M. — Imperial Coll.
Toumazou, Christofer — Imperial Coll. London
Degenaar, Patrick — Imperial Coll. London

09:30-09:45 SuA08.5

Patterned Optical Activation of Retinal Ganglion Cells, pp. 6368-6370.

Farah, Nairouz — Tech.
Reutsky, Inna — Tech. - Israel Inst. of Tech.
Shoham, Shy — Tech. Inst. of Tech.

09:45-10:00 SuA08.6

Intracortical Neural Interface for Prosthetic Applications, pp. 6371-6374.

Ortmann, Valerij — NeuroConnex
Baziyan, Boris Kh. — Intitute of Neurology, Russian Acad. of Science

SuA09 — Gratte Ciel 3

Image Registration I (Oral Session)

Chair: SARRY, Laurent — Faculté de Médecine, Univ. d'Auvergne
Co-Chair: Boire, Jean-Yves — INSERM

08:30-08:45 SuA09.1

Registration Algorithm for Statistical Bone Shape Reconstruction from Radiographs - an Accuracy Study, pp. 6375-6378.

Gollmer, Sebastian T. — Univ. of Luebeck
Lachner, Rainer — BrainLAB AG
Buzug, Thorsten M. — Univ. of Luebeck

08:45-09:00 SuA09.2

Intra Subject 3D/3D Kidney Registration Using Local Mutual Information Maximization, pp. 6379-6382.

Tang, Hui — Southeast Univ.
Dillenseger, Jean-Louis — Univ. de Rennes 1
Luo, Limin — Univ. of Southeast

09:00-09:15 SuA09.3

Registration of Sheep Brain MR Images for Cell Tracking Using Ferrite-Composite Micro-Beads As Markers, pp. 6383-6386.

Kim, Hyun Chung — Kyung Hee Univ.
Han, Byung Hee — Kyung Hee Univ.
Lee, Chun Hyung — Kyung Hee Univ.
Lee, Soo Yeol — Kyung Hee Univ.

09:15-09:30 SuA09.4

Evaluation of a Stochastic Approach to 2D-3D Intensity-Based Registration, pp. 6387-6390.

aouadi, souha — Univ. Clermont1,WAID
SARRY, Laurent — Faculté de Médecine, Univ. d'Auvergne

09:30-09:45 SuA09.5

A Hybrid Optimization Model Based on Multi-Metrics for Registration Using Free-Form Deformation, pp. 6391-6394.

Song, Jiasi — Shanghai Jiaotong Univ.
Gu, Lixu — Shanghai Jiaotong Univ.
Huang, Pengfei — Shanghai Jiao Tong Univ.
Li, Wei — Shanghai Jiaotong Univ.
Xu, Jianrong — Renji Hospital, Medical School, Shanghaijiaotong Univ.

09:45-10:00 SuA09.6

Medical Image Registration Via Steerable Pyramid, pp. 6395-6398.

Wang, Xiu Ying — The Univ. of Sydney
Feng, Dagan — The Univ. of Sydney

SuA10 — Rhône 1

Cellular and Tissue Engineering I (Oral Session)

Chair: Layton, Bradley E. — Drexel Univ.
Co-Chair: Hulmes, David — CNRS

08:30-08:45 SuA10.1

Tissue Engineering of the Cornea: Orthogonal Scaffold of Magnetically Aligned Collagen Lamellae for Corneal Stroma Reconstruction (I), pp. 6399-6399.

Torbet, James — CNRS
Malbouyres, Marilyne — CNRS
Builles, Nicolas — Hospices Civils de Lyon
Justin, Virginie — Hospices Civils de Lyon
Roulet, Muriel — CNRS
Damour, Odile — Hospices Civils de Lyon
Oldberg, Ake — Univ. of Lund
Ruggiero, Florence — CNRS
Hulmes, David — CNRS

08:45-09:00 SuA10.2

Current Developments in Tissue Engineering of Nucleus Pulposus for the Treatment of Intervertebral Disc Degeneration, pp. 6400-6405.

Sebastine, Immanuel Maria — Loughborough Univ.
Williams, David — Loughborough Univ.

09:00-09:15 SuA10.3

Artificial Vitreous Humor for in Vitro Experiments, pp. 6406-6409.

Kummer, Michael — ETH Zurich
Abbott, Jake J. — ETH Zurich
Dinser, Sandro — ETH Zurich
Nelson, Bradley — ETH Zurich

09:15-09:30 SuA10.4

Enhanced in Vitro Culture of Human SAOS-2 Osteoblasts on a Sandblasted Titanium Surface Modified with Plastic Deformation, pp. 6410-6413.

Fassina, Lorenzo — Univ. of Pavia
Saino, Enrica — Univ. of Pavia
Visai, Livia — Univ. of Pavia
Cusella De Angelis, Maria Gabriella — Univ. of Pavia
Benazzo, Francesco — Univ. of Pavia
Magenes, Giovanni — Univ. of Pavia

09:30-09:45 SuA10.5

Physically Enhanced Coating of a Titanium Plasma-Spray Surface with Human SAOS-2 Osteoblasts and Extracellular Matrix, pp. 6414-6417.

Fassina, Lorenzo — Univ. of Pavia
Saino, Enrica — Univ. of Pavia
Visai, Livia — Univ. of Pavia
Magenes, Giovanni — Univ. of Pavia

09:45-10:00 SuA10.6

How Stiff and Thin Can an Engineered Extracellular Matrix Be? Modeling Molecular Forces at the Cell-Matrix Interface, pp. 6418-6420.

Walton, Emily — MIT
Oommen, Binu — Massachusetts Inst. of Tech.
van Vliet, Krystyn — Massachusetts Inst. of Tech.

SuA11 — Tęte d'Or 1

Health Information Systems and Patient Records I (Oral Session)

Chair: Chronaki, Catherine — Foundation for Res. and Tech. Hellas
Co-Chair: Beuscart, Régis — Univ. hospital of Lille

08:30-08:45 SuA11.1

Evaluation of Shared EHR Services in Primary Healthcare Centers and Their Rural Community Offices: The Twister Story, pp. 6421-6424.

Chronaki, Catherine — Foundation for Res. and Tech. Hellas
Kontoyiannis, Vasilis — FORTH
Mytaras, Michalis — FORTH
Agourakis, Nektarios — FORTH
Kostomanolakis, Stavros — FORTH
Roumeliotaki, Theano — FORTH
Kavlentakis, George — FORTH
Chiarugi, Franco — FORTH
Tsiknakis, Emmanouil — Foundation for Res. and Tech. Hellas - FORTH

08:45-09:00 SuA11.2

Implementation Experience of a Patient Monitoring Solution Based on End-To-End Standards, pp. 6425-6428.

Martínez Ruiz, Ignacio — Univ. of Zaragoza
Fernández Navajas, Julián — Aragon Inst. for Engineering Res. (I3A), Univ. of Z
Galarraga, Miguel — Public Univ. of Navarra
Serrano, Luis — Public Univ. of Navarra
de Toledo, Paula — Univ. Pol. de Madrid
Escayola, Javier — Univ. of Zaragoza
Jimenez-Fernandez, Silvia — Tech. Univ. of Madrid
Led, Santiago — Public Univ. of Navarra
Martínez-Espronceda, Miguel — Public Univ. of Navarra
García Moros, José — Univ. of Zaragoza

09:00-09:15 SuA11.3

A Grid PACS Architecture: Providing Data-Centric Applications through a Grid Infrastructure, pp. 6429-6433.

Koutelakis, George — Univ. of Patras
Lymperopoulos, Dimitrios — Univ. of Patras

09:15-09:30 SuA11.4

Ontology Based Data Management Systems for Post-Genomic Clinical Trials within a European Grid Infrastructure for Cancer Research, pp. 6434-6437.

Weiler, Gabriele — Fraunhofer Inst. for Biomedical Engineering
Brochhausen, Mathias — Saarland Univ.
Graf, Norbert — Univ. of the Saarland
Schera, Fatima — Fraunhofer Inst. for Biomedical Engineering
Hoppe, Alexander — Univ. Hospital of the Saarland
Kiefer, Stephan — Fraunhofer Inst. for Biomedical Engineering

09:30-09:45 SuA11.5

Integrating Global Data into Local Health Data Base, pp. 6438-6441.

Patasiene, Irena — Kaunas Univ. of Tech.
Kregzdyte, Rima — Kaunas Univ. of Medicine
Patasius, Martynas — Kaunas Univ. of Tech.
Patasius, Juozas — State Transport and Road Inst.
Kazakeviciute, Agne — Kaunas Univ. of Tech.

SuA12 — Rhône 2

Micro-Nano-Bio Convergence Systems (MNBS): EC-Funded Group of Projects (Minisymposium)

Chair: Lymberis, Andreas — European Commission
Co-Chair: Neves, Herc — IMEC
Organizer: Lymberis, Andreas — European Commission

08:30-08:45 SuA12.1

The NeuroProbes Project (I), pp. 6442-6444.

Neves, Herc — IMEC
Ruther, Patrick — Univ. of Freiburg

08:45-09:00 SuA12.2

Converging Micro-Nano-Bio-Information & Communication Technologies towards Integrated Systems: The Contribution of the EU Information Society Technologies Program (I), pp. 6445-6445.

Lymberis, Andreas — European Commission

09:00-09:15 SuA12.3

Lab-On-Chip for the Isolation and Characterization of Circulating Tumor Cells (I), pp. 6446-6448.

Röser, Tina — Inst. für Mikrotechnik Mainz GmbH
Ritzi, Marion — IMM
Drese, Klaus Stefan — Inst. für Mikrotechnik Mainz GmbH
Laureyn, Wim — IMEC
Liu, Chengxun — IMEC
O' Sullivan, Ciara K. — Univ. Rovira i Vir
Ozalp, Veli C. — Univ. Rovira i Virgili
Fermér, Christian — Fujirebio Diagnostics
Nilsson, Olle — Fujirebio Diagnostics
Hauch, Siegfried — AdnaGen AG
Borgen, Elin — The National Hospital-The Norwegian Radium Hospital, Univ.
Nygren, Anders O.H. — MRC-Holland

09:15-09:30 SuA12.4

Provision of Integrated Micro-Nanotechnologies Via Toolkits in the Europractice Service Project INTEGRAMplus (I), pp. 6449-6449.

von Germar, Frithjof — Inst. fur Mikrotechnik Mainz GmbH
Pickering, Christopher — QinetiQ
McNie, Mark — QinetiQ Ltd
Ryan, Tim — Epigem Ltd
Bosshard, Christian — CSEM SA
Schropfer, Gerold — Coventor Sarl

09:30-09:45 SuA12.5

Fabric-Based Fluid Handling Platform with Integrated Analytical Capability (I), pp. 6450-6450.

Coyle, Shirley — DCU
Wu, Yanzhe — Dublin CIty Univ.
Lau, King Tong — Dublin City Univ.
Wallace, Gordon — Univ. of Wollongong
Diamond, Dermot — Dublin City Univ.

SuA13 — Roseraie 1,2

Retinal Image Analysis I (Invited Session)

Chair: Ruggeri, Alfredo — Univ. of Padova
Co-Chair: MacGillivray, Thomas — Univ. of Edinburgh
Organizer: Ruggeri, Alfredo — Univ. of Padova
Organizer: Trucco, Emanuele — Univ. of Dundee

08:30-08:45 SuA13.1

Detection of Blood Vessels in Fundus Images of the Retina Using Gabor Wavelets (I), pp. 6451-6454.

Oloumi, Faraz — SCHULICH School of Engineering, Univ. of Calgary
Rangayyan, Raj — Univ. of Calgary
Oloumi, Foad — SCHULICH School of Engineering, Univ. of Calgary
Eshghzadeh-Zanjani, Peyman — SCHULICH School of Engineering, Univ. of Calgary
Ayres, Fabio — Schulich School of Engineering, Univ. of Calgary

08:45-09:00 SuA13.2

Fractal Analysis of the Retinal Vascular Network in Fundus Images (I), pp. 6455-6458.

MacGillivray, Thomas — Univ. of Edinburgh
Patton, Niall — NHS Lothian Univ. Hospitals Div.
Doubal, Fergus — Univ. of Edinburgh
Graham, Catriona — Univ. of Edinburgh
Wardlaw, Joanna — Univ. of Edinburgh

09:00-09:15 SuA13.3

Model Based Investigation of Retinal Vessel Tortuosity As a Function of Blood Pressure: Preliminary Results (I), pp. 6459-6462.

Patasius, Martynas — Kaunas Univ. of Tech.
Marozas, Vaidotas — Kaunas Univ. of Tech.
Lukosevicius, Arunas — Kaunas Univ. of Tech.
Jegelevicius, Darius — Kaunas Univ. of Tech.

09:15-09:30 SuA13.4

An Automatic System for the Estimation of Generalized Arteriolar Narrowing in Retinal Images (I), pp. 6463-6466.

Ruggeri, Alfredo — Univ. of Padova
Grisan, Enrico — Univ. of Padova
De Luca, Massimo — Univ. of Padova

09:30-09:45 SuA13.5

Application of the Kohonen Network for Automatic Point Correspondence in Retinal Images (I), pp. 6467-6470.

MARKAKI, VASSILIKI — National Tech. Univ. of Athens
Asvestas, Pantelis — Inst. OF COMMUNICATION & COMPUTER SYSTEMS
MATSOPOULOS, GEORGE K — Inst. OF COMMUNICATION & COMPUTER SYSTEMS
Uzunoglu, Nikolaos — National Tech. Univ. of Athens

09:45-10:00 SuA13.6

Validation of Retinal Image Registration Algorithms by a Projective Imaging Distortion Model (I), pp. 6471-6474.

Lee, Sangyeol — The Univ. of Iowa, USA
Abramoff, Michael David — Univ. of Iowa
Reinhardt, Joseph — The Univ. of Iowa

SuB01 — Gratte Ciel 1

Nonlinear Dynamic Analysis of Biomedical Signals III (Oral Session)

Chair: Westwick, David — Univ. of Calgary

10:30-10:45 SuB01.1

On the Identification of Hammerstein Systems with Time-Varying Parameters, pp. 6475-6478.

Ikharia, Bashiru Isa — Univ. of Calgary
Westwick, David — Univ. of Calgary

10:45-11:00 SuB01.2

Modeling Anesthetic Drugs' Pharmacodynamic Interaction on the Bispectral Index of the EEG: The Influence of Heart Rate, pp. 6479-6482.

Nunes, Catarina S — Faculdade de Ciencias da Univ. do Porto
Mendonça, Teresa — Faculdade de Ciencias
Brás, Susana — Faculdade de Ciencias da Univ. do Porto
Ferreira, David A — Univ. de Trás-os-Montes e Alto Douro
Amorim, Pedro — Hospital Geral de Santo António

11:00-11:15 SuB01.3

Dimensional Characterization of Anesthesia Dynamics in Reconstructed Embedding Space, pp. 6483-6486.

Gifani, Payman — AmirKabir Univ. of Tech. , Sharif Univ.
Rabiee, Hamid Reza — Sharif U niversity of Tech.
Hashemi, Mohammad Reza — Amir Kabir Univ. of Tech.
Ghanbari, Mohammad — Univ. of ESSEX

11:15-11:30 SuB01.4

A New Method for Evaluating the Performance of Depth-Of-Hypnosis Indices - the D-Value, pp. 6487-6490.

Lipping, Tarmo — Tampere Univ. of Tech.
Ferenets, Rain — Tampere Univ. of Tech. Pori
Struys, Michel — Ghent Univ. Hospital
Mortier, Eric — Ghent Univ.

11:30-11:45 SuB01.5

A Complete Strategy for Patient Un-Specific Detection of Epileptic Seizures Using Crude Estimations of Entropy, pp. 6491-6494.

Varsavsky, Andrea — Melbourne Univ.
Mareels, Iven — Melbourne Univ.

11:45-12:00 SuB01.6

Higher Order Spectral(hos) Analysis of Epileptic Eeg Signals, pp. 6495-6498.

Chua, Kuang Chua — Ngee Ann Pol.

SuB02 — Gratte Ciel 2

PCA and ICA in Biomedical Signals III (Oral Session)

Chair: Fotiadis, Dimitrios I. — Univ. of Ioannina

10:30-10:45 SuB02.1

Extraction of the Atrial Activity from the ECG Based on Independent Component Analysis with Prior Knowledge of the Source Kurtosis Signs, pp. 6499-6502.

Zarzoso, Vicente — Univ. de Nice - CNRS
D'Asseler, Yves — Ghent Univ.
Lemahieu, Ignace — Ghent Univ.
Phlypo, Ronald — Ghent Univ.

10:45-11:00 SuB02.2

Ventricular Artifacts Cancellation from Atrial Epicardial Recordings in Atrial Tachyarrhythmias, pp. 6503-6506.

Rieta, J. J. — Valencia Univ. of Tech.
Hornero, Fernando — General Univ. Hospital of Valencia
Alcaraz Martinez, Raul — Univ. of Castilla-La Mancha
Moratal, David — Univ. Pol. de Valčncia

11:00-11:15 SuB02.3

Maternal and Fetal Heart Rate Extraction from Abdominal Recordings Using Multi-Scale Principal Components Analysis, pp. 6507-6510.

Karvounis, Evaggelos — Univ. of Ioannina
Fotiadis, Dimitrios I. — Univ. of Ioannina

11:15-11:30 SuB02.4

Principal Components Analysis Preprocessing to Reduce Controller Delays in Pattern Recognition Based Myoelectric Control, pp. 6511-6514.

Hargrove, Levi — Univ. of New Brunswick
Scheme, Erik — Univ. of New Brunswick
Englehart, Kevin — Univ. of New Brunswick
Hudgins, Bernard — Univ. of New Brunswick

11:30-11:45 SuB02.5

Number of Sources Uncertainty in Blind Source Separation. Application to EMG Signal Processing, pp. 6515-6518.

Snoussi, Hichem — UTT
Khanna, Saurabh — UTT
Hewson, David J — Univ. de Tech. de Troyes
Duchęne, Jacques — UTT

11:45-12:00 SuB02.6

A Classwise PCA-Based Recognition of Neural Data for Brain-Computer Interfaces, pp. 6519-6522.

Das, Koel — Univ. of California, Irvine
Osechinskiy, Sergey — Univ. of California, Irvine
Nenadic, Zoran — Caltech

12:00-12:15 SuB02.7

Independent Component Analysis (ICA) Applied to Ultrasound Speckle Texture Analysis and Tissue Characterization, pp. 6523-6526.

Di, Lai — Rochester Inst. of Tech.
Rao, Navalgund — Rochester Inst. of Tech.
Kuo, Chunghui — Eastman Kodak
Bhatt, Shweta — Uliversity of Rochester School of Medicine
Dogra, Vikram — Univ. of Rochester School of Medicine

SuB03 — Bellecour 1

Biomedical Image Reconstruction (Oral Session)

Co-Chair: Desbat, Laurent — Grenoble Univ. (UJF)

10:30-10:45 SuB03.1

Minimum Cross-Entropy Reconstruction of PET Images with Anatomically Based Anisotropic Median-Diffusion Filtering, pp. 6527-6530.

Chan, Chung — Univ. of Sydney
Fulton, Roger — Univ. of Sydney
Cai, Tom — Univ. of Sydney
Feng, Dagan — The Univ. of Sydney
Meikle, Steven — Univ. of Sydney

10:45-11:00 SuB03.2

Parametric Blind Deconvolution for Confocal Laser Scanning Microscopy, pp. 6531-6534.

Pankajakshan, Praveen — INRIA Sophia-Antipolis,
Zhang, Bo — Inst. Pasteur
Blanc-Feraud, Laure — INRIA/I3S
Kam, Zvi — Weizmann Inst. of Science,
Olivo-Marin, Jean-Christophe — Inst. Pasteur
Zerubia, Josiane — INRIA/I3S

11:00-11:15 SuB03.3

Volume Reconstruction Based on Non-Rigid Registration, pp. 6535-6538.

bao, xudong — southeast Univ.
Xu, Danhua — southeast Univ.
Toumoulin, Christine — Univ. de Rennes I
Luo, Limin — Univ. of Southeast

11:15-11:30 SuB03.4

Reconstruction of Dynamic PET Data Using Spatio-Temporal Wavelet L1 Regularization, pp. 6539-6542.

Verhaeghe, Jeroen — Ghent Univ.
Van De Ville, Dimitri — EPFL
Khalidov, Ildar — EPFL
Unser, Michael — EPFL
D'Asseler, Yves — Ghent Univ.
Lemahieu, Ignace — Ghent Univ.

11:30-11:45 SuB03.5

Cone-Beam Projection of a Deformable Volume for Motion Compensated Algebraic Reconstruction, pp. 6543-6546.

Rit, Simon — Univ. Lumičre Lyon 2
Sarrut, David — Léon Bérard anti-cancer center / CREATIS Lab.

11:45-12:00 SuB03.6

Assessment of PSF Modeling in PET AWOSEM Reconstruction, pp. 6547-6550.

De Bernardi, Elisabetta — Pol. di Milano
Zito, Felicia — Ospedale Maggiore Pol. Mangiagalli e Regina Elena
Baselli, Giuseppe — Pol. di Milano

SuB04 Bellecour 3

Detection and Classification (Oral Session)

Chair: Muńoz-Barrutia, Arrate — Centre for Applied Medical Res.

10:30-10:45 SuB04.1

Epiphysis and Metaphysis Extraction and Classification by Adaptive Thresholding and DoG Filtering for Automated Skeletal Bone Age Analysis, pp. 6551-6556.

Giordano, Daniela — Univ. di Catania
Leonardi, Rosalia — Univ. of Catania
Maiorana, Francesco — Univ. of Catania
Scarciofalo, Giacomo — Univ. of Catania
Spampinato, Concetto — Univ. di Catania

10:45-11:00 SuB04.2

Spine Localization and Vertebral Mobility Analysis Using Faces Contours Detection, pp. 6557-6560.

Benjelloun, Mohammed — Faculty of Engineering at Mons
Mahmoudi, Said — Faculty of Engineering of Mons

11:00-11:15 SuB04.3

Application of Lattice Boltzmann Method to Image Segmentation, pp. 6561-6564.

Chen, Yu — Shanghai Univ.
Yan, Zhuangzhi — Shanghai Univ.
Shi, Jun — Shanghai Univ.

11:15-11:30 SuB04.4

Improving the Accuracy of Feature Extraction for Flexible Endoscope Calibration by Spatial Super Resolution, pp. 6565-6571.

Rupp, Stephan — Fraunhofer Inst. for Integrated Circuits (IIS)
Winter, Christian — Univ. of Erlangen
Elter, Matthias — Fraunhofer Inst. for Integrated Circuits (IIS)

11:30-11:45 SuB04.5

Comparison of Segmentation Methods for Automatic Diagnosis of Dermoscopy Images, pp. 6572-6575.

Mendonça, Teresa — Faculdade de Ciençias
Marcal, Andre R. S. — Faculdade de Ciencias, Univ. do Porto
Vieira, Angela — Faculdade de Ciencias, Univ. do Porto
Nascimento, Jacinto — Inst. Superior Técnico
Silveira, Margarida — Inst. Superior Técnico
Marques, Jorge — Inst. Superior Tecnico and Inst.
Rozeira, Jorge — Hospital de Pedro Hispano

11:45-12:00 SuB04.6

A Color-Based Approach for Applying Automated Segmentation to Tumor Tissue Classification, pp. 6576-6579.

Wang, Yi-Ying — National Cheng Kung Univ.
Chang, Shao-Chien — National Cheng Kung Univ.
Wu, Li-Wha — National Cheng Kung Univ.
Tsai, Sen-Tien — National Cheng Kung Univ. Hospital.
Sun, Yung-Nien — National Cheng Kung Univ.

SuB05 Tęte d'Or Lounge

Implantable and Communicative Sensors, Electrodes, System Integration II (Oral Session)

Chair: Delbeke, Jean — Univ. catholique de Louvain

10:30-10:45 SuB05.1

High Data-Rate 6.7 GHz Wireless ASIC Transmitter for Neural Prostheses, pp. 6580-6583.

Chow, Eric — Purdue Univ.
Kahn, Adam — Purdue Univ.
Irazoqui, Pedro — Purdue Univ.

10:45-11:00 SuB05.2

Real-Time Software Platform Design for In-Vivo Navigation of a Small Ferromagnetic Device in a Swine Carotid Artery Using a Magnetic Resonance Imaging System, pp. 6584-6587.

Chanu, Arnaud — Ec. Pol. de Montreal
Martel, Sylvain — Ec. Pol. de Montreal

11:00-11:15 SuB05.3

A Power-Efficient Communication System between Brain-Implantable Devices and External Computers, pp. 6588-6591.

Yao, Ning — Univ. of Pittsburgh
Lee, Heung-no — Univ. of Pittsburgh
Chang, Cheng-Chun — Univ. of Pittsburgh
Sclabassi, Robert — Univ. of Pittsburgh
Sun, Mingui — Univ. of Pittsburgh

11:15-11:30 SuB05.4

Low Cost, Biocompatible Elastic and Conformable Electronic Technologies Using Mid in Stretchable Polymer, pp. 6592-6595.

axisa, fabrice — IMEC
Bossuyt, Frederick — TFCG IMEC Ghent

11:30-11:45 SuB05.5

A Dual Band Wireless Power and FSK Data Telemetry for Biomedical Implants, pp. 6596-6599.

Jung, Louis Hyunsuk — Univ. of New South Wales
Byrnes-Preston, Phil J. — The Univ. of New South Wales
Hessler, Roland — Univ. of New South Wales
Lehmann, Torsten — Univ. of New South Wales
Suaning, Gregg — The Univ. of Newcastle
Lovell, Nigel H — Univ. of New South Wales

11:45-12:00 SuB05.6

Wireless System for Monitoring Polymer Encapsulations, pp. 6600-6603.

von Metzen, Rene Patrick — Univ. of Freiburg
Stieglitz, Thomas — Univ. of Freiburg

12:00-12:15 SuB05.7

A Microsystem Integration Platform Dedicated to Build Multi-Chip Neural Interfaces, pp. 6604-6607.

Ayoub, Amer Elias — Ec. Pol. de Montreal
Gosselin, Benoit — Ec. Pol.
Sawan, Mohamad — Ec. Pol.

SuB06 — Tęte d'Or 2

Nanomedicine, Bio-Nano Structures, Drug Delivery (Oral Session)

Co-Chair: Subramaniam, Vinod — Univ. of Twente

10:30-10:45 SuB06.1

Quantitative Characterization of Protein Nanostructures Using Atomic Force Microscopy, pp. 6608-6611.

Segers-Nolten, Ine — Univ. of Twente
van der Werf, Kees — Univ. of Twente
van Raaij, Martijn — Univ. of Twente
Subramaniam, Vinod — Univ. of Twente

10:45-11:00 SuB06.2

Controlled Release Drug Coatings on Flexible Neural Probes, pp. 6612-6615.

Mercanzini, Andre — EPFL
Bertsch, Arnaud — EPFL
Renaud, Philippe — EPFL

11:00-11:15 SuB06.3

Micro-Molded Cannulae for Intracochlear Infusions in Small Rodents, pp. 6616-6619.

Johnson, Dean G. — Rochester Inst. of Tech.
Zhu, Xiao Xia — Univ. of Rochester School of Medicine and Dentistry
Frisina, Robert D. — Univ. of Rochester School of Medicine and Dentistry
Borkholder, David A. — Rochester Inst. of Tech.

11:15-11:30 SuB06.4

Investigation of CNTs Interaction with Fibroblast Cells, pp. 6620-6623.

Pensabene, Virginia — Univ. di Genova, Italian Inst. of Tech.
Vittorio, Orazio — Scuola Superiore Sant'Anna
Raffa, Vittoria — Scuola Superiore Sant'Anna
Menciassi, Arianna — Scuola Superiore Sant'Anna
Dario, Paolo — Scuola Superiore Sant'Anna

11:30-11:45 SuB06.5

Using MPTMS As Permselective Membranes of Biosensors, pp. 6624-6627.

Yang, Yang Li — Chung Yuan Christan Unviersity
Tseng, Ta-Feng — Chung Yuan Christian Univ.
Lou, Shyhliang — Chung Yuan Christian Univ.

SuB07 — Bellecour 2

Modeling and Computational Biology with Clinical Implications (Oral Session)

Chair: Pirogova, Elena — RMIT Univ.

10:30-10:45 SuB07.1

The "Oncosimulator": A Multilevel, Clinically Oriented Simulation System of Tumor Growth and Organism Response to Therapeutic Schemes towards the Clinical Evaluation of in Silico Oncology, pp. 6628-6631.

Stamatakos, Georgios — National Tech. Univ. of Athens
Dionysiou, Dimitra — National Tech. Univ. of Athens
Graf, Norbert — Univ.
Sofra, Nikoletta — Imperial Coll. London
Desmedt, Christine — Jules Bordet Inst.
Hoppe, Alexander — Univ.
Uzunoglu, Nikolaos — National Tech. Univ. of Athens
Tsiknakis, Manolis — Foundation for Res. and Tech. Hellas - FORTH

10:45-11:00 SuB07.2

Practical Identifiability of Photophysical Parameters in Photodynamic Therapy, pp. 6632-6635.

Dobre, Simona — Nancy-Univ.
Bastogne, Thierry — Nancy-Univ.
Barberi-Heyob, Muriel — Nancy-Univ.
Richard, Alain — Nancy-Univ.

11:00-11:15 SuB07.3

On the Accurate Modeling of a Complex Antenna for Breast Tumor Detection Using a Hybrid MOM/FDTD Approach, pp. 6636-6639.

Padhi, Shantanu — EMI Centre, Univ. of Queensland
Liu, Feng — The Univ. of Queensland
Li, Bing Keong — The Univ. of Queensland
Shuley, Nick — Univ. of Queensland
Crozier, Stuart — The Univ. of Queensland

11:15-11:30 SuB07.4

Modelling the Mechanical Properties of Human Skin: Towards a 3D Discrete Fibre Model, pp. 6640-6643.

Jor, Jessica — Univ. of Auckland
Nash, Martyn — Univ. of Auckland
Nielsen, Poul — Univ. of Auckland
Hunter, Peter — Univ. of Auckland

11:30-11:45 SuB07.5

Simulating T-Wave Parameters of Local Extracellular Electrograms with a Whole-Heart Bidomain Reaction-Diffusion Model: Size Matters!, pp. 6644-6647.

Potse, Mark — Univ. de Montréal
Coronel, Ruben — Acad. Medical Center, Univ. of Amsterdam
Opthof, Tobias — Acad. Medical Center
Vinet, Alain — Univ. de Montréal

11:45-12:00 SuB07.6

SAPHIR - a Multi-Scale, Multi-Resolution Modeling Environment Targeting Blood Pressure Regulation and Fluid Homeostasis, pp. 6648-6651.

Thomas, S. Randall — CNRS FRE 2873
Abdulhay, Enas — Univ. Joseph Fourier
Baconnier, Pierre — Univ. Joseph Fourier
Fontecave Jallon, Julie — Univ. Joseph Fourier
FRANCOISE, Jean-Pierre — Univ. P.-M. Curie, Paris6
Guillaud, François — INSERM
Hannaert, P. — Inserm E0324
Hernández, Alfredo I — INSERM U642 LTSI.
Le Rolle, Virginie — Univ. of Rennes 1
Mazičre, Pierre — Univ. of Evry
tahi, fariza — Univ. of Evry
Zehraoui, Farida — Evry Val d'Essonnes Univ. IBISC Lab.

SuB08 — Gratte Ciel Lounge

Neuromodulation I - Brain Stimulation (Oral Session)

Chair: Durand, Dominique — Case Western Res. Univ.
Co-Chair: Veltink, Peter — Univ. of Twente

10:30-10:45 SuB08.1

High-Permeability Core Coils for Transcranial Magnetic Stimulation of Deep Brain Regions, pp. 6652-6655.

Salvador, Ricardo — Faculty of Science, Univ. of Lisbon, Inst. of Biophysic
Miranda, Pedro — Faculty of Science, Univ. of Lisbon
Roth, Yiftach — Sheba Medical Center
Zangen, Abraham — The Weizmann Inst. of Science

10:45-11:00 SuB08.2

The Activation Function of TMS on a Finite Element Model of a Cortical Sulcus, pp. 6656-6659.

Silva, Sofia — Faculty of Science, Univ. of Lisbon
Basser, Peter — NIH
Miranda, Pedro — Faculty of Science, Univ. of Lisbon

11:00-11:15 SuB08.3

Enhancement of Information Transmission with Stochastic Resonance in Hippocampal CA1 Neuron Models: Effects of Noise Input Location, pp. 6660-6663.

Kawaguchi, Minato — Kanto Gakuin Univ.
Mino, Hiroyuki — Kanto Gakuin Univ.
Durand, Dominique — Case Western Res. Univ.

11:15-11:30 SuB08.4

Effect of L-Dopa and Subthalamic Nucleus Stimulation on Arm and Leg Swing During Gait in Parkinson's Disease, pp. 6664-6667.

Carpinella, Ilaria — Foundation Don Carlo Gnocchi Onlus
Crenna, Paolo — Univ. of Milan
Marzegan, Alberto — Univ. of Milan
Rabuffetti, Marco — Foundation Don Carlo Gnocchi Onlus
Rizzone, Mario — Univ. of Turin
Lopiano, Leonardo — Univ. of Turin
Ferrarin, Maurizio — Foundation Don Carlo Gnocchi Onlus

11:30-11:45 SuB08.5

Fundamental Electrical Quantities in Deep Brain Stimulation: Influence of Domain Dimensions and Boundary Conditions, pp. 6668-6671.

Liberti, Micaela — ICEMB@La Sapienza Univ. Rome
Apollonio, Francesca — ICEmB@La Sapienza Univ. Rome
Paffi, Alessandra — ICEmB@La Sapienza Univ. Rome
Parazzini, Marta — CNR
Maggio, Fernando — ICEMB@La Sapienza Univ. Rome
Novellino, Tommaso — Campus biomedico
Ravazzani, Paolo — CNR
D'Inzeo, Guglielmo — ICEmB@"La Sapienza" Univ.

SuB09 Gratte Ciel 3

Minisymposium: Heart-Rate Variability in Extreme Environments (Minisymposium)

Chair: Di Rienzo, Marco — Fondazione Don Carlo Gnocchi

10:30-10:45 SuB09.1

Cardiovascular Function and Gravity Transitions During Parabolic Flight (I), pp. 6672-6673.

Aubert, Andre — KULeuven
Beckers, Frank — Univ. Hospital Gasthuisberg, K.U.Leuven
Liu, Jiexin — KULeuven
Verheyden, Bart — KULeuven
Cockuyt, Kurt — Univ. Hosp Gasthuisberg

10:45-11:00 SuB09.2

Analysis of Heart Rate Variability Using Time-Varying Frequency Bands Based on Respiratory Frequency (I), pp. 6674-6677.

Bailon, Raquel — Univ. of Zaragoza
Laguna, Pablo — Zaragoza Univ.
Mainardi, Luca — Pol. di Milano
Sornmo, Leif — Lund Univ.

11:00-11:15 SuB09.3

Heart Rate and Cardiovascular Variability at High Altitude (I), pp. 6678-6680.

Bernardi, Luciano — Univ. of Pavia

11:15-11:30 SuB09.4

Heart Rate Monitoring and Control in Altered Gravity Conditions (I), pp. 6681-6684.

Di Rienzo, Marco — Fondazione Don Carlo Gnocchi
Parati, Gianfranco — Istituto Auxologico Italiano
Rizzo, Francesco — Fondazione Don C. Gnocchi ONLUS
Meriggi, Paolo — Fondazione Don Gnocchi
Merati, Giampiero — Univ. of Milan
Faini, Andrea — Univ. degli Studi Milano-Bicocca
Castiglioni, Paolo — Fondazione Don Carlo Gnocchi ONLUS

SuB10 Rhône 1

Portable Micro-Nano Sensors and Integrated IT Systems in Ubiquitous Healthcare Delivery: Sleep Disorders and the EC-Funded SENSATION System (Invited Session)

Chair: Maglaveras, Nikolaos — Aristotle Univ. of Thessaloniki
Organizer: Maglaveras, Nikolaos — Aristotle Univ. of Thessaloniki

10:30-10:45 SuB10.1

FFT Averaging of Multichannel BCG Signals from Bed Mattress Sensor to Improve Estimation of Heart Beat Interval (I), pp. 6685-6688.

Kortelainen, Juha Matti — VTT, Tech. Res. Center of Finland
Virkkala, Jussi — Finnish Inst. of Occupational Health

10:45-11:00 SuB10.2

ENOBIO Dry Electrophysiology Electrode; First Human Trial and Wireless Electrode System (I), pp. 6689-6693.

Ruffini, Giulio — Starlab Barcelona SL
Dunne, Stephen — Starlab Barcelona SL
Farrés, Esteve — Starlab Barcelona SL
Cester, Ivan — Starlab Barcelona SL
Watts, Paul C.P. — Univ. of Surrey
Silva, Ravi — Univ. of Surrey
Grau, Carles — Univ. of Barcelona
Fuentemilla, Lluis — Univ. of Barcelona
Marco, Josep — Univ. of Barcelona
Vandecasteele, Bjorn — IMEC

11:00-11:15 SuB10.3

Insomnia Treatment Assessment Based on Physiological Data Analysis (I), pp. 6694-6696.

Chouvarda, Ioanna — Aristotle Univ.
Papadelis, Christos — Aristotle Univ. of Thessaloniki
Domis, Nathalie — FORENAP
Staner, Luc — FORENAP
Maglaveras, Nikolaos — Aristotle Univ. of Thessaloniki

11:15-11:30 SuB10.4

Combination of Multiple Light Paths in Pulse Oximetry: The Finger Ring Example (I), pp. 6697-6698.

Sola, Josep — Swiss Center for Electr & Micro
Olivier, Chételat — CSEM

11:30-11:45 SuB10.5

Physiological Indicators Based Sleep Onset Prediction for the Avoidance of Driving Accidents (I), pp. 6699-6704.

Damousis, Ioannis — Centre for Res. and Tech. Hellas
Cester, Ivan — Starlab Barcelona SL
Nikolaou, Stella — Centre for Res. and Tech. Hellas
Tzovaras, Dimitrios — Centre for Res. and Tech. Hellas

SuB11 Tęte d'Or 1

Health Information Systems and Patient Records II (Oral Session)

Chair: Puentes, John — INSERM - GET ENST Bretagne
Co-Chair: Coatrieux, Gouenou — ENST Bretagne - Inserm

10:30-10:45 SuB11.1

DicomWorks Teleradiology: Secure Transmission of Medical Images Over the Internet at Low Cost, pp. 6705-6708.

PUECH, Philippe — INSERM U703
Chazard, Emmanuel — Lille Univ. Hospital
Lemaître, Laurent — Univ. hospital of Lille
Beuscart, Régis — Univ. hospital of Lille

10:45-11:00 SuB11.2

Proposal of an ISO/IEEE11073 Platform for Healthcare Telemonitoring: Plug-And-Play Solution with New Use Cases, pp. 6709-6712.

Galarraga, Miguel — Public Univ. of Navarra
Martínez Ruiz, Ignacio — Univ. of Zaragoza
Serrano, Luis — Public Univ. of Navarra
de Toledo, Paula — Univ. Pol. de Madrid
Escayola, Javier — Univ. of Zaragoza
Fernández Navajas, Julián — Aragon Inst. for Engineering Res. (I3A), Univ. of Z
Jimenez-Fernandez, Silvia — Tech. Univ. of Madrid
Led, Santiago — Public Univ. of Navarra
Martínez-Espronceda, Miguel — Public Univ. of Navarra
Viruete Navarro, Eduardo Antonio — Aragon Inst. of Engineering Res. (I3A), Univ. Zar
García Moros, José — Univ. of Zaragoza

11:00-11:15 SuB11.3

Implementation of the Relay Server for the Ubiquitous Integrated Biotelemetry System for Emergency Care (UIBSEC) Based on 3.5G HSDPA Technology, pp. 6713-6716.

Jung, Min Yang — Seoul National Univ.
Kang, Jaemin — Seoul National Univ.
Shin, Il Hyung — Seoul National Univ.
Koo, Yoonseo — Seoul National Univ.
Suh, Gil Joon — Seoul National Univ. Hospital
Kim, Hee Chan — Seoul National Univ.

11:15-11:30 SuB11.4

Using Zigbee to Integrate Medical Devices, pp. 6717-6720.

Frehill, Paul — National Univ. of Ireland Galway
Chambers, Des — National Univ. of Ireland Galway
Rotariu, Cosmin — National Univ. of Ireland Galway

11:30-11:45 SuB11.5

Probability of Interference between LP-LDC and LBT MICS Implants in a Medical Care Facility, pp. 6721-6725.

Sutton, Brian — Biotronik
Stadnik, Paul — Biotronik
Nelson, Jim — Biotronik
Stotts, Larry — Biotronik

11:45-12:00 SuB11.6

Development of an Electronic Medical Report Delivery System to 3G GSM Mobile (Cellular) Phones for a Medical Imaging Department, pp. 6726-6729.

Lim, Eugene Yusuk — Royal Prince Alfred Hospital
Feng, Dagan — The Univ. of Sydney
Cai, Tom — Univ. of Sydney

SuB12 Rhône 2

Education for Biomedical Engineering Professionals – Crossing Boundaries between Disciplines II (Minisymposium)

Chair: Simpson, David Martin — Univ. of Southampton

10:30-10:45 SuB12.1

Education in Biomedical Engineering – Crossing Professional and National Boundaries (I), pp. 6730-6730.

Simpson, David Martin — Univ. of Southampton

SuB13 Roseraie 1,2

Retinal Image Analysis II (Invited Session)

Chair: Ruggeri, Alfredo — Univ. of Padova
Co-Chair: Trucco, Emanuele — Univ. of Dundee
Organizer: Ruggeri, Alfredo — Univ. of Padova

10:30-10:45 SuB13.1

Model Based Retinal Analysis for Retinopathy Detection, pp. 6731-6734.

D'Antoni, Roberto — Univ. of Padua
De Giusti, Andrea — Univ. of Padua

10:45-11:00 SuB13.2

Segmentation of Candidate Dark Lesions in Fundus Images Based on Local Thresholding and Colour Density (I), pp. 6735-6738.

Grisan, Enrico — Univ. of Padova
Ruggeri, Alfredo — Univ. of Padova

11:00-11:15 SuB13.3

Contextual Detection of Ischemic Regions in Ultra-Wide-Field-Of-View Retinal Fluorescein Angiograms (I), pp. 6739-6742.

Trucco, Emanuele — Univ. of Dundee
Buchanan, Colin — Heriot-Watt Univ.
Aslam, Tariq — Univ. of Edinburgh
Dhillon, Baljean — Princess Alexandra Eye Pavilion

11:15-11:30 SuB13.4

A Probabilistic Framework for Content-Based Diagnosis of Retinal Disease (I), pp. 6743-6746.

Tobin, Kenneth — Oak Ridge National Lab.
Abdelrahman, Mohamed — Tennessee Tech. Univ.
Chaum, Edward — Univ. of Tennessee Hamilton Eye Inst.
Govindasamy, V. Priya — Oak Ridge National Lab.
Karnowski, Thomas — Oak Ridge National Lab.

11:30-11:45 SuB13.5

Three-Dimensional Reconstruction of Optic Nerve Head from Stereo Fundus Images and Its Quantitative Estimation, pp. 6747-6750.

Nakagawa, Toshiaki — Gifu Univ.
Hayashi, Yoshinori — TAK CO., LTD.
Hatanaka, Yuji — Gifu National Coll. of Tech.
Aoyama, Akira — Gifu Univ. Graduate School of Medicine
Hara, Takeshi — Gifu Univ. Graduate Sch of Medicine
Fujita, Akihiro — Kowa Co. Ltd.
Kakogawa, Masakatsu — TAK CO., LTD.
Fujita, Hiroshi — Gifu Univ.
Yamamoto, Tetsuya — Gifu Univ.

11:45-12:00 SuB13.6

Translation Histogram Based Hierarchical Algorithm for 3-D Optic Nerve Head Modeling (I), pp. 6751-6754.

Xu, Juan — Univ. of Pittsburgh
Ishikawa, Hiroshi — Univ. of Pittsburgh School of Medicine
Wollstein, Gadi — Univ. of Pittsburgh School of Medicine
Schuman, Joel S. — Univ. of Pittsburgh School of Medicine