## **Special Sessions**

#### S1: Representation and Approximation of Fuzzy Numbers and Applications

#### Organizers:

Luciano Stefanini (University of Urbino, Italy) Przemysław Grzegorzewski (Polish Academy of Sciences, Poland)

# S2: From Business Intelligence to Business Artificial Intelligence: New Challenges for Intelligent Systems

#### Organizers:

Alberto Bugarín (University of Santiago de Compostela, Spain) Manuel Lama (University of Santiago de Compostela, Spain)

# S3: Evolutionary Multiobjective Optimization—Design and Applications (EMODA)

#### Organizers:

Crina Grosan (Babes-Bolya University, Romania)
Ajith Abraham (Norwegian University of Science and Technology, Norway)

### **S4: Designing Comprehensible Intelligent Systems**

#### Organizers:

Ciro Castiello (University of Bari, Italy) Francesco Marcelloni (University of Pisa, Italy) Corrado Mencar (University of Bari, Italy)

#### S5: Computational Intelligence in Business Management and Risk Analysis

#### Organizers:

Davide Aloini (University of Pisa, Italy)
Mario G.C.A. Cimino (University of Pisa, Italy)
Riccardo Dulmin (University of Pisa, Italy)
Beatrice Lazzerini (University of Pisa, Italy)
Valeria Mininno (University of Pisa, Italy)

#### **S6: Hybrid Metaheuristics and Their Applications**

#### Organizers:

Pedro Isasi (University Carlos III, Spain)

### S7: Education and Learning Models, Applications and Solutions

#### Organizers:

Silvio Bortoleto (University Positivo, Brazil) Katia Bortoleto (University Positivo, Brazil)

### **S8: Intelligent E-Learning Systems**

#### Organizers:

Norazah Yusof (Universiti Teknologi, Malaysia) Nor Bahiah Hj. Ahmad (Universiti Teknologi, Malaysia) Ajith Abraham (Norwegian University of Science and Technology, Norway)

## **S9: Intelligent Systems for Industrial Processes**

#### Organizers:

Leonardo Reyneri (Politecnico di Torino, Italy) Valentina Colla (Scuola Superiore Sant'Anna, Italy)

# **S10:** Intelligent Systems and Data Mining Techniques for Bioinformatics Organizers:

Alicia Troncoso (University of Seville, Spain) Raúl Giráldez (University of Seville, Spain) Roberto Ruiz (University of Seville, Spain)

# **S11: Bioinspired and Evolutionary Computation Based Data Mining Techniques** Organizers:

María José del Jesus (University of Jaen, Spain) José A. Gámez (University of Castilla-La Mancha, Spain) José M. Puerta (University of Castilla-La Mancha, Spain)