
CONFERENCE PROGRAM

Thursday 17th, May

13:00 - 19:00 **REGISTRATION** – IIASS Secretariat

13:30 **WELCOME ADDRESS**

G. Scarpetta, President of IIASS

F. C. Morabito, President of SIREN, Chair of WIRN

13:45 **Opening Plenary Lecture**

Soo-Young **Lee**

DEE & BSRC, KAIST, Daejeon, Republic of Korea

Active Learning and Implicit Intention Understanding: Two New Functions for Artificial Cognitive Systems

Special Session

“Smart Grid: new frontiers and challenges”

Chairs: Stefano Squartini, Rosario Carbone, Michele Scarpiniti, Francesco

Piazza & Aurelio Uncini

14:30 **Invited Lectures**

G. Kumar **Venayagamoorthy**

Clemson University, USA

Dynamic, Stochastic, Computational and Scalable Intelligent Technologies for Smart Grids

G. Spagnuolo

University of Salerno, Italy

Real Time Techniques and Architecture for Maximizing the Power produced by a Photovoltaic Array

15:50 **Coffee Break**

16:10 **Regular Lectures**

16:10-16:25 Emanuele Crisostomi, Mauro Tucci and Marco Raugi
SVM Methods for Optimal Management of a Virtual Power Plant

16:25-16:40 Francesco De Angelis, Matteo Boaro, Danilo Fuselli, Stefano Squartini and Francesco Piazza
A Comparison Between Different Optimization Techniques for Energy Scheduling in Smart Home Environment

16:40-16:55 Michele Nucci, Marco Grassi and Francesco Piazza
Ontology-based device configuration and management for Smart Homes

16:55-17:10 Maria Carmen Falvo, Luigi Martirano and Danilo Sbordone
Sustainable Energy Microsystems for a Smart Grid

17:10-17:25 Lucio Ciabattoni, Gianluca Ippoliti, Sauro Longhi, Matteo Pirro and Matteo Cavalletti
Solar Irradiation Forecasting for PV Systems by Fully Tuned Minimal RBF Neural Networks

17:25–17:40 Gian Luca Storti, Francesca Possemato, Maurizio Paschero,
Antonello Rizzi and Fabio Massimo Frattale Mascioli
*Active power losses constrained optimization in Smart Grids by genetic
algorithms*

17:40–17:55 Rosario Carbone and Angela Tomaselli
*Numerical Analysis of Quality of Power Generated by an Innovative AC PV-
module with On-board Energy Storage*

18:00 Regular Session

Chair: **Simone Bassis**

18:00-18:15 Simone Scardapane, Danilo Comminiello, Michele Scarpiniti,
Raffaele Parisi and Aurelio Uncini
PM10 Forecasting Using Kernel Adaptive Filtering: an Italian Case Study

18:15–18:30 Michele Scarpiniti, Danilo Comminiello, Raffaele Parisi and Aurelio
Uncini
A Collaborative Filter Approach to Adaptive Noise Cancellation

18:30-18:45 Simon Bulotta, Hassan Mahmoud, Francesco Masulli, Stefano
Rovetta and Ernesto Palummeri
Fall Detection Using an Ensemble of Learning Machines

18:45-19:00 Marta Cardin, Marco Corazza, Stefania Funari and Silvio Giove
*Building a global performance indicator to evaluate academic activity using
fuzzy measures*

Friday 18th, May

9:00 - 19:00 **REGISTRATION** – IIASS Secretariat

Special Session (in memory of Professor John G. Taylor)

"Computational Intelligence in Emotional or Affective Systems"

Chairs: Anna Esposito, Günther Palm, and Stefano Squartini

Organized by Anna Esposito

9:00 **"Maria Marinaro" Invited Lectures**

9:00–9:45 Günther **Palm**

University of Ulm, Germany

Towards a Redefinition of Emotions in Human Computer Interaction

9:45-10:30 Alessandro **Vinciarelli**

University of Glasgow, Scotland, UK

Automatic Detection of Conflict in Social Interactions

10: 30 **Coffee Break**

10:45 **Regular Lectures**

10:45-11:05 Emilie Delaherche, Sofiane Boucéna, Mohamed Chetouani, David Cohen

How social signal processing (SSP) can help assessment of bonding and interaction in developmental psychology?

11:05-11:25 Nick Costen

Object Localisation via Action Recognition

11:25-11:45 Martin Schels, Michael Glodek, Friedhelm Schwenker and Günther

Palm Revisiting AVEC 2011 – An Information Fusion Architecture

11:45–12:05 Michael Fartoukh, Lucile Chanquoy and Annie Piolat

Emotion and complex tasks: The writing abilities in young graders

12:05–12:25 Mauro Maldonato, Iliaria Anzoise

Homo-machina visual metaphors, representations of consciousness and scientific thinking

12:25–12:45 Marcos Faundez-Zanuy, Enric Sesa-Nogueras, Josep Roure-Alcombe, Josep Garre-Olmo, Jiri Mekyska, Karmele Lopez-de-Ipiña, Anna Esposito

A Preliminary Study of Online Drawings and Dementia Diagnose

12:45–13:05 Xavier Font-Aragones, Marcos Faundez-Zanuy

Hand-based Gender Recognition Using Biometric Dispersion Matcher

13:05 **Lunch Break**

14:30 **Special Session / Regular Lectures**

14:30–14:50 Rytis Maskeliunas, Vidas Raudonis, Paulius Lengvenis

Emotional Status Determination in HCI Interface for the Paralyzed

14:50–15:10 Liliana Mamani Sanchez and Carl Vogel

Emotions Signal Expertise in Technical Web Forum

15:10-15:30 Angelo Ciaramella and Giuseppe Vettigli

Machine Learning and Soft Computing Methodologies for Music Emotion Recognition

15:30–15:50 Wolfgang Tschacher & Fabian Ramseyer

Nonverbal synchrony in interaction is associated to emotion

15:50-16:10 Hicham Atassi

Emotion Recognition from Slavic Speech: An application for call centre monitoring

16:10 **Coffee Break**

16:30 **“E.R. Caianiello” Invited Lecture**

Jacek **Zurada**

University of Liousville, USA

Non negative factorizations in interpretable pattern classifiers

17:00 **Regular Session**

Chair: **Francesco Palmieri**

17:00-17:15 Francesco Camastra and Domenico De Felice

LVQ-based Hand Gesture Recognition using a Data Glove

17:15-17:30 Francesco Palmieri and Alberto Cavallo

Probability Learning and Soft Quantization in Bayesian Factor Graphs

17:30-17:45 Marco Fagiani, Emanuele Principi, Stefano Squartini and
Francesco Piazza

*Automatic recognition of Italian Sign Language based on Hidden Markov
Models: A preliminary study*

17:45-18:00 Stefano Cavuoti, Mauro Garofalo, Massimo Brescia, Antonio
Pescapè, Giuseppe Longo and Giorgio Ventre

Genetic Algorithm Modeling with GPU Parallel Computing Technology

18:00-18:15 Pietro Burrascano, Marco Ricci, L. Senni, M. Erolì, L. Battaglini, A.
Palazzi

*Wavelet and image fusion techniques in electromagnetic non destructive
evaluation of metallic materials*

18:15 **Bruno Apolloni**

Remembering a friend of SIREN: John Gerald Taylor

18:30 ***E.R. Caianiello Award for the Best Ph.D. Thesis in Neural Network
and Machine Learning Research***

18:45 **SIREN Society Meeting**

20:30 **Social Dinner**

Saturday 19th , May

Chair: **Marco Gori**

9:00-9:30 **Invited Lecture**

Danilo **Mandic**

Imperial College, London, UK

Multivariate Time-Frequency Analysis: Data Driven Approaches

9:30 **Regular Sessions**

9:30-9:45 Luca Mesin, Diego Alberto and Eros Pasero

Control of coffee grinding with General Regression Neural Networks

9:45-10:00 Paolo Motto Ros and Eros Pasero

Neuro-Fuzzy Classifier for Hazelnuts through X-ray Images

Probability Learning and Soft Quantization in Bayesian Factor Graphs

10:00-10:15 Antonietta Esposito, Luca D'Auria, Flora Giudicepietro and
Marcello Martini

*Waveform Variation of the Explosion-Quakes as a function of the eruptive
activity at Stromboli Volcano*

10:15-10:30 Davide Bacciu, Stefano Chessa, Claudio Gallicchio, Alessio Micheli
and Paolo Barsocchi

*An Experimental Evaluation of Reservoir Computation for Ambient Assisted
Living*

10:30 COFFEE BREAK

Chair: **Alfredo Petrosino**

10:45-11:00 Marco Frasca, Alberto Bertoni and Andrea Sion

A neural procedure for Gene Function Prediction

11:00-11:15 Antonio Giuliano Zippo, Sara Nencini, Giuliana Gelsomino and Gabriele Eliseo Mario Biella

Handwritten digit recognition by bio-inspired hierarchical spiking networks

11:15-11:30 Giuseppina Albano, Michele La Rocca and Ciria Perna

Testing the weak form market efficiency: empirical evidence from the Italian stock exchange

11:30-11:45 Marco Lippi, Lorenzo Menconi and Marco Gori

Balancing recall and precision in stock market predictors using support vector machines

11:45-12:00 Antonino Staiano, Maria Donata Di Taranto, Elena Bloise, Maria Nicoletta D'Agostino, Antonietta D'Angelo, Gennaro Marotta, Marco Gentile,

Fabrizio Jossa, Arcangelo Iannuzzi, Paolo Rubba and Giuliana Fortunato
Investigation of Single Nucleotide Polymorphisms associated to Familial Combined Hyperlipidemia with Random Forests

12:30-12:45 N. Alberto Borghese and Wiliam Capraro

Rival-Penalized Competitive Clustering: a study and comparison

12:45-13:00 Dario Malchiodi

An interpretation of the boundary movement method for imbalanced dataset classification based on data quality

13:00–13:15 Alessia Bramanti, Lilla Bonanno, Placido Bramanti and Pietro Lanzafame

Artificial Neural Network (ANN) Morphological Classification of Magnetic Resonance Imaging in Multiple Sclerosis

13:15-13:30 Lucia Maddalena, Alfredo Petrosino and Alessio Ferone
Neural-Based Moving Object Detection by Active Cameras

13:15-13:45 D. Labate, G.Inuso, G.Occhiuto, F. La Foresta, F.C.Morabito
Measures of Brain Connectivity through Permutation Entropy in Epileptic disorders

13:45-14:00 V.D'Amato , G.Piscopo, M.Russolillo
Forecasting net migration by functional demographic model

14:00 **Conference Closing**