



Call for papers on Dynamics of Signal Exchanges

Special Session of the 28th Italian Workshop on Neural Networks WIRN 2018

WIRN 2018 is sponsored by the *Italian Society of Neural Networks* (SIREN, www.associazionesiren.org/) in co-operation with the *International Institute for Advanced Scientific Studies* (IIASS, www.iiassvietri.it)

June 13-15, 2018, Vietri sul Mare, Salerno, Italy.

Instructions on how to reach the Conference Location are on www.iiassvietri.it

I. PROGRAM CO-CHAIRS AND CONTACTS:

Anna Esposito, Antonietta M. Esposito, Gennaro Cordasco, Mauro Maldonato, Carl Vogel,

Anna Esposito is with the Università della Campania "Luigi Vanvitelli", Department of Psychology and the International Institute for Advanced Scientific Studies (IIASS). Email: iiass.annaesp@tin.it

Antonietta M. Esposito is with the Istituto Nazionale di Geofisica e Vulcanologia, Sezione di Napoli Osservatorio Vesuviano, Napoli, Italy. Email: antonietta.esposito@ingv.it

Gennaro Cordasco is with the Università della Campania "Luigi Vanvitelli", Department of Psychology and the International Institute for Advanced Scientific Studies (IIASS). Email: gennaro.cordasco@unicampania.it

Nelson Mauro Maldonato is with the Università di Napoli "Federico II", Dipartimento di Neuroscienze and Reproductive Odontostomatological Sciences, Italy. Email: nelsonmauro.maldonato@unina.it

Francesco Carlo Morabito is with the Università degli Studi "Mediterranea" di Reggio Calabria, Italy. Email: morabito@unirc.it;

Vincenzo Paolo Senese is with the Università della Campania "Luigi Vanvitelli", Department of Psychology and the International Institute for Advanced Scientific Studies (IIASS). Email: vincenzopaolo.senses@unicampania.it

Carl Vogel is with the Trinity Centre for Computing and Language Studies of Trinity College Dublin, Ireland, Department of computer Science. Email: vogel@cs.tcd.ie

II. THEMES AND SCOPE OF THE SESSION

The themes of this special session are multidisciplinary in nature, and closely connected in their final aims to identify features from realistic dynamic of signal exchanges. Such dynamics characterize, formal and informal social signals, communication modes, hearing and vision processes, and brain functionalities. Of particular interest are analyses of visual, written and audio information and corresponding computational efforts to automatically detect and interpret their semantic and pragmatic contents. Related applications of these interdisciplinary facets are ICT interfaces able to detect health and affective states of their users, interpret their psychological and behavioral patterns and support them through positively designed interventions to improve their quality of life.

III. TOPICS

Topics include but are not limited to:

- Signals for detecting affective wellbeing and emotional states
- Detection of health and psychological states from multimodal signals
- Social networks for information spread and share
- Empathic ICT interfaces
- Computational Architectures for Affective Systems
- Supervised and Unsupervised Learning Algorithms in Affective Systems
- Human and/or machine encoding and decoding of behavioral patterns
- Human daily cognitive activities
- More

IV. IMPORTANT DATES

- Paper Submission Deadline: **April 15 2018**
- Notification of acceptance: **May 15, 2018**
- Camera-ready copy: **June 1 2018**
- Conference Dates: **June 13-15, 2018**

V. PUBLICATION AND PAGE LIMITATIONS

- The accepted contributions will be published on the Springer series on “**Smart Innovation Systems and Technologies**” (see <http://www.springer.com/series/8767> for the download of the paper format). The maximum length of the **full paper is 8 -10 pages**. The manuscripts should be submitted through Easy Chair conference system using the following website address: <https://easychair.org/conferences/?conf=wirn2018>.
- Log in your Easy Chair account or register for it and log in. Please specify the name of the special session : “*Dynamics of Signal Exchanges*”
- Please do not hesitate to contact Anna Esposito (iass.annaesp@tin.it) or Gennaro Cordasco (gennaro.cordasco@unina2.it) for further clarifications

VI. REGISTRATION FEE

- The registration fee is **250 euros** and **include the social dinner**. Registration can be done on site (**using cash**) or through bank transfer (the receipt must be exhibited at the conference).
 - >> Bank Name: UBI-Banca Carime
 - >> Branch: Filiale di Salerno - Agenzia Centrale [6701]
 - >> IBAN: IT26K030671520100000022400
 - >> BIC/SWIFT CODE: CARMIT31
 - >> Reason: WIRN 2018 conference
- For further details contact Miss Tina Nappi, email: t.nappi@iassvietri.it

VII. INVITED SPEAKERS

PROFESSOR Alessandro Vinciarelli, <http://www.dcs.gla.ac.uk/vincia>

Alessandro short bio: Alessandro Vinciarelli is with the University of Glasgow where he is Full professor at the School of Computing Science and Associate Academic at the Institute of Neuroscience and Psychology. His main research interest is Social Signal Processing, the domain aimed at modelling analysis and synthesis of nonverbal behaviour in social interactions. In particular, Alessandro has investigated approaches for role recognition in multiparty conversations, automatic personality perception from speech, and conflict analysis and measurement in competitive discussions.

Talk Title: Body language without the body: social signal processing in technology mediated settings

Abstract: Humans are wired for face-to-face interaction because this was the only possible and available setting during the long evolutionary process that has led to Homo Sapiens. At the moment an increasingly significant fraction of our interactions take place in technology mediated settings, it is important to investigate how such a wiring - mainly corresponding to neural processes – reacts and adapts to them. This talk focuses in particular on how nonverbal communication - one of the main channels through which people convey socially and psychologically relevant information - plays a role in settings where natural nonverbal cues (facial expressions, vocalizations, gestures, etc.) are no longer available. Such an issue is important not only from a technological point of view (it can help to design interaction and communication technologies that better address human needs), but also from a societal one (it can help to understand major phenomena such as cyberbullyism and virality).