

7<sup>th</sup> IEEE International Workshop on Advances in

Pizzomunno Vieste Palace Hotel



# **Call For Papers**

The International Workshop on Advances in Sensors and Interfaces is a premier Sensor and Interface design workshop aimed at bridging the gap between electronic design and integrated circuit technologies, processes, and manufacturing to achieve high performance of sensors and electronic interfaces. The conference provides a network to present and exchange ideas, promoting research, development, and applications in a wide range of sensor and interface fields. The workshop theme spans from biomedical, chemical transducers, high-energy physics, and space/automotive sensors to their interfaces, including harsh environment applications and sensor networks.

The 7th IEEE International Workshop on Advances in Sensors and Interfaces aims to provide a forum for experiences and knowledge sharing among international experts actively involved in research, development and applications of novel concepts, theoretical methods/models and experimental analysis, as well as in testing techniques for micro- and nano-sensor systems.

**TOPICS**. Papers are solicited in – but are not limited to - in the following topics:

- Sensor networks in biomedical, bio-telemetrical environmental applications
- Novel health-care systems and applications
- New materials and new technologies for sensors, including 1D and
- Printed, flexible, biodegradable and biocompatible sensors and interfaces
- Novel testing and modeling techniques for sensors systems
- Sensors for aerospace and automotive applications
- Sensor interfaces: analog and digital sensor data processing architectures
- High energy physics experiments
- Neuro-inspired electronics and neural system architectures for brain activity monitoring
- Predictive study of neural signals related to subjects' activity
- Brain computer interfaces, including software tools and architectures
- Formal neural-network models
- Big data management
- Simulation infrastructures in neuro-computing
- Real-time processing of bio signals: tools, methods and experimental results
- Noise and artifacts rejection techniques in hardware design and signal processing
- Biochemical sensors, labs on a chip, multi-electrode arrays and their interfaces
- Low power circuit design for specific sensors and sensing systems Experiences of real-world low power sensing applications and
- deployments Architectures for energy-neutral and self-sustaining sensing systems
- Ultra-low power communication and wake-up radio devices for sensor networks

Accepted papers will be included in the workshop proceedings and available on IEEEXplore.

PAPER SUBMISSION. Papers must be submitted in PDF format following the IEEE template (max. size 2MB). They must be double column and should not exceed six A4 pages with all illustrations and references included. Manuscript guidelines as well as instructions on how to submit electronically are available on the conference web site.

- Paper submission deadline: May 1, 2017 (strict deadline)
- Author Notification: May 15, 2017
- Final Paper Submission deadline: May 29, 2017

The complete workshop program will be published on the conference web site in May 2017.

### General Chair

• De Venuto, D. (Politecnico di Bari and INFN, Italy)

### Steering Committee

- · Cumming, D.R.S. (University of Glasgow, UK)
- Di Sciascio, E.
- (Politecnico di Bari, Italy) Gielen, G.
- (University of Leuven, Belgium) Makinwa, K. (Delft Univ. of Technology,
- Netherlands) Rabaey, J. (University of California at Berkeley,
- · Van Hoof, C. (IMEC Leuven, Belgium)

## **Local Committee**

- · Annese, V.F.
- (University of Glasgow, UK) De Palma, M. (INFN Bari, Italy)
- Magno, M. (ETH Zurich, Switzerland)
- Mezzina, G. (Politecnico di Bari, Italy)

### **Program Committee**

- Benini, L. (Univ. di Bologna, Italy and ETH Zurich, Switzerland)
- · Cantatore, E. (Eindhoven Univ. of Technology, The Netherlands)
- Carrara, S. (EPFL Lausanne, Switzerland)
- Casier, H. (AMI Semiconductors, Belgium)
- De Cesare, G. (Univ. La Sapienza, Italy)
- De Palma, M. (INFN Bari, Italy)
  Demarchi, D. (IIT Politecnico di Torino, Italy)
- Dilillo, L. (LIRMM, France)
- Docchio, F. (Univ. of Brescia, Italy) • Kayal, M. (EPFL Lausanne, Switzerland)
- Milor, L. (Georgia Inst. of Technology, US)
- Nappi, E. (INFN Bari, Italy)
- Ohletz, M.J. (IDT Europe, Germany)
- Ohta, J. (NAIST Takayama, Ikoma, Japan)
- Ozanyan, K.B. (Manchester University, UK)
- Popovici, E. (Univ. Cork, Ireland)
- •Rufer, L. (University Grenoble-Alpes, France)
- Ruta, M. (Politecnico di Bari, Italy)
- Savino, M. (Politecnico di Bari, Italy)
- Siciliano, P. (IMM-CNR Lecce, Italy)
- Thewes, R. (TU Berlin, Germany)
- Torsi, L. (Univ. di Bari, Italy)
- Vigna, B. (ST Microelectronics, Italy) • Sansoni, G. (Univ. of Brescia, Italy)