

2016 IEEE International Symposium on

MeMeA

**Medical
Measurements
and Applications**
**MAY 16 - 18, 2016
BENEVENTO ITALY**
2006 - 2016 : Back to Benevento


CALL FOR PAPERS

FOR THE SPECIAL SESSION

Advances in electromagnetic waves-based diagnostic techniques



ABSTRACT

This Special Session intends to encourage submission of original research papers concerning instrumentation and measurement techniques based on electromagnetic waves to diagnose disorders and pathologies. Nowadays, several electromagnetic waves-based diagnostic techniques are extensively used to diagnose a wide variety of diseases. For example, active thermography and microwave reflectometry can be used to diagnose cancer of skin or breast. Magnetic Resonance Imaging, tomography, x-ray are further diagnostic techniques based on electromagnetic fields which are used to study and inspect human body. Nevertheless, several perspectives and open research problems have to be still investigated, as a consequence advances and new approaches are an interesting frontier in healthcare. This Special Session aims to collect manuscripts that will give significant contributions in the field of electromagnetic waves-based diagnostic techniques addressed to reliable diagnosis or treatment of pathologies and diseases. Further topics concern the definition of procedures for maintenance and calibration, reliability and failure assessment of instrumentation used in this field.

This special session will provide space to researchers to share and present their work, experience and knowledge, with a particular emphasis in technology developments and medical applications.

CHAIR



Rosario Morello
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Rosario Morello was born in Reggio Calabria, Italy, in 1978. He received the M.Sc. Degree (cum laude) in Electronic Engineering and the Ph.D. Degree in Electrical and Automation Engineering from the University "Mediterranea" of Reggio Calabria, Italy, in 2002 and 2006, respectively. Since 2005, he has been Postdoctoral Researcher of Electrical and Electronic Measurements at the Department of Computer Science and Electrical Engineering of the same University. At the present he is Assistant Professor. His main research interests include the design and characterization of distributed and intelligent measurement systems, wireless sensor network, smart sensors, environmental monitoring, decision-making problems and measurement uncertainty, process quality assurance, instrumentation reliability and calibration, biomedical applications and statistical signal processing, non-invasive systems, Measurement, Instrumentation and Methodologies related to Healthcare Systems.

Dr. Morello is a member of the IEEE Society and of the Italian Group of Electrical and Electronic Measurements (GMEE).

BENEVENTO

Benevento, due to the Santa Sofia's Church with its Cloister, has been part of UNESCO World Heritage Sites as "Longobards in Italy. Places of the power".



MORE INFO

For further information, please visit MeMeA2016 website at



memea2016.ieee-ims.org

TOPICS

All the papers reporting measurements of magnetic and electric fields generated by biological systems or man-made for diagnostic scope are welcome. Topics of interest include but are not limited to:

- Thermography
- Magnetocardiography, Magnetoencephalography, mammography
- Microwave reflectometry
- MRI, FMRI, TDI
- Tomography, PET
- X-ray
- Radiotherapy
- Calibration, reliability

DATES

- **January 17, 2016** - Submission of Final Paper (5-6 pages) - first version
- **March 10, 2016** - Submission of revised Final Paper
- **April 4, 2016** - Final Submission, Registration

SUBMISSION

Prospective authors must electronically submit a final paper (5-6 pages, including figures) by January 10, 2016, by pointing out the related Special Session.

All papers will receive multiple peer reviews; authors will receive timely notification of paper acceptance. If accepted, final papers must be no more than 6 pages and will be submitted electronically.

Papers must be presented at the conference orally by an author, will appear in the final conference proceedings, and will be indexed in the Scopus citation index.