

1-st IEEE ITALY SECTION SUMMER SCHOOL

Perugia, June 21-28, 2015



Advanced course for graduated students and industrial research

The IEEE Italy Section, in cooperation with the Dipartimento di Ingegneria of the University of Perugia, organizes the 1-st IEEE Italy Section Summer School: Advanced Course for Graduate Students and Industrial Research. The School is mainly dedicated to graduated students (Ph.D., Dottorato di Ricerca) in technical or scientific fields dealing with the IEEE topics and related areas. Young graduates (MSc, Laurea Magistrale) are also admitted. The school consists of lectures by international experts coming from industry, academia and other research centres. The program covers fundamentals and advanced topics in the following areas:

Antenna & microwaves
Biomechanics and bio-robotics
Communication and networking
Computational electromagnetics
Data treatment
Electrical machines and drives
Electromagnetic compatibility
Electronic components, devices and systems
Ethic issues in research and

technology
Instrumentation, measurement and sensors
Intelligent systems, knowledge discovery and management
Magnetic and electric materials
Mechatronics
Nanotechnology
Nondestructive evaluation
Photonics

Power electronics
Power quality
Power systems, renewable energy and storage
Real-time and embedded systems
Robotics
Security and safety
Signal and image processing
Smart energy systems
Software technologies

The School is also aimed at providing a basic overview about the modern industrial approaches to research and development, including organization and people management. The School provides a great chance not only for learning new skills but also for networking and sharing experiences. The 1-st IEEE Italy Section Summer School will be held at the School of Engineering, via G. Duranti, Perugia. A maximum of **50** participants will be admitted to the School. A **Qualifying IEEE Certificate of Attendance** will be issued.

PRELIMINARY PROGRAM

Sunday, June 21-st Welcome and reception

Monday, June 22-nd - Saturday, June 27-th

Distinguished Lecturers

R. Baldoni, Univ. La Sapienza, Rome, *Cybersecurity*
M. Ceraolo, Univ. Pisa, *Object-Oriented Simulations with Modelica*
F. Cianetti, Univ. of Perugia, *Modeling and simulation of mechatronic systems*
P. Civalieri, Politecnico di Torino, *The circuital approach in R&D*
F. Fiorillo, INRIM Turin, *Magnetic Materials and Measurements*
A. Fernández, Univ. of Vigo, *Digital image processing: some basic concepts and applications*
P. Liò, Cambridge University, *Bioinformatics algorithms and predictive models*

STEERING COMMITTEE

Dario Petri, Chair (IEEE Italy Section and Research Association GMEE)
Paolo Ciancarini (Research Association GRIN)
Maria Domenica di Benedetto (Research Association SIDRA)
Andrea Lacaita (Research Association GE)
Paolo Lampariello (Research Association SIEM)
Nino Mazzeo (Research Association GII)
Carlo Alberto Nucci (Research Association GUSEE)
Sergio Palazzo (Research Association GTTI)
Riccardo Pietrabissa (Research Association GNB)
Alberto Tenconi (Research Association CMAEL)
Fabio Villone (Research Association ET)

GENERAL CHAIR

Ermanno Cardelli (IEEE Italy Section)

PROGRAM COMMITTEE CHAIR

Raffaele Martone (Univ. SUN Naples)

Also technical co-sponsored by

G. Rubinacci, Univ. Naples Federico II, *The constitutive error approach in the computation of the electric and magnetic fields*

D. Scaramuzza, Tech. Univ. of Zurich, *Computer vision for robotic and UAV applications*

J. Schoukens, Vrije Univ. Brussel, *Non-linear system identification*

R. Sorrentino, Univ. of Perugia, *Electromagnetic fields and their applications in the everyday's life*

More lectures (Power Systems, Power Electronics, Telecommunication Systems, etc.) will be announced

A guided tour is expected in the afternoon of **Thursday, June 25-th**

Saturday, June 27-th, 2015 Final evaluation test and Closing ceremony

PUBLICITY CHAIR

Daniela Proto (IEEE Italy Section)

INDUSTRY LIASON CHAIR

Alessandro Vizzarri (IEEE Italy Section)

WEB

Antonio Faba (University of Perugia)

Michele Pompei (University of Perugia)

LOCAL ORGANIZING COMMITTEE

Francesco Bianconi (University of Perugia)

Antonio Moschitta (University of Perugia)

Stefano Saetta (University of Perugia)

More details in: <http://ieeess2015.tr.unipg.it/>

Info: ermanno.cardelli@unipg.it