



organized by Dipartimento di Ingegneria Industriale e dell'Informazione (DIII)

The topics of the course focus on Hybrid Microgrids, energy systems for powering small to medium power consumers in electric islands or connected to the grid. Such systems are important not only for developing countries looking for higher level of electrification, but also for the industrialized countries as engaged in the definition of future smart energy systems, powered by distributed sources. The course is addressed not only to doctoral students, but also to all researchers interested of components, systems and controls for microgrids. Presentations by renowned experts will be complemented by works in groups and a visit to the Campus Microgrid Infrastructure in Savona.

MONDAY 14:00-14:15 **WELCOME to ISS2016**

2016-07-11 14:15-16:00 F. Granelli, Integration of Renewable Sources Within the Smart Grids

16:30-18:15 C. Rottondi, Privacy issues in the automatic metering infrastructure of Smart Grids

18:45 Palazzo Mezzabarba: Welcome from the Mayor of Pavia and tour of the city with the volunteers of Touring Club

9:00-10:45 *P. Zanchetta*, Why power electronics is the enabling technology for the future electrical energy supply grid 11:15-13:00 *P. Zanchetta*, Why power electronics is the enabling technology for the future electrical energy supply grid

2016-07-12 14:15-16:00 M. I. Valla, Non Linear Control of power converters in new electrical grids

16:30-18:30 Working groups & poster session

9:00-10:45 M. Liserre, Integration of renewable energy sources for hybrid microgrids

WEDNESDAY 11:15-13:00 G. Spagnuolo, Control and diagnosis of photovoltaic systems

2016-07-13 14:15-16:00 F. Zanellini, Smart grid and microgrids: the Italian technical and regulatory framework and real cases

16:30-18:30 Working groups & poster session

20:30 Banquet in the city center

9:00-10:45 J. Guerrero, New technologies and future challenges on microgrid research

THURSDAY 11:15-13:00 A. Monti, Hybrid AC/DC microgrids: A bridge to future energy distribution systems

2016-07-14 14:15-16:00 A. Monti, Real-time simulation and Hardware in the Loop in support to the design of advanced power

system solutions

16:30-18:30 Working groups & poster session

TECHNICAL VISIT AT THE SAVONA CAMPUS MICROGRID

FRIDAY 2016-07-15 1

8:00 Departure from Pavia Palazzo Vistarino to Savona by bus;

10:30 Arrival to Savona's campus microgrid infrastructure, courtesy of University of Savona (*F. Delfino*) and Siemens (*F. Zanellini*)

14:15 Departure from Savona to Pavia (by bus arrival by 17:00)

Coffee Breaks: 10:45-11:15/16:00-16:30 - Lunch Break: 13:00-14:15

Scientific Committee:

Norma Anglani Paolo Di Barba Lorenzo Favalli Giancarlo Ferrari Trecate Pericle Zanchetta

Registration

- Deadline: 15 June 2016
- Regular fee: € 210
- IEEE student member fee: € 200
- Free accommodation for 13 selected PhD students (check eligibility on the website).

www.labenunipv.wordpress.com/3ecs-seminars

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