

**DOTTORATO DI RICERCA IN INGEGNERIA ELETTRONICA, INFORMATICA ED ELETTRICA
DIPARTIMENTO DI INGEGNERIA INDUSTRIALE E DELL'INFORMAZIONE
UNIVERSITÀ DEGLI STUDI DI PAVIA**



Ph.D. Course on

**Advanced Topics in Electrical and Electronic
Engineering and Informatics**

September 25-28, 2012

**Sala delle Mostre Temporanee - Museo della Tecnica Elettrica
Via Ferrata 3 – I-27100 Pavia**

Objectives and content

The course organized by the Ph.D. program in Electrical and Electronic Engineering and Informatics is aimed at presenting recent advances and emerging new topics in the fields of Electrical and Electronic Engineering and Informatics. Lectures will mainly focus on theoretical and methodological aspects, in order to offer a multidisciplinary perspective and capture the attention of students working in different research fields. The thesis work of the Ph.D. students in their final year will also be presented.

Organizers

Valerio Annovazzi Lodi

Maria Carla Calzarossa (Chairperson)

Virginio Cantoni

Ilaria Cristiani

Gianni Danese

Vittorio Degiorgio

Giuseppe De Nicolao

Paolo Di Barba

Lorenzo Favalli

Antonella Ferrara

Marco Ferretti

Paolo Gamba

Sabina Merlo

Mario Montagna

Luca Perregrini

Giancarlo Reali

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Program

September 25, 2012	
Tuesday	
9:00 - 9:30	Opening Session
9:30-11:30	"Functional approach of image processing toward artificial vision" - Prof. B. ZAVIDOVIQUE, Université Paris Sud, France
	<i>Break</i>
11:45-12:30	"Recent developments in high-temperature superconducting levitators - part 1" - Prof. R. PALKA, West Pomeranian University
	<i>Break</i>
14:00-15:00	"Recent developments in high-temperature superconducting levitators - part 2" - Prof. R. PALKA, West Pomeranian University of Technology in Szczecin, Poland
15:00-16:00	Thesis presentations - Ph.D. Students
	<i>Break</i>
16:15-17:45	Thesis presentations - Ph.D. Students
September 26, 2012	
Wednesday	
9:00-11:00	"Optimal design of a permanent-magnet machine for electrical automobiles" - Prof. R. PALKA, West Pomeranian University of
	<i>Break</i>
11:15-13:00	"Functional approach of image processing toward artificial vision" - Prof. B. ZAVIDOVIQUE, Université Paris Sud, France
	<i>Break</i>
14:30-16:00	"An evolutionary approach to the digital industry" - Prof. B. LAMBORGHINI, Università Cattolica del Sacro Cuore, Milano
	<i>Break</i>
16:15-17:45	Thesis presentations - Ph.D. Students
September 27, 2012	
Thursday	
9:00-10:30	"Identification problems for evolution equations" - Prof. A. LORENZI, Università di Milano
	<i>Break</i>
10:45-12:45	"Bio-inspired and Nanoscale Communications and Networking - part 1" - Prof. O.B. AKAN, Koc University, Istanbul, Turkey
	<i>Break</i>
14:00-16:00	"Nano-technology and nano-fabrication" - Prof. M. STRAIN, University of Glasgow, Scotland
	<i>Break</i>
16:15-17:45	Thesis presentations - Ph.D. Students
September 28, 2012	
Friday	
9:00-11:00	"Bio-inspired and Nanoscale Communications and Networking - part 2" - Prof. O.B. AKAN, Koc University, Istanbul, Turkey
	<i>Break</i>
11:15-13:00	"Applications in silicon photonics and micro-cavity semiconductor lasers" - Prof. M. STRAIN, University of Glasgow, Scotland
	<i>Break</i>
14:30-16:30	Thesis presentations - Ph.D. Students
16:30- 16:45	Closing Session