



**University of Pavia**

**Ph.D. School of Electrical and Electronics Engineering and Computer Science**

## **SEMINAR**

### **Optimized Generation of Terahertz Radiation for Spectroscopy of Doped Semiconductors**

***Prasanta Kumar Datta***  
**Department of Physics,**  
**IIT Kharagpur – 721302, India**

January 27 2016, 15.00  
Aula Seminari ex Dipartimento di Elettronica, piano D

**Abstract:** Introducing the different methods of THz generation and their pros and cons, the optical rectification applied in a ZnTe crystal with an optical pulse at 800nm for the generation of efficient and wide band-width THz will be described. The effect of pulse shape and its chirping on the efficiency and bandwidth of the generated THz radiation will be presented. The generated THz radiation used to obtain THz time domain absorption spectroscopy in doped GaSe will be discussed to identify the combinational phonon modes.

**Bio:** Prasanta Kumar Datta is Professor of Physics at the Indian Institute of Technology in Kharagpur. His research interests are in the field of ultrafast lasers and nonlinear optics.

**Organizer**

Prof. Luca Tartara

**Ph.D. Coordinator**

Prof. Paolo Di Barba

Seminar in English

For more information: [luca.tartara@unipv.it](mailto:luca.tartara@unipv.it)