



**University of Pavia**

**Ph.D. Program of Electrical and Electronics Engineering and Computer Science  
Ph.D. Program in Microelectronics**

## **SEMINAR**

# **Network architectures for wireless sensor networks**

***Prof. K.R. Chowdhury***  
***Northeastern University, Boston, MA***

**November 11<sup>th</sup>, 2015, h 16.00 – 18.00, room E2**

**Abstract:** WSN play a fundamental role in the general framework of the so-called Internet of things (IoT). This set of seminars will introduce the main applications of sensor networks, outline the main boundary conditions that define WSN characteristics and derive from these hardware, software and network level solutions. In this seminar we will introduce some potential applications to outline different constraints for WSNs. Issues related to topology will also be addressed. Topics covered:

- Introduction to sensor networks, applications, operational constraints
- Underwater sensor networks
- Multimedia sensor networks
- Sensory deployment and topology management
- Clustering techniques

**Bio:** Kaushik Chowdhury is Associate Professor in the Electrical and Computer Engineering Department at Northeastern University, Boston, MA, USA since 2009. He graduated with B.E. in Electronics Engineering with distinction from VJTI, Mumbai University, India, in 2003. He received his M.S. in Computer Science from the University of Cincinnati, OH, in 2006, and Ph.D. from the Georgia Institute of Technology, Atlanta, GA in 2009. His M.S. thesis was given the outstanding thesis award jointly by the ECE and CS departments at the University of Cincinnati. He received the Best Paper Award at the IEEE ICC Conference in 2009, 2012, 2013, as well as the Best Paper award in the ICNC Conference in 2013. His expertise and research interests lie in wireless cognitive radio ad hoc networks, energy harvesting, and intra-body communication. He is currently an area editor for the Elsevier Ad Hoc and Computer Communications journals, and the Chair for the IEEE Technical Committee on Simulation. He is the recipient of the 2015 NSF CAREER award.

### **Organizer**

**Prof. L. Favalli**

### **Ph.D. Coordinator**

**Prof. P. Di Barba**

**Prof. Franco Maloberti**

Seminar in English

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