



**University of Pavia**

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

## **SEMINAR**

### **Next generation cellular networks**

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

**November 19<sup>th</sup>, 2015, h 11.00 – 13.00,**  
**Aula seminari ex Dipartimento di Informatica, Floor D**

**Abstract:** In the run towards higher and higher network capacities several technological and architectural changes are proposed to today's cellular networks. This seminar will first introduce the new version of the 4G standard LTE-A which introduces concepts such as channel bonding, densification of access points, coexistence in unlicensed spectrum bands to increase aggregate rate up to 300Mb/s. Densification and coexistence also raise issues at the network level, where resources must be allocated in a flexible way to accommodate different user requests and network configurations. Topics covered:

- LTE-A
- Full Duplex Communication

**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**

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Seminar in English

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