# First International Workshop on Planning and Optimization of Wireless Networks (OPTNet 2011)

http://www.cwind.org/OPTNet2011/index.html

# 14-15 September 2011,

## The Ridge, The Ranmoor Village, Sheffield, UK

# **Organisers:**

#### General co-chairs:

Jie Zhang, University of Sheffield, UK Mehmet E. Aydin, University of Bedfordshire, UK Ben Allen , University of Bedfordshire, UK

#### Technical Programme Committee

Di Yuan, Linkoping University, Sweden Jean-Marie Gorce, CITI, University of Lyon, INRIA, INSA-Lyon, France Ghazanfar S. Ali, University of Bedfordshire, UK Haci Ali Mantar, Gebze Institute of Technology, Turkey Enjie Liu, University of Bedfordshire, UK Raymond Kwan, Ubiquisys, UK Joyce Wu, Ranplan, UK Stuart Allen, University of Cardiff, UK Jie Zhang, Sheffield University, UK Guillaume de la Roche, Mindspeed Technologies, France Liqiang Zhao, Xidian University, China Vangelis Angelakis, Linköping University, Sweden

#### With Collaboration of:



# Workshop Programme

Wednesday, 14 September 2011.

9:00 – 9:30 Registration

9:30 – 10:00 Welcoming Session

Session 1

10:00 – 10:45 Physical Layer Network Coding for Next Generation Wireless Broadband, Alister Burr, University of York, UK (Keynote)

10:45 – 11:15 Decentralized Femtocell Transmission Regulation in Spectrum-Sharing Macro and Femto Networks, Xiaoli Chu, KCL, UK (Invited)

11:15 – 11:45 Analytical Approximations of EESM Effective SNR Distribution using Pearson System, Hui Song, Ranplan Wireless Network Design Ltd., UK (Invited)

11:45 – 12:15 Blind Beamforming for Multi-path Wideband Signals, Wei Liu, Sheffield University (Invited)

12:15 – 13:30 Lunch

# Session 2

13:30 – 14:15 Understanding Cell Load Coupling for Efficient Performance Engineering of LTE, Di Yuan, Linkoping University, Sweden (Keynote)

14:15-14:45 RRPS: Ranplan Radiowave Propagation Simulator, Zhihua Lai, Ranplan Wireless Network Design Ltd., UK (Invited)

14:45-15:15 Multipath scattering modeling and antenna diversity performance in wireless channels, Petors Karadimas, University of Bedfordshire, UK (Invited)

15:15-15:30 Tea break

Session 3

15:30-16:00 iBuildNet - Enabling Efficient Small Cell Deployment for In-Building Coverage, **Jimin Liu**, **Ranplan Wireless Network Design Ltd.**, **UK (Invited)**  16:00-16:30 Overview for femtocell-macrocell two-tier networks, Zhu Xiao, University of Bedfordshire, UK (Invited)

**16:30-17:00** Network Assisted Power Control in Virtually Clustered Femtocell Network, **Faisal Tariq, Open University, UK** 

**Conference Dinner at 19:00** 

Thursday, 15 September 2011.

Session 4

10: 00 – 10:45 Green Communications- where we are and where we are going, Tim O'Farrell, Sheffield University (Keynote)

**10:45-11:15** Coordinated Multi Cell Processing (CoMP): capacity distribution, fairness and trade off, Nikolai Lebedev (CPE Lyon), Lyon, France (Invited)

11:15-11:45 Introduction of LTE/LTE-Advanced system simulation, Jiming Chen, Ranplan Wireless Network Design Ltd., UK (Invited)

**11:45-12:15** Inter-Cell Interference Coordination in Heterogeneous LTE-Advanced Access Networks, Jie Zhang, Sheffield University, UK

### 12:15-13:30 Lunch

Session 5

13:30-14:00 Cognitive Radio: Spectrum sensing and Spectrum Access,

Ghazanfar Safdar, University of Bedfordshire, UK (Invited)

14:00-14:30 Spectrum Sharing via Cell Zoning and Zooming Techniques in Cognitive Cellular Networks, ATM Shafiul Alam, Laurence S. Dooley, Adrian S. Poulton, Open University, UK

**14:30-15:00** Reinforcement learning based radio resource scheduling in LTE Advanced, **Mehmet Aydin**, **University of Bedfordshire**, **UK** 

**15:00-15:30** A Fault Tolerant Protocol for wireless sensor networks, *By Mohammad Mehdi Afsar* 

15:30-16:00 Closing Session