## Call for Papers Communication and Control Theory Symposium

## **Symposium Co-Chairs**

Peng Cheng, Zhejiang University, China <a href="mailto:pcheng@iipc.zju.edu.cn">pcheng@iipc.zju.edu.cn</a>

Tony Q.S. Quek, Singapore University of Technology and Design, Singapore tonyquek@sutd.edu.sg

Xianghui Cao, Illinoise Institute of Technology, USA

xh.cao@ieee.org

## **Scope and Topics of Interest**

The Communication and Control Theory Symposium will focus on the fundamentals of communication systems and networks, and explore the interdisciplinary fusion of concepts and methods from communication and control. The symposium welcomes original research works in these general areas, focusing on the communication and control issues of all the communication layers as well as of their interactions. To ensure complete coverage of the advances in this field, the Communication and Control Theory Symposium solicits original contributions in, but not limited to, the following typical areas:

- Adaptive Modulation and Coding
- Channel Estimation
- Coding Theory
- Co-design of Communication and Control
- Communication Theory in Ad-Hoc and Sensor Networks
- Communication-Constrained Control
- Cognitive Radio and Dynamic Spectrum Management
- Cooperative Communications
- Cooperative Formation and Flocking Control in Network Systems
- Cryptography, Security, and Privacy in Network Systems
- Cross Layer Design
- Detection and Estimation
- Distributed Processing
- Distributed Sensor Fusion and Estimation
- Distributed Control in Communication Systems
- Diversity
- Energy Efficient Communication and Control
- Feedback in Communications
- Fiber Optical Communications
- Fundamentals of femtocell and picocell-enhanced cellular networks
- Information theory and channel capacity
- Interference Management
- Iterative Techniques, Detection and Decoding
- Joint Source/Channel Coding

- Multicarrier Transmission
- Multiple Access Techniques
- Multiple-Input Multiple-Output (MIMO) Communications
- Multiuser Detection
- Network Coding
- Network Information Theory
- Orthogonal Frequency Division Multiplexing (OFDM)
- Physical-Layer Security
- Radio Resource Management
- Remote State Estimation and Control
- Resource Scheduling and Optimization
- Source Coding and Data Compression
- Space-time Coding and Processing
- Stability Analysis and Control of/over Networks
- Synchronization
- Turbo and LDPC Codes
- Ultra-wideband Communications

## **Submission Guidelines**

Prospective authors are invited to submit original technical papers by the deadline of **1st June 2015** for publication in the IEEE/CIC ICCC 2015 Conference Proceedings and for presentation at the conference. Submissions will be accepted through EDAS. All submissions must be written in English and be at most six (6) printed pages in length, including figures. For full details, please visit the following website:

http://www.ieee-iccc.org/submguide.html