IEEE International Conference on Communications
IEEE ICC 2014
Communications: The Centrepoint of the Digital Economy
10-14 June 2014, Sydney, Australia

Wireless Communications Symposium

Symposium Co-Chairs

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The 2014 IEEE International Conference on Communications (ICC) will be held in the beautiful city of Sydney, Australia between 10 and 14 June 2014. The theme of this flagship conference of IEEE Communications Society for 2014 is "*Communications: The Centrepoint of the Digital Economy*." The conference will feature a comprehensive technical program including twelve Symposia and a number of Tutorials and Workshops. IEEE ICC 2014 will also include an attractive expo program including keynote speakers, and Industry Forum & Exhibitions (IF&E). We invite you to submit your original technical papers, industry forum, workshop, and tutorial proposals to this event. Accepted and presented papers will be published in the IEEE ICC 2014 Conference Proceedings and in IEEE Xplore®. Full details of submission procedures are available at http://www.ieee-icc.org/2014.

Scope and Topics of Interest

The Wireless Communications Symposium will focus on topics related to physical layer (PHY), Medium Access Control (MAC) layer, cross-layer, and PHY-related network analysis and design. High quality papers reporting on novel and practical solutions to PHY, MAC and cross-layer design in wireless communication systems are encouraged. To ensure complete coverage of the advances in wireless communications technologies for current and future wireless systems, the Wireless Communications Symposium cordially invites original contributions from academia and industry in, but not limited to, the following typical areas:

- Multiple-antenna techniques
  - MIMO and multi-antenna communications
  - Multi-user MIMO
  - Space-time coding and processing
  - Smart Antennas
  - Massive antenna arrays and beamforming
  - Near field communications

- Signal processing for communications
  - Modulation, coding, and diversity techniques

- Advanced equalization for single carrier systems
- OFDM and multi-carrier systems
- Ultra-wideband communications (UWB)
- Detection and estimation
- Compressive sensing for communications
- Security issues related to physical layer communications
- <u>Cooperative communications</u>
  - Distributed multipoint, relay assisted, and cooperative communications
  - Network coding
  - Interference alignment and cancellation techniques
  - Cloud-RAN, Radio over fiber, and other related technologies enabling cooperative communication
- <u>Applications and hardware implementations</u>
  - Vehicular communication (C2X communication)
  - RFID and its applications
  - Millimeter wave and visible light communications
  - Underwater wireless communications
  - Hybrid wireless communication systems
  - Wireless communications test-bed development
  - Field tests and measurements
  - Channel and propagation models and measurements
- <u>Wireless air link and multiple access schemes</u>
  - CDMA, TDMA, FDMA, OFDMA air interfaces
  - Broadband wireless access techniques
  - Wireless multicasting and multi-user communication
- Spectrum efficiency and energy efficiency in communications
- Wireless multimedia and QoS
- Coexistence in unlicensed spectra
  - Interference control and radio resource management
- <u>Physical-layer aspects of wireless networks and standards</u>
  - Cross-layer design and physical layer based network Issues
  - Advances in cellular networks such as UMTS, LTE, and IMT-Advanced
  - Body area networks (BAN) and its applications
  - Femtocell networks
  - Heterogeneous networks
  - Sensor networks and applications
  - Advances in millimeter wave wireless LANs and PANs
  - DVB and DAB techniques
  - Standardizations on wireless systems

Submission Guidelines

Prospective authors are invited to submit original technical papers by the deadline 15 September 2013 for publication in the IEEE ICC 2014 Conference Proceedings and for oral or poster presentation(s). All submissions should be

written in English with a maximum paper length of Six (6) printed pages (10-point font) including figures without incurring additional page charges (maximum 1 additional page with over length page charge if accepted).

Standard IEEE Transactions templates for Microsoft Word or LaTeX formats are found at
http://www.ieee.org/portal/pages/pubs/transactions/stylesheets.html
<this link will redirect to the one below
http://www.ieee.org/publications_standards/publications/authors/authors_journals.html >
**Alternatively you can follow the sample instructions in template.pdf at**
http://www.comsoc.org/confs/globecom/2008/downloads/template.pdf
<Better to have a link to the template under ICC'14, instead of GC'08. The link is broken as of Jan 20th, 2013>
Only PDF files will be accepted for the review process and all submissions must be done through EDAS at
http://edas.info/

Short biography for symposium co-chairs:

Yahong Rosa Zheng received the B.S. degree from the University of Electronic Science and Technology of China, Chengdu, China, in 1987, the M.S. degree from Tsinghua University, Beijing, China, in 1989, and the Ph.D. degree from Carleton University, Ottawa, Canada, in 2002. She was an NSERC Postdoctoral Fellow from Jan. 2003 to April, 2005. She has been a faculty member at the Missouri University of Science and Technology since 2005. Her research interests include array signal processing, wireless communications, and wireless sensor networks. She has served as Technical Program Committee (TPC) co-chair for GLOBECOM 2012 and as TPC member for more than ten IEEE international conferences. She served as an Associate Editor for IEEE Transactions on Wireless Communications for 2006-2008. She is currently Associate Editor for IEEE Transactions on Vehicular Technology. She has been a senior member of the IEEE since 2007. She is the recipient of an NSF CAREER award in 2009.
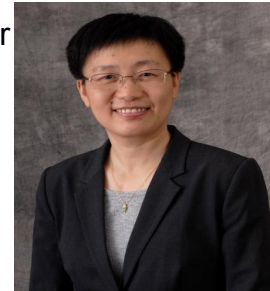
Yiqing Zhou (S'03–M'05–SM'10) received the B.S. degree in communication and information engineering and the M.S. degree in signal and information processing from the Southeast University, China, in 1997 and 2000, respectively. In February 2004, she received the Ph.D. degree in electrical and electronic engineering from the University of Hong Kong, Hong Kong. Now she is a professor in Wireless Communication Research Center, Institute of Computing Technology, Chinese Academy of Sciences. Dr. Zhou has published over 60 papers and book chapter in the areas of wireless mobile communications. Dr. Zhou is a senior member of IEEE and the associate/guest editor for IEEE Trans. Vehicular Technology, IEEE JSAC (Special issue on "Broadband Wireless Communication for High Speed Vehicles" and "Virtual MIMO"), WCMC, ETT and JCST. She is also the TPC co-chair of ChinaCom2012, the tutorial co-chair of IEEE WCNC2013 and the workshop co-chair of IEEE SmartGridComm and GlobeCom2011. Dr. Zhou has served many international conferences as a TPC member, including IEEE ICC, GlobeCom, WCNC and VTC.

Cheng Li received the B. Eng. and M. Eng. degrees from Harbin Institute of Technology, Harbin, P. R. China, in 1992 and 1995, respectively, and the Ph.D. degree in Electrical and Computer Engineering from Memorial University, St. John's, Canada, in 2004.
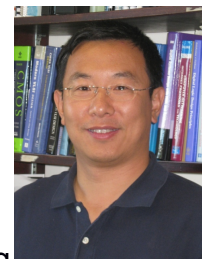
He is currently an Associate Professor at the Faculty of Engineering and Applied Science of Memorial University, St. John's, Canada. His research interests include mobile ad hoc and wireless sensor networks, wireless communications and mobile computing, switching and routing, and broadband communication networks. He is an editorial board member of *Wiley Wireless Communications and Mobile Computing*, an

associate editor of *Wiley Security and Communication Networks*, and an editorial board member of *Journal of Networks, International Journal of E-Health and Medical Communications* and *KSII Transactions on Internet and Information Systems.* He has served a technical program committee (TPC) co-chair for the *IEEE WiMob'11* and *QBSC'10*. He has served as a co-chair for various technical symposia of many international conferences, including the *IEEE GLOBECOM* and *ICC.* He has served as the TPC member for many international conferences, including the IEEE *ICC*, *GLOBECOM*, and *WCNC*. Dr. Li is a registered Professional Engineer (P.Eng.) in Canada and is a Senior Member of the *IEEE* and a member of the *IEEE* Communication Society, Vehicular Technology Society, and Ocean Engineering Society.

Peter Rost received his Ph.D. degree from Technische Universität Dresden, Dresden, Germany, in 2009 and his M.Sc. degree from University of Stuttgart, Stuttgart, Germany, in 2005. From 1999 to 2002 he was with Fraunhofer Institute for Beam and Material Technologies, Dresden, Germany where he developed augmented and virtual reality based controlling systems. From 2002 to 2005 he was with IBM Deutschland Entwicklung GmbH, Böblingen, Germany, where he contributed to the IBM Tivoli system. In June 2005 he joined the Technische Universität Dresden and focused on different aspects of relaying in the context of mobile communications systems. Since April 2010 Peter is member of the Mobile and Wireless Networks group at NEC Laboratories Europe, where he is working multiple projects such as BU, 3GPP RAN2, FLAVIA, and iJOIN. Peter published more than 30 contributions to books, journals, conferences, and public project reports, and he is author of multiple patents and patent applications.

Peter is a guest editor at Elsevier Journal on Computer Networks, conference coordinator of the first IEEE online conference (2010 IEEE Online Conference on Green Communications). He was also a leading member of the organizing team of IEEE ICC 2009 and served as TPC Chair at VTC Spring 2013.

Jinhong Yuan received the B.E. and Ph.D degrees in electronics engineering from Beijing Institute of Technology, Beijing, China, in 1991 and 1997, respectively. From 1997 to 1999 he was a Research Fellow at the School of Electrical Engineering, the University of Sydney, Sydney, Australia. In 2000 he joined the School of Electrical Engineering and Telecommunications, the University of New South Wales, Sydney, Australia, where he is currently a Professor for Telecommunications of the school. He has published two books, two book chapters, over 200 papers in telecommunications journals and conference proceedings and 40 industrial reports. He is a co-inventor of one patent on MIMO systems and two patents on low-density-parity-check (LDPC) codes. He co-authored three Best Paper Awards and one Best Poster Award, including a Best Paper Award of IEEE Wireless Communications and Networking Conference (WCNC), Cancun, Mexico in 2011, and a Best Paper Award of IEEE International Symposium on Wireless Communications

Systems (ISWCS), Trondheim, Norway in 2007. He serves as the IEEE NSW Chair of joint Communications/Signal Processions/Ocean Engineering Chapter. He is currently an Associate Editor for IEEE Transactions on Communications. His research interests include error control coding and information theory, communication theory, and wireless communications.