2015

IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS

SMART CITY & SMART WORLD

8-12 JUNE 2015 • LONDON, UK

◆IEEE   IEEE COMMUNICATIONS SOCIETY

CONNECT WITH IEEE ICC:

Communication Theory Symposium

Symposium Co-Chairs

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The 2015 IEEE International Conference on Communications (ICC) will be held in London, UK from 8-12 June 2015. Themed "Smart City & Smart World," with its proximity to Tech City, the fastest growing technology cluster in Europe, this flagship conference of IEEE Communications Society will feature a comprehensive technical program including twelve Symposia and a number of Tutorials and Workshops. IEEE ICC 2015 will also include an exceptional Industry Forum & Exhibition program including business panels and keynote speakers. We invite you to submit your original technical papers, and industry forum, workshop, and tutorial proposals to this event. Accepted and presented papers will be published in the IEEE ICC 2015 Conference Proceedings and submitted for inclusion in IEEE Xplore®/IEEE Digital Library. Full details of submission procedures are available at http://www.ieee-icc.org/2015.

Scope and Topics of Interest

The Communication Theory Symposium will focus on the fundamentals of communications, with emphasis on wireless and wireline communications. The symposium welcomes original research works in these general areas, focusing on the physical layer as well as on the interactions with higher layers. Research papers on communication theory that relate to networking, genetics, bioinformatics, and quantum information processing are also welcome. To ensure complete coverage of the advances in this field, the Communication Theory Symposium solicits original contributions in, but not limited to, the following topical areas:

- 60 GHz and Sub-terahertz Communications
- Adaptive Modulation and Coding
- Channel Estimation
- Coding Theory
- Cognitive Radio and Dynamic Spectrum Access
- Communication Theory in Ad-Hoc and Sensor Networks
- Cooperative Communications
- Cross Layer Design
- Detection and Estimation
- Distributed Processing
- Diversity and Fading Countermeasures
- Energy Efficient Communication
- Feedback in Communications
- Fundamentals of Heterogeneous Cellular Networks
- Interference Management, Cancellation, Alignment, and Avoidance
- Information theory and Channel Capacity
- Iterative Techniques, Detection and Decoding
- Joint Source/Channel Coding

- Multiple Access Techniques
- Multiple-Input Multiple-Output (MIMO) Communications
- Multiuser Detection
- Network Coding
- Network Information Theory
- Physical-Layer Security
- Radio Resource Management
- Source Coding and Data Compression
- Space-time Coding and Processing
- Theoretical Aspects of Fiber-Optical Communications and Free-Space Optical Communications
- Theoretical Aspects of Power Line Communications
- Theory of Compressed Sensing
- Synchronization
- Ultra-wideband Communications

Submission Guidelines

Prospective authors are invited to submit original technical papers by the deadline 15 October 2014 for publication in the IEEE ICC 2015 Conference Proceedings. 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 found at
http://www.ieee.org/portal/pages/pubs/transactions/stylesheets.html

Alternatively you can follow the sample instructions in template.pdf at
http://www.comsoc.org/confs/globecom/2008/downloads/template.pdf

Only PDF files will be accepted for the review process and all submissions must be done through EDAS at
https://edas.info/newPaper.php?c=17703

Co-Chairs Biographies
Tony Quek received the B.E. and M.E. degrees in Electrical and Electronics Engineering from Tokyo Institute of Technology, Tokyo, Japan, respectively. At Massachusetts Institute of Technology, he earned the Ph.D. in Electrical Engineering and Computer Science. Currently, he is an Assistant Professor with the Information Systems Technology and Design Pillar at Singapore University of Technology and Design (SUTD). He is also a Scientist with the Institute for Infocomm Research. His main research interests are the application of mathematical, optimization, and statistical theories to communication, networking, signal processing, and resource allocation problems. Specific current research topics include cooperative networks, heterogeneous networks, green communications, smart grid, wireless security, compressed sensing, big data processing, and cognitive radio. Dr. Quek has been actively involved in organizing and chairing sessions, and has served as a member of the Technical Program Committee as well as symposium chairs in a number of international conferences. He is serving as the TPC co-chair for IEEE ICCS in 2014, the Wireless Networks and Security Track for IEEE VTC Fall in 2014, the PHY & Fundamentals Track for IEEE WCNC in 2015, and the Communication Theory Symposium for IEEE ICC in 2015. He is currently an Editor for the IEEE Transactions on Communications, the IEEE Wireless Communications Letters, and an Executive Editorial Committee Member for the IEEE Transactions on Wireless Communications. He was Guest Editor for the IEEE Communications Magazine (Special Issue on Heterogeneous and Small Cell Networks) in 2013 and the IEEE Signal Processing Magazine (Special Issue on Signal Processing for the 5G Revolution) in 2014. Dr. Quek was honored with the 2008 Philip Yeo Prize for Outstanding Achievement in Research, the IEEE Globecom 2010 Best Paper Award, the 2011 JSPS Invited Fellow for Research in Japan, the CAS Fellowship for Young International Scientists in 2011, the 2012 IEEE William R. Bennett Prize, and the IEEE SPAWC 2013 Best Student Paper Award.

Meixia Tao received the B.S. degree in electronic engineering from Fudan University, Shanghai, China, in 1999, and the Ph.D. degree in electrical and electronic engineering from Hong Kong University of Science and Technology in 2003. She is currently a Professor with the Department of Electronic Engineering, Shanghai Jiao Tong University, China. Her current research interests include physical layer network coding, wireless resource allocation, MIMO techniques and physical layer security. Dr. Tao is currently an Editor for the IEEE Transactions on Communications and the IEEE Wireless Communications Letters. She was on the Editorial Board of the IEEE Transactions on Wireless Communications from 2007 to 2011 and the IEEE Communications Letters from 2009 to 2012. She also served as Guest Editor for IEEE Communications Magazine with feature topic on LTE-Advanced and 4G Wireless Communications in 2012, and Guest Editor for EURISAP J WCN with special issue on Physical Layer Network Coding for Wireless Cooperative Networks in 2010. Dr. Tao is the recipient of the IEEE Heinrich

Hertz Award for Best Communications Letters in 2013, the IEEE ComSoc Asia-Pacific Outstanding Young Researcher Award in 2009, and the International Conference on Wireless Communications and Signal Processing (WCSP) Best Paper Award in 2012.

Haesik Kim received the M.Sc and Ph.D. degree from Korea Advanced Institute of Science and Technology (KAIST), South Korea, in 2000 and Lancaster University, UK, in 2009, respectively. From 2002 to 2006, he was with Samsung Advanced Institute of Technology (SAIT) where he focused on physical layer system design and standardisation in SDR and UWB project. From 2008 to 2009, he was with NEC Laboratory Europe where he was involved in WiMAX system design and standardisation. He is currently Sr. Scientist and Project Manager with VTT Technical Research Centre of Finland. His current research interests include physical layer system design, coding theory, massive MIMO, wireless backhaul, advanced OFDM system, etc. He served as TPC member of the IEEE/IFIP International Conference on Embedded and Ubiquitous Computing (EUC 2012 and 2013) and the International conference on information technology: New Generations (ITNG 2011 to 2014). He is the recipient of the International Conference on Wireless Communications and Signal Processing (WCSP) Best Paper Award in 2010.