Call for Papers for
Communication Theory Symposium

Scope and Motivation:

The mission of the Communication Theory Symposium is to explore the technical fundamentals of communication systems. The symposium features original and innovative research in technical areas focusing on the physical layer and its interactions with higher layers. Sample topics are listed below.

Main Topics of Interest:

The Communication Theory Symposium seeks original contributions in the following topical areas, plus others that are not explicitly listed but are closely related:

- Adaptive Modulation and Coding
- CDMA and Spread Spectrum
- Channel Estimation and Synchronization
- Coding Theory and Practice
- Communication Theory Aspects of Ad Hoc and Sensor Networks
- Compressed Sensing
- Cooperative Communications
- Detection and Estimation Theory
- Distributed Coding and Processing
- Diversity and Fading Countermeasures
- Dynamic Spectrum Management
- Feedback in Communication Systems
- Fundamentals of Femtocell and Picocell-Enhanced Cellular Networks
- Fiber Optical Communications and Free-Space Optical Communications
- Heterogeneous Networks
- Information Theory and Channel Capacity
- Interference Management, Cancellation, Alignment, and Avoidance
- Iterative Techniques, Detection and Decoding
- Joint Source/Channel Coding
- Massive MIMO Communications

- Multiple Access Techniques
- Multiple-Input Multiple-Output (MIMO) Systems Design and Analysis
- Multiuser Diversity
- Network Coding
- Network and Multiuser Information Theory
- Orthogonal Frequency Division Multiplexing (OFDM) and Multi-Carrier Systems
- Physical Layer Security
- Powerline Communications
- Radio Resource Management and Scheduling
- Source Coding and Data Compression
- Space-time Coding and Processing
- Theoretical aspects of Cognitive Radio
- Theoretical aspects of Cross Layer Design
- Ultra-Wideband, 60GHz, and Sub-Terahertz Communication Theory
- Wireless Communications Powered by Energy Harvesting

Sponsoring Technical Committees:

- Communication Theory
- Wireless Communications

How to Submit a Paper:

The IEEE Globecom 2014 website provides full instructions on how to submit papers. You will select the desired symposia when submitting. **The paper submission deadline is April 1, 2014. Unlike recent ICC's and Globecom's, this is a hard deadline that will not be extended.**

Symposium Co-Chairs:

- Kaibin Huang, The University of Hong Kong, Hong Kong, huangkb@ieee.org
- Sennur Ulukus, University of Maryland, USA, ulukus@umd.edu
- Pooi-Yuen Kam, National University of Singapore, Singapore, py.kam@nus.edu.sg

Biographies:

Kaibin Huang (S'05–M'08-SM'13) received the B.Eng. (first-class hons.) and the M.Eng. from the National University of Singapore in 1998 and 2000, respectively, and the Ph.D. degree from The University of Texas at Austin (UT Austin) in 2008, all in electrical engineering.

Since Jan. 2014, he has been an assistant professor in the Dept. of Electrical and Electronic Engineering (EEE) at The University of Hong Kong. He is an adjunct professor in the School of EEE at Yonsei University in S. Korea. He used to be a faculty member in the Dept. of Applied Mathematics at The Hong Kong Polytechnic University (PolyU) and the Dept. of EEE at Yonsei University. He had been a Postdoctoral Research Fellow in the Department of Electrical and Computer Engineering at the Hong Kong University of Science and Technology from Jun. 2008 to Feb. 2009 and an Associate Scientist at the Institute for Infocomm Research in Singapore from Nov. 1999 to Jul. 2004. His research interests focus on the analysis and design of wireless networks using stochastic geometry and multi-antenna techniques.

He frequently serves on the technical program committees of major IEEE conferences in wireless communications. He chairs the Comm. Theory Symp. of IEEE GLOBECOM 2014 and the Adv. Topics in Wireless Comm. Symp. of IEEE/CIC ICCC 2014 and has been the technical co-chair for IEEE CTW 2013, the track chair for IEEE Asilomar 2011, and the track co-chair for IEE VTC Spring 2013 and IEEE WCNC 2011. He is a guest editor for the IEEE Journal on Selected Areas in Communications, an editor for the IEEE Transactions on Wireless Communications, IEEE Wireless Communications Letters and also IEEE/KICS Journal of Communication and Networks. He is an elected member of the SPCOM Technical Committee of the IEEE Signal Processing Society. Dr. Huang received the Outstanding Teaching Award from Yonsei, Motorola Partnerships in Research Grant, the University Continuing Fellowship at UT Austin, and Best Paper Awards from IEEE GLOBECOM 2006 and PolyU AMA in 2013.

Sennur Ulukus is a Professor of Electrical and Computer Engineering at the University of Maryland at College Park, where she also holds a joint appointment with the Institute for Systems Research (ISR). Prior to joining UMD, she was a Senior Technical Staff Member at AT&T Labs-Research. She received her Ph.D. degree in Electrical and Computer Engineering from Wireless Information Network Laboratory (WINLAB), Rutgers University, and B.S. and M.S. degrees in Electrical and Electronics Engineering from Bilkent University. Her research interests are in wireless communication theory and networking, network information theory for wireless communications, signal processing for wireless communications, information-theoretic physical-layer security, and energy-harvesting communications.

Dr. Ulukus received the 2003 IEEE Marconi Prize Paper Award in Wireless Communications, an 2005 NSF CAREER Award, the 2010-2011 ISR Outstanding Systems Engineering Faculty Award, and the 2012 George Corcoran Education Award. She served as an Associate Editor for the IEEE Transactions on Information Theory (2007-2010) and IEEE Transactions on Communications (2003-2007). She served as a Guest Editor for the Journal of Communications and Networks for the special issue on energy harvesting in wireless networks (2012), IEEE Transactions on Information Theory for the special issue on interference networks (2011), IEEE Journal on Selected Areas in Communications for the special issue on multiuser detection for advanced communication systems and networks (2008). She served as the TPC co-chair of the Communication Theory Symposium at 2013 IEEE ICC, Physical-Layer Security Workshop at 2011 IEEE Globecom, Physical-Layer Security Workshop at 2011 IEEE ICC, 2011 Communication Theory Workshop (IEEE CTW), Wireless Communications Symposium at 2010 IEEE ICC, Medium Access Control Track at 2008 IEEE WCNC, and Communication Theory

Symposium at 2007 IEEE Globecom. She was the Secretary of the IEEE Communication Theory Technical Committee (CTTC) in 2007-2009.

Pooi-Yuen KAM [F'10] was born in Ipoh, Malaysia, and educated at the Massachusetts Institute of Technology, Cambridge, Mass., USA where he obtained the S. B., S. M., and Ph. D. degrees in electrical engineering in 1972, 1973, and 1976, respectively.

From 1976 to 1978, he was a member of the technical staff at the Bell Telephone Laboratories, Holmdel, N. J., U. S. A., where he was engaged in packet network studies. Since 1978, he has been with the Department of Electrical and Computer Engineering, National University of Singapore, where he is now a professor. He served as the Deputy Dean of Engineering and the Vice Dean for Academic Affairs, Faculty of Engineering of the National University of Singapore, from 2000 to 2003. His research interests are in the communication sciences and information theory, and their applications to wireless and optical communications. He spent the sabbatical year 1987 to 1988 at the Tokyo Institute of Technology, Tokyo, Japan, under the sponsorship of the Hitachi Scholarship Foundation. In year 2006, he was invited to the School of Engineering Science, Simon Fraser University, Burnaby, B.C., Canada, as the David Bested Fellow.

Dr. Kam is a member of Eta Kappa Nu, Tau Beta Pi, and Sigma Xi. Since September 2011, he is a senior editor of the IEEE Wireless Communications Letters. From 1996 to 2011, he served as the Editor for Modulation and Detection for Wireless Systems of the IEEE Transactions on Communications. He also served on the editorial board of PHYCOM, the Journal of Physical Communications of Elsevier, from 2007 to 2012. He was elected a Fellow of the IEEE for his contributions to receiver design and performance analysis for wireless communications. He received the Best Paper Award at the IEEE VTC2004-Fall, at the IEEE VTC2011-Spring, and at the IEEE ICC2011.