Call for Papers for Wireless Communications Symposium

Scope and Motivation:

The Wireless Communications Symposium covers all aspects related to wireless communications and its applications, with a focus on topics related to physical layer (PHY), MAC layer, cross-layer, and physical layer-related network analysis and design. High quality papers reporting on novel and practical solutions for PHY, MAC, and cross-layer design in wireless communication systems are encouraged. In addition, papers on field tests and measurements, field trials and applications from both industries and academia are of special interest.

Main Topics of Interest:

To ensure complete coverage of the advances in wireless communications technologies for the current and future systems, the Wireless Communications Symposium cordially invites original contributions in, but not limited to, the following topical areas:

- Advanced equalization, channel estimation, and synchronization techniques
- Antennas, smart antennas, and space-time processing
- Broadband wireless access techniques, systems, and standards
- Channel modeling and propagation
- Cross-layer design and physical-layer based network issues
- Device-to-device and machine-to-machine communications
- Digital broadcasting of audio (DAB), video (DVB), and multimedia (MBMS)
- Distributed, relay assisted, and cooperative communications
- Heterogeneous and small-cell networks
- Hybrid communication systems (e.g. satellite/terrestrial/wireline hybrids)
- Interference characterization and applications of stochastic geometry
- Interference management, alignment, and cancellation
- Inter-cell interference coordination (ICIC) and coordinated multi-point (CoMP)
- Localization and navigation techniques
- Millimeter wave and Terahertz communications
- MIMO, multi-user MIMO, and massive MIMO
- Modulation, coding, and diversity techniques
- Multiple access techniques and air interfaces (CDMA, TDMA, FDMA, OFDMA)
- OFDM and multi-carrier systems
- Performance analysis of wireless systems
- Physical-layer network coding
- Physical-layer security

- Physical-layer aspects of wireless sensor networks
- Radio resource management
- RFID and its applications
- Ultra-wideband (UWB)
- Underwater communications
- Wireless communications testbeds, field tests, and measurements

Sponsoring Technical Committees:

- Wireless Communications
- Communication Theory
- Signal Processing and Communications Electronics

How to Submit a Paper:

The IEEE Globecom 2015 website provides full instructions on how to submit papers. You will select the desired symposium when submitting. The paper submission deadline is April 1, 2015. Unlike recent ICC's and Globecom's, this is a hard deadline that will not be extended.

Symposium Co-Chairs:

- Matthew Valenti, West Virginia University, USA, <u>valenti@ieee.org</u>
- Jingxian Wu, University of Arkansas, USA, <u>wuj@uark.edu</u>
- Watcharapan Suwansantisuk, King Mongkut's Univ. of Tech. Thonburi, Thailand, watcharapan.suw@kmutt.ac.th
- Hongyi Wu, University of Louisiana at Lafayette, USA, <u>dr.hongyi.wu@gmail.com</u>
- Huiling Zhu, University of Kent, UK, <u>h.zhu@kent.ac.uk</u>

Biographies:

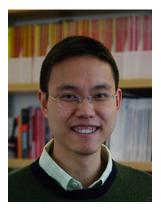


Matthew Valenti (IEEE M'99-SM'07) is a Professor in the Lane Department of Computer Science and Electrical Engineering at West Virginia University and site director for the Center for Identification Technology Research (CITeR), an NSF Industry/University Cooperative Research Center (I/UCRC). His research is in the area of wireless communications, including cellular networks, military communication systems, sensor networks, and coded modulation for satellite communications. He is active in the organization of major IEEE Communication Society (ComSoc) conferences, including serving as the Technical Program Vice Chair for Globecom 2013 and MILCOM 2015 and as a track or symposium chair for MILCOM ('10,'12,'14), ICC ('09,'11), and Globecom ('15). He is an Executive Editor for IEEE Transactions on Wireless Communications, an Editor for IEEE Transactions on Communications, and an Officer in ComSoc's Communication Theory Technical Committee. He is registered as a Professional Engineer in the state of West Virginia.



Jingxian Wu (S'02-M'06) received the B.S. (EE) degree from the Beijing University of Aeronautics and Astronautics, Beijing, China, in 1998, the M.S. (EE) degree from Tsinghua University, Beijing, China, in 2001, and the Ph.D. (EE) degree from the University of Missouri at Columbia, MO, USA, in 2005. Dr. Wu joined the University of Arkansas, Fayetteville, AR, in August 2008, and he is currently an Associate Professor in Electrical Engineering. He also serves as the director for the Intelligent Information Sensing, Processing, and Transmission Laboratory at the University of Arkansas. Dr. Wu is currently serving as an Editor of the IEEE Transactions on Wireless Communications, and an Associate Editor of the IEEE Access. He served as an Associate Editor of the IEEE Transactions on Vehicular Technology from 2007 to 2011. He has served as a symposium co-chair or technical program co-chair for a number of international conferences, including IEEE Global Telecommunication Conference (2009 and 2015), International Conference on Communications (2012), International Wireless Communications and Mobile

Computing Conference (2010), and International Workshop on Emerging MIMO Technologies with 2D Antenna Array for 4G LTE-Advanced and 5G (2015).



Watcharapan Suwansantisuk (M'12) is a Lecturer at King Mongkut's University of Technology Thonburi (KMUTT), Thailand. He received B.S. degrees in electrical and computer engineering and in computer science from Carnegie Mellon University (2002); and the M.S. and Ph.D. degrees in electrical engineering from Massachusetts Institute of Technology (2004 and 2012). Before joining KMUTT, he spent summers at the University of Bologna in Italy as a visiting research scholar and at Alcatel-Lucent Bells Laboratory, New Jersey, as a research intern. His main research interests are synchronization theory and stochastic calculus with applications to wireless communications and networks. Dr. Suwansantisuk is an active member of the community, serving on the technical program committees for international conferences and most recently as a symposium co-chair of the IEEE Global Communications Conference (2015). Dr. Suwansantisuk received a Claude E. Shannon Fellowship from the Laboratory for Information and Decision Systems (2007); and, jointly with Professor Marco Chiani and Professor Moe Win, the Leonard G. Abraham Prize in the Field of Communications Systems from the IEEE Communications Society (2011).



Hongyi Wu (M'02) received the B.S. degree in scientific instruments from Zhejiang University, Hangzhou, China, in 1996, and the M.S. degree in electrical engineering and Ph.D. degree in computer science from the State University of New York (SUNY) at Buffalo in 2000 and 2002, respectively. Since then, he has been with the Center for Advanced Computer Studies (CACS), University of Louisiana at Lafayette (UL Lafayette), where he is now a Professor and holds the Alfred and Helen Lamson Endowed Professorship in Computer Science. His research spans delay-tolerant networks, radio frequency identification (RFID) systems, wireless sensor networks, and integrated heterogeneous wireless systems. He is an Associate Editor for several journals and involved in the organization of a diversity of international conferences. He received NSF CAREER Award in 2004 and UL Lafayette Distinguished Professor Award in 2011.



Huiling Zhu (M'04) received the B.S degree from Xidian Univeristy, Xi'an, China, in 1997, and the Ph.D. degree from Tsinghua University, Beijing, China in 2003. She is currently a Lecturer (Assistant Professor) in the School of Engineering and Digital Arts, University of Kent, Canterbury, United Kingdom. Her research interests are in the area of broadband wireless mobile communications, covering topics such as radio resource allocation and management, MIMO, cooperative communications, distributed antenna systems, and small cells and heterogeneous networks. She has participated in a number of European and industrial projects in these topics. She has served as the Publication Chair of IEEE WCNC2013 and is the Operation Chair of IEEE ICC2015.