



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 to 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 current and future wireless 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
- Broadband wireless access techniques and systems
- Channel and network interference characterization and modeling
- Channel state information feedback techniques
- Coexistence in unlicensed spectra
- Cross-layer design and physical-layer based network issues
- Device-to-device and machine-to-machine communications
- Digital video broadcasting (DVB) and digital audio broadcasting (DAB) techniques
- Distributed multipoint, relay assisted, and cooperative communications
- Field tests and measurements
- Heterogeneous and femtocell networks
- Hybrid wireless communication systems (e.g. satellite/terrestrial hybrids)
- Interference management, alignment and cancellation, inter-cell interference coordination (ICIC), and coordinated multi-point transmission (CoMP)
- Localization techniques
- 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
- Opportunistic and dynamic spectrum access
- Physical-layer aspects of cellular networks such as LTE, 5G and IMT-Advanced, wireless local-area networks (LANs), personal area networks (PANs), and body area networks (BANs)
- Physical-layer network coding
- Radio resource management and interference control
- RFID and its applications
- Signal design (waveform design, pilot design, preamble design, etc.)
- Smart antennas, Space-time coding and processing
- Standardization of wireless systems
- Security issues related to wireless communications
- Ultra-wideband (UWB) and millimeter wave communications
- Underwater wireless communications
- Wireless communications testbed development
- Wireless multimedia and quality of service (QoS)

Sponsoring Technical Committees:

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

How to Submit a Paper:

The IEEE Globecom 2014 website provides full instructions on how to submit papers. You will select the desired symposium 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:

- Huaiyu Dai, NC State University, USA, Huaiyu_Dai@ncsu.edu
- Luc Deneire, Université de Nice Sophia Antipolis, France, Luc.Deneire@unice.fr
- Hlaing Minn, University of Texas at Dallas, USA, Hlaing.Minn@utdallas.edu
- Daniele Tarchi, Univ. of Bologna, Italy, daniele.tarchi@unibo.it
- Santiago Mazuelas, Massachusetts Institute of Technology, USA, mazuelas@mit.edu
- Zhaoyang Zhang, Zhejiang University, China, ning_ming@zju.edu.cn

Biographies:



Huaiyu Dai (M'03, SM'09) received the B.E. and M.S. degrees in electrical engineering from Tsinghua University, Beijing, China, in 1996 and 1998, respectively, and the Ph.D. degree in electrical engineering from Princeton University, Princeton, NJ in 2002.

He was with Bell Labs, Lucent Technologies, Holmdel, NJ, during summer 2000, and with AT&T Labs-Research, Middletown, NJ, during summer 2001. Currently he is an Associate Professor of Electrical and Computer Engineering at NC State University, Raleigh. His research interests are in the general areas of communication systems and networks, advanced signal processing for digital communications, and communication theory and information theory. His current research focuses on networked information processing and crosslayer design in wireless networks, cognitive radio networks, wireless security, and associated information-theoretic and computation-theoretic analysis.

He has served as an editor of IEEE Transactions on Communications, Signal Processing, and Wireless Communications. He co-edited two special issues of EURASIP journals on distributed signal processing techniques for wireless sensor networks, and on multiuser information theory and related applications, respectively. He co-chairs the Signal Processing for Communications Symposium of IEEE Globecom 2013, the Communications Theory Symposium of IEEE ICC 2014, and the Wireless Communications Symposium of IEEE Globecom 2014.



Luc Deneire (M'99) received the Eng. degree from University of Liège in 1988 and from University of Louvain -la-Neuve in 1993, as well as the Ph.D. Degree from Eurecom in 1998. Since Sept. 2002, he has been assistant professor, and since Jan. 2009, Full Professor in the Dept. of Electrical Engineering at the Polytechnical School of University of Nice Sophia Antipolis. From Sept. 1999 to Aug. 2002 he was senior researcher at IMEC, Leuven, Belgium. He is the author of more than 100 conference and journal papers. He frequently serves on the technical program committees of major IEEE conferences in wireless communications. Recently he has served as Crowncom local chair, 2011 Signal Processing Symposium co-chair, ICC 2011 Signal Processing Symposium co-chair, ICC 2009 Wireless Communications co-chair, Globecom 2008. He is associate editor for IEEE Transactions on Wireless Communications. His research activities are focused on signal processing for wireless communications, in the frame of mobile communications, local and personal area wireless networks. His main focus is on OFDM and on multiple antenna systems, including space-time processing and diversity-aided systems (spatial multiplexing, space-time coding and cooperative diversity).



Hlaing Minn (SM'07) received the B.E. degree in Electrical Electronics Engineering from Yangon Institute of Technology, Myanmar, in 1995, the M.Eng. degree in Telecommunications from Asian Institute of Technology (AIT), Thailand, in 1997, and the Ph.D. degree in Electrical Engineering from the University of Victoria, Victoria, Canada, in December 2001.

He worked as a Telecommunication Engineer in TOTAL Myanmar Exploration and Production Company, Myanmar, during 1995, a laboratory supervisor in AIT, Thailand, during 1998, and a post-doctoral fellow at the University of Victoria, Canada, during 2002. He joined the University of Texas at Dallas as an Assistant Professor in 2002 and now is an Associate Professor in the Department of Electrical Engineering since 2008. His research interests include communication theory, wireless communications, signal processing, information theory, and biomedical signal processing. His current research focuses on efficient CSI acquisition and exploitation in emerging wireless systems, signal design, opportunistic and dynamic spectrum access, capacity and spectrum efficiency enhancement techniques, and exploring technologies for next generation wireless systems. He has published over 50 IEEE journal papers and 80 IEEE conference papers.

He serves as an editor in the IEEE Transactions on Communications and in the International Journal of Communications and Networks. He has served as a symposium TPC Co-Chair for the Wireless Access Track of IEEE VTC Fall (2009), Program Chair of the Dallas Chapter of IEEE Signal Processing Society (2007-2008), and a TPC member in over twenty IEEE major conferences.



Daniele Tarchi (S'98, M'06, SM'12) received the MSc degree in Telecommunications Engineering and the PhD degree in Informatics and Telecommunications Engineering from the University of Florence, Italy, in 2000 and 2004, respectively. In 2004-2007 he was a research fellow at the University of Florence, Italy. From January 2008 to November 2010 he was a research associate at the University of Florence, Italy. Since December 2010 is an assistant professor at the University of Bologna, Italy. His research interests are in both Data Link and Physical Layers, with particular interests to Resource Allocation algorithms in wireless networks, Link Adaptation and Adaptive Modulation and Coding Techniques, MAC Protocols for Broadband wireless access. He has been involved in several national projects (Insyeme, Rescue, Pattern and Women) as well as European projects (CoRaSat, Nexway, Newcom, Satnex, COST289). He is author of about 60 papers, mainly on journal and main IEEE conferences. He is currently serving as Associate Editor for IEEE Transactions on Wireless Communications, and has been TPC co-chair in IEEE WCNC 2012 – Track 2; he has been reviewer of several technical papers submitted to journals and magazines and TPC for several symposium of ICC and Globecom of the last years. He is IEEE Senior Member since 2012.



Santiago Mazuelas (M'10) received the Ph.D. in Mathematics and Ph.D in Telecommunications Engineering from the University of Valladolid, Spain, in 2009 and 2011, respectively.

Since 2009, he has been a postdoctoral fellow in the Wireless Communication and Network Sciences Laboratory at MIT. He previously worked from 2006 to 2009 as a Researcher and Project Manager in a Spanish technological center, as well as a junior lecturer in the University of Valladolid. His research interests are the application of mathematical and statistical theories to signal processing and navigation networks.

Dr. Mazuelas served as member of the TPC for the IEEE Globecom in 2010–2013, ICC in 2013, VTC in 2012, and ICUWB in 2011 and 2013. He received the Best Student Prize in Telecommunications Technical Engineering from University of Valladolid in 2006, the Best Doctorate Thesis Award from University of Valladolid in 2011, and the Young Scientist Prize from the Union Radio-Scientifique Internationale (URSI) Symposium in 2007. His papers received the IEEE Communications Society Fred W. Ellersick Prize in 2012, and Best Paper Awards from the IEEE ICC in 2013, the IEEE ICUWB in 2011 and the IEEE Globecom in 2011.



Zhaoyang Zhang (M'02) received his B.S. degree in *radio engineering* and Ph.D degree in *communication and information systems* from Zhejiang University, China, in 1994 and 1998 respectively. He is currently a full professor with the Department of Information Science and Electronic Engineering, Zhejiang University. His research interests are mainly focused on next generation wireless mobile communications, communication and network signal processing, cognitive radio and cooperative communications, etc. He has published more than 150 refereed international journal and conference papers and two books in the above areas. He received the *New Century Excellent Talents in University* Award from the Ministry of Education, China, and the *Outstanding Young Investigator* Award from the Natural Science Foundation of Zhejiang Province, China, in 2009 and 2012, respectively. He was a co-recipient of Chinacom'2008 Best Paper Award and Chinacom'2011 Best Student Paper Award. He has served as Associate Editor for *Wiley International Journal of Communication Systems* (2008-now), and TPC Co-Chair for *WCSP' 2013, ICUFN'2011/12/13*.