

## Call for Papers for Wireless Communications Symposium

### Symposium Co-Chairs

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| <b>Xiaohu Ge</b>           | Huazong University of Science and Technology, China, xhge@mail.hust.edu.cn |
| <b>Dimitrie C. Popescu</b> | Old Dominion University, USA, dpopescu@odu.edu                             |
| <b>Hossam Hassanein</b>    | Queen's University, Canada, hossam@cs.queensu.ca                           |
| <b>Rui Zhang</b>           | National University of Singapore, Singapore, elezhang@nus.edu.sg           |

*Submissions must be done through EDAS at <http://edas.info/N20759>*

### 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
- 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
- Cooperative and relay-aided communications
- Compressive sensing for communications
- Physical layer issues in device-to-device and machine-to-machine communications
- Digital broadcasting of audio (DAB), video (DVB), and multimedia (MBMS)
- 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 communication systems
- Physical-layer network coding
- Physical-layer security
- Physical-layer aspects of wireless sensor networks
- Radio resource management
- RFID and its applications
- Security issues related to wireless communications

- Space-time coding and processing
- Ultra-wideband (UWB)
- Underwater communications
- Wireless communications testbeds, field tests, and measurements
- Wireless network coding
- Wireless power transfer
- Energy harvesting for wireless communications

### Sponsoring Technical Committees

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

### Co-Chairs Biographies



**Xiaohu Ge** is currently a Professor with the School of Electronic Information and Communications at Huazhong University of Science and Technology (HUST), China. He has been granted as a Huazhong Scholar professor position in HUST. He received his PhD degree in Communication and Information Engineering from HUST in 2003. He has worked at HUST since Nov. 2005. Prior to that, he worked as a researcher at Ajou University (Korea) and Politecnico Di Torino (Italy) from Jan. 2004 to Oct. 2005. He was a visiting researcher at Heriot-Watt University, Edinburgh, UK from June to August 2010. His research interests are in the area of mobile communications, traffic modeling in wireless networks, green communications, and interference modeling in wireless communications.

He has published about 100 papers in refereed journals and conference proceedings and has been granted about 15 patents in China. He received the Best Paper Awards from IEEE Globecom 2010. He is leading several projects funded by NSFC, China MOST, and industries. He is taking part in several international joint projects, such as the RCUK funded UK-China Science Bridges: R&D on (B)4G Wireless Mobile Communications and the EU FP7 funded project: Security, Services, Networking and Performance of Next Generation IP-based Multimedia Wireless Networks.

Dr. Ge is currently serving as an Associate Editor for seven internationals, such as Wireless Communications and Mobile Computing Journal (John Wiley & Sons), et. al. Since 2005, he has been actively involved in the organisation of more than 10 international conferences, such as Executive Chair of the 2013 IEEE International Conference on Green Computing and Communications (GreenCom2013). He is a Senior Member of the IEEE, a Senior member of the Chinese Institute of Electronics, a Senior member of the China Institute of Communications, and a member of the NSFC and China MOST Peer Review College.



**Dimitrie C. Popescu** is Associate Professor and Graduate Program Director in the Department of Electrical and Computer Engineering at Old Dominion University, in Norfolk, Virginia. His current research is focused on spectral shaping, spectrum sensing, and modulation classification for cognitive radio systems; waveform design and optimization for adaptive radar systems; and vehicular communications and networking for intelligent transportation systems. Dr. Popescu's research includes also interference mitigation and power control in wireless systems, OFDM, UWB and MIMO systems, as well as applications of non-cooperative game theory and distributed optimization in wireless networks.

He co-authored over 130 referred journal and conference papers in these areas.

Dr. Popescu is a Senior Member of the IEEE and a member of the IEEE Communications and Information Theory societies. Currently he serves as Associate Editor for IEEE Transactions on Wireless Communications and has also served as Associate Editor for IEEE Communications Letters between 2010 and 2014. In addition he is a frequent reviewer for many other journals such as IEEE Transactions on Communications, IEEE Transactions on Wireless Communications, IEEE Transactions on Signal Processing, IEEE Transactions on Information Theory, and Elsevier Physical Communications and Signal Processing journals. His professional activities include also participation in organizing and technical program committees of numerous IEEE conferences: he served as Co-Chair for the Services, Applications and Business track of the 2015 IEEE Wireless Communications and Networking Conference, Publicity Co-Chair for the 2010 IEEE Vehicular Networking Conference (VNC), Co-Chair for the Vehicular Networks track of the 70th IEEE Vehicular Technology Conference (VTC 2009 Fall), and Finance Chair for the 2nd IEEE Multi-Conference on Systems

and Control (MSC 2008). As a member of the Technical Program Committee, Dr. Popescu has participated over the past decade in the IEEE Global Telecommunications Conference (GLOBECOM), IEEE International Conference on Communications (ICC), IEEE Wireless Communications and Networking Conference (WCNC), IEEE Vehicular Technology Conference (VTC), and IEEE Consumer Communications and Networking Conference (CCNC).

Dr. Popescu is also very active in local and regional activities of the IEEE as well as in technical committees of the IEEE Communications Society. He was the faculty advisor of the IEEE student chapter at Old Dominion University and a member of the Executive Committee of the IEEE Hampton Roads section, actively participating and organizing monthly meetings, technical presentations, and student events. In addition, he is a voting member of the Signal Processing and Communications Electronics (SPCE) and of the Communications Theory technical committees of the IEEE Communications Society.



**Hossam Hassanein** is a leading authority in the areas of broadband, wireless and mobile networks architecture, protocols, control and performance evaluation. His record spans more than 500 publications in journals, conferences and book chapters, in addition to numerous keynotes and plenary talks in flagship venues. Dr. Hassanein has received several recognitions and best papers awards at top international conferences. He is also the founder and director of the Telecommunications Research Lab (TRL) at Queen's University School of Computing, with extensive international academic and industrial collaborations. He is a senior member of the IEEE, and is a former chair of the IEEE Communication Society Technical Committee on Ad hoc and Sensor Networks (TC AHSN). Dr. Hassanein is an IEEE Communications Society Distinguished Speaker (Distinguished Lecturer 2008-2010).



**Rui Zhang** received the B.Eng. (First-Class Hons.) and M.Eng. degrees from the National University of Singapore in 2000 and 2001, respectively, and the Ph.D. degree from the Stanford University, Stanford, CA USA, in 2007, all in electrical engineering. From 2007 to 2010, he worked at the Institute for Infocomm Research, A\*STAR, Singapore, where he now holds a Senior Research Scientist joint appointment. Since 2010, he has joined the Department of Electrical and Computer Engineering of the National University of Singapore as an Assistant Professor. His current research interests include energy-efficient and energy-harvesting-enabled wireless communications, wireless information and power transfer, multiuser MIMO, cognitive radio, smart grids, and optimization methods. He has published over 200 papers, which have been cited more than 8,000 times. He was the recipient of the 6th IEEE Communications Society Asia-Pacific Best Young Researcher Award in 2011, the Young Investigator Award of the National University of Singapore in 2011, the Young Researcher Award of the National University of Singapore in 2015, and the co-recipient of the IEEE Marconi Prize Paper Award in Wireless Communications in 2015. He has served for over 30 IEEE conferences as TPC members and Organizing Committee members. He is now an elected member of the IEEE Signal Processing Society SPCOM and SAM Technical Committees, and the Vice Chair of the IEEE ComSoc Asia-Pacific Board Technical Affairs Committee. He is an editor for the IEEE Transactions on Wireless Communications, the IEEE Transactions on Signal Processing, and the Green Communications and Networking Series of the IEEE Journal on Selected Areas in Communications.