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Call for Papers
Communications Theory Symposium

Symposium Track Co-Chairs
Marco Di Renzo – CNRS / Paris-Saclay University (France)
Lifeng Lai – University of California, Davis (USA)
Wei Chen – Tsinghua University (China)

Important Dates
Paper Submission: 1 April 2017
Paper Notification: 25 July 2017
Camera-Ready Paper: 4 September 2017

Submissions Requirements
All submissions must be done through EDAS via the following link: https://edas.info/newPaper.php?c=23271.
Information to the authors is available here: http://globecom2017.ieee-globecom.org/content/call-symposium-papers.

Scope and Motivation
The Communication Theory Symposium will focus on the fundamentals of communication systems, with emphasis on wireless and wired communications. The symposium welcomes original and innovative research work in these general areas, focusing on the physical layer and its interactions with higher layers. High quality papers reporting on applications of communications theory from both industry and academia are encouraged.

Main Topics of Interest

To ensure complete coverage of the advances in this field, the Communication Theory Symposium cordially invites original contributions in, but not limited to, the following topical areas:

• Adaptive Modulation and Coding
• Channel Estimation and Synchronization
• Coding Theory
• Communication Theory Aspects of Ad Hoc and Sensor Networks
• Theory Aspects of Cooperative Communications
• Communication Theory for Cross Layer Design
• Detection and Estimation Theory
• Distributed Coding and Processing
• Diversity and Fading Countermeasures
• Energy Efficient Communication
• Feedback in Communication Systems
• Fundamentals of Heterogeneous and Small-Cell Networks
• Fiber Optical Communications and Free-Space Optical Communications
• Information Theory and Channel Capacity
• Theory Aspects of Interference Characterization and Applications of Stochastic Geometry
• Theory Aspects of Interference Management, Cancellation, Alignment, and Avoidance
• Iterative Techniques, Detection and Decoding
• Joint Source/Channel Coding
• Multiple Access Techniques
• Massive MIMO
• Multiuser Diversity
• Network Coding
• Network and Multiuser Information Theory
• Novel Communication Schemes
• Orthogonal Frequency Division Multiplexing (OFDM) and Multi-Carrier Systems
• Physical Layer Security
• Radio Resource Management and Scheduling
• Source Coding and Data Compression
• Space-time Coding and Processing
• Theoretical Aspects of Cognitive Radio
• Theoretical Aspects of Device-to-Device and Machine-to-Machine communications
• Theoretical Aspects of Power Line Communication
• Ultra-Wideband, Millimeter Wave, and Sub-Terahertz Communication Theory
• Wireless Communications Powered by Energy Harvesting

Biographies of the Symposium Chairs

Marco Di Renzo received the Laurea (cum laude) and the Ph.D. degrees in electrical engineering from the University of L'Aquila, L'Aquila, Italy, in 2003 and in 2007, respectively, and the Doctor of Science (HDR) degree from the University Paris-Sud, France, in 2013. He has

held research and academic positions in Italy at the University of L'Aquila, in the United States at Virginia Tech, in Spain at CTTC, and in the United Kingdom at The University of Edinburgh. Since 2010, he has been a CNRS Associate Professor ("Chargé de Recherche Titulaire CNRS") in the Laboratory of Signals and Systems of Paris-Saclay University—CNRS, CentraleSupélec, University Paris Sud, France. He is a Distinguished Visiting Fellow of the Royal Academy of Engineering, U.K. He is a co-founder of the university spin-off company WEST Aquila s.r.l. Italy. He is a recipient of several awards, including Best Paper Awards at IEEECAMAD (2012 and 2014), IEEE-VTCfall (2013), IEEE-ATC (2014), IEEE ComManTel (2015), the 2013 Network of Excellence NEWCOM# Best Paper Award, the 2013 IEEE-COMSOC Best Young Researcher Award for Europe, Middle East and Africa (EMEA Region), the 2015 IEEE Jack Neubauer Memorial Best System Paper Award, the 2015-2018 CNRS Award for Excellence in Research and in Advising Doctoral Students, and the 2016 Marie Curie Global Fellowship. Currently, he serves as an Editor of the IEEE COMMUNICATIONS LETTERS and IEEE TRANSACTIONS ON COMMUNICATIONS, where is the Editor for Heterogeneous Networks Modeling and Analysis of the IEEE Communications Society. He is a Senior Member of the IEEE (COMSOC and VTS) and a Member of the European Association for Communications and Networking (EURACON). He is a Distinguished Lecturer of the IEEE Vehicular Technology Society. He is the Project Coordinator of the H2020 projects ITN-5Gwireless and ITN-5Gaura and he is or has been a Principal Investigator of the EU-funded projects ITN-GREENET, ITN-CROSSFIRE, IAPP-WSN4QoL, IAPP-SmartNRG, RISE-CASPER, and of the ANR-funded (French Science Foundation) project SpatialModulation. He is the representative for CNRS and Paris-Saclay University of the COST Action IRACON.

Lifeng Lai received the B.E. and M. E. degrees in Information Science and Electrical Engineering from Zhejiang University, Hangzhou, China in 2001 and 2004 respectively, and the PhD degree in Electrical and Computer Engineering from the Ohio State University at Columbus, OH, in 2007. He was a postdoctoral research associate in the Department of Electrical Engineering, Princeton University from 2007 to 2009. He is now an associate professor at the Department of Electrical and Computer Engineering at University of California, Davis. His current research interest includes information theory, stochastic signal processing, machine learning and their applications. Dr. Lai was a Distinguished University Fellow at the Ohio State University from 2004 to 2007. He received the Best Paper Award from IEEE Global Communications Conference (Globecom) in 2008, the Best Paper Award from IEEE International Conference on Communications (ICC) in 2011, the Faculty Early Career Development (CAREER) Award from the National Science Foundation in 2011, Northrop Young Researcher Award from University of Arkansas at Little Rock in 2012, and the Best Paper Award from IEEE International Conference on Smart Grid Communications (SmartGridComm) in 2012. He served as a guest editor for IEEE Journal on Selected Areas in Communications, Special Issue on Signal Processing Techniques for Wireless Physical Layer Security. He is currently serving as an editor for IEEE Transactions on Wireless Communications, and an associate editor for IEEE Transactions on Information Forensics and Security.

Wei Chen received his BS and PhD degrees in Electronic Engineering (both with the highest honors) from Tsinghua University, Beijing, China, in 2002, and 2007, respectively. From May 2005 to March 2007, he was a visiting research staff member in the Department of Electronic and Computer Engineering, the Hong Kong University of Science and Technology. Since July 2007, he has been with Department of Electronic Engineering, Tsinghua University, where he

is currently an Assistant Professor. He visited the Chinese University of Hong Kong on October, 2007 and the Hong Kong University of Science and Technology on September, 2008. His research interests are in broad areas of wireless communications, information theory and applied optimizations. He has served as TPC members for a number of major international conferences, including IEEE ICC, Globecom, and WCNC. He served as student travel grant chair of ICC 2008 and co-chair of cognitive and cooperative network workshop 2008. He is now serving as TPC Co-Chair for wireless communication symposium in ICC 2010. He received the Best Paper Award at IEEE ICC 2006 and the Best Paper Award at IEEE IWCLD 2007.