

CALL FOR PAPERS -- IEEE GLOBECOM 2011

Communication Theory Symposium

Symposium Co-Chairs:

Zhi (Gerry) Tian, Michigan Tech University, USA
ztian@mtu.edu

Ali Ghayeb, Concordia University, Canada
aghayeb@ece.concordia.ca

Riccardo Raheli, University of Parma, Italy
raheli@unipr.it

Qinqing Zhang, Johns Hopkins University, USA
Qinqing@ieee.org

Scope and Motivation

The scope of the Communication Theory Symposium encompasses the fundamentals of communication systems, with emphasis on wireless and wire-line communications. The symposium welcomes original research in these general areas focusing on physical layer as well as interactions with higher layers. Topics of interest include, but are not limited to, modulation, channel coding, detection and estimation, source coding, joint source-channel coding, multiple-input multiple-output (MIMO) systems, cooperative communications, cognitive radio, communication theory in ad-hoc and sensor networks, optical communications, advanced multiple access strategies, network information theory, and network coding. Research on communication theory that relates to networking, genetics, bioinformatics, and quantum information processing is also encouraged.

Main Topics of Interest

- Adaptive Modulation and Coding
- CDMA and Spread Spectrum
- Channel Estimation
- Coding Theory and Practice
- Communication Theory in Ad-Hoc and Sensor Networks
- Theoretical aspects of Cognitive Radio
- Cooperative Communications
- Theoretical aspects of Cross Layer Design
- Detection and Estimation
- Distributed Coding and Processing
- Diversity and Fading Countermeasures
- Dynamic Spectrum Management
- Equalization
- Feedback Schemes in Communications
- Fiber Optical Communications and Free-Space Optical Communications
- Information Theory and Physical Layer Security
- Interference Management, Cancellation, Avoidance
- Iterative Techniques, Detection and Decoding
- Joint Source/Channel Coding
- Multi-Carrier Systems
- Multiple Access Techniques
- Multiple-Input Multiple-Output (MIMO) Systems Design and Analysis
- Multiuser Detection
- Multiuser Diversity
- Network Coding

- Network Information Theory
- Orthogonal Frequency Division Multiplexing (OFDM)
- Radio Resource Management
- Source Coding and Data Compression
- Space-time Coding and Processing
- Synchronization
- Turbo and LDPC Codes
- Ultra-Wideband Communications

Technical Program Committee

Giuseppe Abreu, University of Oulu, Finland
 Sofiene Affes, INRS-EMT, Canada
 Rajiv Agarwal, Stanford University, USA
 Mohamed Hossam Ahmed, Memorial University, Canada
 Wessam Ajib, Université du Québec à Montréal, Canada
 Ben Allen, University of Bedfordshire, United Kingdom
 Jeffrey Andrews, The University of Texas at Austin, USA
 Nallanathan Arumugam, King's College London, United Kingdom
 Fulvio Babich, University of Trieste, Italy
 Israfil Bahceci, Huawei, Canada
 Amir Banihashemi, Carleton University, Canada
 Gerhard Bauch, Universitaet der Bundeswehr Munich, Germany
 Norman Beaulieu, University of Alberta, Canada
 Dan Bliss, MIT Lincoln Labs, USA
 Wladimir Bocquet, Orange, France
 Deva Borah, New Mexico State University, USA
 Joseph Jean Boutros, Texas A&M University at Qatar, Qatar
 Michael Buehrer, Virginia Tech, USA
 Jean Pierre Cances, University of Limoges, France
 Dajana Cassioli, RadioLabs - University of L'Aquila, Italy
 Wei Chen, Tsinghua University, P.R. China
 Andrea Conti, ENDIF University of Ferrara, WiLAB University of Bologna, Italy
 Claudio Da Silva, Virginia Tech, USA
 Panagiotis Demestichas, University of Piraeus, Greece
 Octavia Dobre, Memorial University of Newfoundland, Canada
 Tolga Duman, Arizona State University, USA
 Mohamed El-Tarhuni, American University of Sharjah, UAE
 Maged Elkashlan, CSIRO, ICT Centre, Australia
 Pingyi Fan, Tsinghua University, P.R. China
 Gianluigi Ferrari, University of Parma, Italy
 Long Gao, Hitachi America, Ltd, USA
 Dennis Goeckel, University of Massachusetts, USA
 David Haccoun, Ecole Polytechnique de Montréal, Canada
 Mazen Hasna, Qatar University, Qatar
 Babak Hassibi, California Institute of Technology, USA
 Robert Heath, The University of Texas at Austin, USA
 Chansoo Hwang, ASSIA Inc., USA
 Syed Jafar, University of California Irvine, USA
 Hamid Jafarkhani, University of California, Irvine, USA
 Jinhua Jiang, Stanford University, USA
 Tao Jiang, Huazhong University of Science and Technology, P.R. China
 Nihar Jindal, University of Minnesota, USA
 Markku Juntti, University of Oulu, Finland
 Pooi-Yuen Kam, National University of Singapore, Singapore
 Toshiaki Koike-Akino, MERL, USA
 Brian Kurkoski, University of Electro-Communications, Japan

Lifeng Lai, University of Arkansas, Little Rock, USA
Lutz Lampe, University of British Columbia, Canada
Inkyu Lee, Korea University, Korea
Ernest Lo, Stanford University, USA
David Love, Purdue University, USA
Ranjan Mallik, Indian Institute of Technology – Delhi, India
Marco Martalò, University of Parma, Italy
Muriel Medard, MIT, USA
Vahid Meghdadi, University of Limoges, France
Geoffrey Messier, University of Calgary, Canada
Olgica Milenkovic, University of Illinois, USA
Hlaing Minn, University of Texas at Dallas, USA
Chandra Murthy, Indian Institute of Science, India
Rohit Negi, Carnegie Mellon University, USA
Aria Nosratinia, University of Texas, Dallas, USA
Erik Perrins, University of Kansas, USA
Lorenzo Piazzi, Università di Roma "La Sapienza", Italy
Zhi Quan, Qualcomm Inc., USA
Tony Q. S. Quek, Institute for Infocomm Research, Singapore
Luca Reggiani, Politecnico di Milano, Italy
Ghaya Rekaya-Ben Othman, TELECOM, France
Michael Rice, Brigham Young University, USA
Robert Schober, University of British Columbia, Canada
Erchin Serpedin, Texas A&M University, USA
John Shea, University of Florida, USA
Cong Shen, Qualcomm, USA
Besma Smida, Purdue University Calumet, USA
Ananthram Swami, Army Research Lab., USA
Leszek Szczecinski, INRS-EMT, Canada
Jun Tao, Missouri University of Science and Technology, USA
Meixia Tao, Shanghai Jiao Tong University, P.R. China
Daniele Tarchi, University of Bologna, Italy
Cihan Tepedelenlioglu, Arizona State University, USA
Andrea Tonello, University of Udine, Italy
Daniela Tuninetti, University of Illinois at Chicago, USA
Murat Uysal, University of Waterloo, Canada
Matthew Valenti, West Virginia University, USA
Luc Vandendorpe, University of Louvain, Belgium
Emanuele Viterbo, Monash University, Australia
Li-Chun Wang, National Chiao Tung University, Taiwan
Xinbing Wang, Shanghai Jiaotong University, P.R. China
Moe Win, Massachusetts Institute of Technology, USA
Tan Wong, University of Florida, USA
Hsiao-Chun Wu, Louisiana State University, USA
Jingxian Wu, University of Arkansas, USA
Bike Xie, UCLA, USA
Yu-Dong Yao, Stevens Institute of Technology, USA
Simon Yiu, Bell Labs, Alcatel-Lucent, USA
Shahram Yousefi, Queen's University, Canada
Wei Yu, University of Toronto, Canada
Rui Zhang, Institute of Infocomm Research, Singapore
Shengli Zhou, University of Connecticut, USA.