

**Call for papers for
*Communication Theory Symposium (CT)***

Symposium Track Co-Chairs

Ender Ayanoglu University of California, Irvine
Fulvio Babich University of Trieste, Italy
Steven Weber Drexel University, Philadelphia

Submissions must be done through EDAS at: <https://edas.info/newPaper.php?c=22634&track=81048>
The paper submission deadline is October 14, 2016.

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
- CDMA and Spread Spectrum
- 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
- Theory Aspects of Multiple-Input Multiple-Output (MIMO) Communications
- Multiuser Diversity
- Network Coding
- Network and Multiuser Information Theory
- Orthogonal Frequency Division Multiplexing (OFDM) and Multi-Carrier Systems
- 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

Ender Ayanoglu received his Ph.D. degree from Stanford University, Stanford, CA in 1986 in electrical engineering. He was with the Communications Systems Research Laboratory, Holmdel, NJ, part of AT&T Bell Laboratories until 1996, and Bell Labs, Lucent Technologies from 1996 until 1999. During 1999-2002, he was a Systems Architect at Cisco Systems, Inc., San Jose, CA. Since 2002, he has been a Professor in the Department of Electrical Engineering and Computer Science, University of California, Irvine, Irvine, CA, where he served as the Director of the Center for Pervasive Communications and Computing and held the Conexant-Broadcom Endowed Chair during 2002-2010.

From 1993 until 2014 Dr. Ayanoglu was an Editor, and since January 2014 is a Senior Editor of the *IEEE Transactions on Communications*. He served as the Editor-in-Chief of the *IEEE Transactions on Communications* from 2004 to 2008. As of December 2014, he is serving as the Editor-in-Chief of *IEEE Journal on Selected Areas in Communications - Series on Green Communications and Networking*. From 1990 to 2002, he served on the Executive Committee of the IEEE Communications Society Communication Theory Committee, and from 1999 to 2001, was its Chair.

Dr. Ayanoglu is the recipient of the IEEE Communications Society Stephen O. Rice Prize Paper Award in 1995 and the IEEE Communications Society Best Tutorial Paper Award in 1997. He received the IEEE Communications Society Communication Theory Technical Committee Outstanding Service Award in 2014. He has been an IEEE Fellow since 1998.

Fulvio Babich is Professor of Digital Communications and Wireless Networks at the University of Trieste (Italy). He is vice director of Department of Engineering and Architecture, and he also vice president of the board of the National Telecommunications and Information Theory Group – GTTI. He was member of the Directive Board of CNIT (National Inter-University Consortium for Telecommunications). His current research interests are in the field of wireless networks and personal communications. He is involved in channel modeling, multiple access techniques, error control techniques, multi-packet communications, and 5G systems. He has co-authored over 100 papers published in international journals and presented in leading international conferences. Fulvio Babich serves as reviewer for many international journals and conferences, and he has served as co-chair for the Communication Theory Symposium, ICC 2005, Seoul, for the Wireless Communication Symposium, ICC 2011, Kyoto, for the Wireless Communication Symposium, WCSP 2012, Huangshan, China, and for the Communication Theory Symposium, ICC 2014 Sydney. He has been general chair of IEEE Med-Hoc-Net 2014, Piran, Slovenia. He is Senior Member of IEEE.

Steven Weber is Professor in the Department of Electrical and Computer Engineering at Drexel University (Philadelphia, PA, USA), where he served (2011-2015) as the Associate Department Head of Graduate Affairs, and currently directs the Drexel Cybersecurity Institute. His research interests are in the mathematical modeling, performance analysis, and optimization of wireless (ad hoc and cellular) and wired networked systems. He has authored over 100 conference and journal papers in these areas, and is the author of the NOW Foundations and Trends monograph Transmission Capacity of Wireless Networks. He regularly serves as a reviewer for IEEE journals and conferences, served as an Associate Editor for IEEE Transactions on Mobile Computing, and serves as an Associate Editor for IEEE/ACM Transactions on Networking. He has served on the Technical Program Committee of IEEE Globecom, IEEE ICC, IEEE Infocom, WiOpt, SpaSWiN, and the Network Economics workshop. He is a Senior Member of IEEE.