

# CALL FOR PAPERS -- IEEE GLOBECOM 2011

## Cognitive Radio Networks Symposium

### Symposium Co-Chairs

Qing Zhao, University of California, Davis, USA  
qzhao@ucdavis.edu

F. Richard Yu, Carleton University, Canada  
Richard\_Yu@carleton.ca

Alexander M. Wyglinski, Worcester Polytechnic Institute, USA  
alexw@ece.wpi.edu

Natasha Devroye, University of Illinois at Chicago, USA  
devroye@uic.edu

### Scope and Motivation

Cognitive radio and cognitive networking are emerging technologies to address critical challenges of spectrum efficiency, interference management, coexistence and interoperability associated with current and future wireless networks. The goal of this symposium is to facilitate interactions among researchers and to enable public dissemination of recent advances in theory, protocol design, and experimental testing in this rapidly evolving research area. Authors are invited to submit papers presenting original research, not published or currently under review, on the following non-exhaustive list of topics.

### Main Topics of Interest

- Models, fundamental limits, and scalability of cognitive radio networks.
- MAC and networking protocols for cognitive radio networks.
- Algorithms and architectures for cognitive radios and networks.
- Adaptive antennas and cognitive RF front-ends for enabling cognitive radio.
- Statistical inference, learning, and cognition in cognitive radio networks.
- Transient behavior and stability analysis in cognitive radio networks.
- Modulation, interference propagation, aggregation, and mitigation.
- Security and robustness issues in cognitive radio networks.
- Spectrum sensing, measurements and statistical modeling of spectrum usage.
- Dynamic spectrum sharing, coexistence, and interoperability.
- Auction, pricing, and other economic aspects and approaches for dynamic spectrum access.
- Cross-layer design and optimization of cognitive radio networks.
- Multimedia communications over cognitive radio networks.
- Cognitive radio test-beds, simulation tools, and hardware prototypes.
- Regulatory policy and standardization.
- Green cognitive radio networks.
- Applications of cognitive radio and cognitive networks (e.g., public safety, vehicular networks, satellite networks)

### Technical Program Committee

Ozgur Akan, Koc University, Turkey  
Animashree Anandkumar, University of California at Irvine, USA

N. Prasanth Anthapadmanabhan, University of Texas at Austin, USA  
Alfred Asterjadhi, University of Padova, Italy  
Saman Atapattu, University of Alberta, Canada  
Alireza Attar, University of British Columbia, Canada  
Olufunmilola Awoniyi, Qualcomm, USA  
Nicola Baldo, Centre Tecnologic de Telecomunicacions de Catalunya (CTTC), Spain  
Bern Bandemer, Stanford University, USA  
Tuncer Baykas, National Institute of Information and Communications Technology, Japan  
Mehdi Bennis, University of Oulu, Finland  
Randall Berry, Northwestern University, USA  
Mauro Biagi, Sapienza University of Rome, Italy  
Tamal Bose, Virginia Tech, USA  
Danijela Cabric, University of California Los Angeles, USA  
Hasari Celebi, Texas A&M University at Qatar, Qatar  
Chan-Byoung Chae, Bell Laboratories, Alcatel-Lucent, USA  
Vasu Chakravarthy, Air Force Research Laboratory, USA  
Kiran Challapali, Philips Research, USA  
Mohamad Charafeddine, Stanford University, USA  
Debdeep Chatterjee, Intel Corporation, USA  
Mainak Chatterjee, University of Central Florida, USA  
Yueling Che, Nanyang technological University, Singapore  
Chung Shue Chen, INRIA-ENS, France  
Yunfei Chen, University of Warwick, United Kingdom  
Jo Woon Chong, Korea Advanced Institute of Science and Technology, Korea  
Kaushik Chowdhury, Northeastern University, USA  
Carlos Cordeiro, Intel Corporation, USA  
Shuguang Cui, Texas A&M University, USA  
Taiping Cui, Inha University, Korea  
Panagiotis Demestichas, University of Piraeus, Greece  
Natasha Devroye, University of Illinois at Chicago, USA  
Pawel Dmochowski, Victoria University of Wellington, New Zealand  
Giuseppe Durisi, ETH Zurich, Switzerland  
Mustafa El-Nainay, Virginia Tech, USA, Egypt  
Ronan Farrell, National University of Ireland at Maynooth, Ireland  
Zbynek Fedra, Brno University of Technology, Czech Republic  
Zhiyong Feng, Beijing University of Posts and Telecommunications, China  
Stanislav Filin, NICT, Japan  
Carolina Fortuna, Jozef Stefan Institute, Slovenia  
Takeo Fujii, The University of Electro-Communications, Japan  
Radha Krishna Ganti, University of Texas at Austin, USA  
Stefan Geirhofer, Qualcomm, Inc., USA  
Sinan Gezici, Bilkent University, Turkey  
Kavey Ghaboosi, University of Oulu, Finland  
Monisha Ghosh, Philips Research North America, USA  
Chittabrata Ghosh, University of Washington, USA  
Lorenza Giupponi, Centre Tecnologic de Telecomunicacions de Catalunya (CTTC), Spain  
David Grace, University of York, UK  
Alessandro Guidotti, University of Bologna, Italy  
Deniz Gunduz, CTTC, Spain  
Vehbi Cagri Gungor, Bahcesehir University, Turkey  
Ismail Guvenc, DOCOMO USA Labs, USA  
Jyri Hamalainen, Aalto University, Finland  
Karama Hamdi, Hong Kong University of Science and Technology, Hong Kong  
Zhu Han, University of Houston, USA  
Muhammad Fainan Hanif, University of Canterbury, New Zealand  
Aawatif Hayar, Eurecom, France

Di He, Shanghai Jiaotong University, P.R. China  
Oliver Holland, King's College London, UK  
Xuemin Hong, Heriot-Watt University, United Kingdom  
Senhua Huang, University of California, Davis, USA  
Shinsuke Ibi, Osaka University, Japan  
Mamiko Inamori, Keio University, Japan  
Kentaro Ishizu, National Institute of Information and Communications Technology, Japan  
Sudharman Jayaweera, University of New Mexico, USA  
Hong Ji, Beijing University of Posts and Telecommunications, China  
Juncheng Jia, Hong Kong University of Science and Technology, Hong Kong  
Jinhua Jiang, Stanford University, USA  
Ahmed E. Kamal, Iowa State University, USA  
Suguru Kameda, Tohoku University, Japan  
Sithampanathan Kandeepan, Create-Net International Research Centre, Italy  
Kanshiro Kashiki, KDDI R&D Laboratories Inc., Japan  
Onur Kaya, Isik University, Turkey  
Dzmitry Kliazovich, University of Luxembourg, Luxemburg  
Ali Koc, Intel Corporation, USA  
Vinay Kolar, Carnegie Mellon University, USA  
Ioannis Krikidis, University of Edinburgh, United Kingdom  
Lifeng Lai, University of Arkansas, Little Rock, USA  
Heunchul Lee, Samsung Advanced Institute of Technology, Korea  
Marco Levorato, Stanford University, USA  
Husheng Li, University of Tennessee Knoxville, USA  
Tianming Li, WINLAB, Rutgers University, USA  
Ying-Chang Liang, Institute for Infocomm Research, Singapore  
Keqin Liu, University of California at Davis, USA  
Jaime Lloret, Universidad Politecnica de Valencia, Spain  
Ernest Lo, Stanford University, USA  
Yao Ma, Wright State University, USA  
Allen MacKenzie, Virginia Tech, USA  
Ivana Maric, Stanford University, USA  
Tommaso Melodia, State University of New York at Buffalo, USA  
Guowang Miao, Georgia Institute of Technology, USA  
Shridhar Mishra, UC Berkeley, USA  
Urbashi Mitra, University of Southern California, USA  
Patrick Mitran, University of Waterloo, Canada  
Klaus Moessner, University of Surrey, United Kingdom  
Mihael Mohorcic, Jozef Stefan Institute, Slovenia  
Markus Dominik Mueck, Infineon Technologies, Germany  
Homare Murakami, National Institute of Information and Communications Technology, Japan  
Mohammed Nafie, Nile University, Egypt  
Maziar Nekovee, BT Research, UK  
Jad Nasreddine, RWTH Aachen University, Germany  
Timothy Newman, US Department of Defense, USA  
Van Minh Nguyen, Bell Labs, Alcatel-Lucent, France  
Dusit Niyato, Nanyang Technological University, Singapore  
Dominique Noguét, CEA LETI, France  
Barry O'Mahony, Intel Corporation, USA  
Kome Oteri, Huawei Technologies, USA  
Ozgur Oyman, Intel Corporation, USA  
Ashish Pandharipande, Philips Research Laboratories, The Netherlands  
Przemyslaw Pawelczak, UCLA, USA  
Yiyang Pei, Nanyang Technological University, Singapore  
Valeria Petrini, University of Bologna, Italy  
Marina Petrova, RWTH Aachen University, Germany

Tony Q. S. Quek, Institute for Infocomm Research, Singapore  
Mohammad Azizur Rahman, National Institute of Information and Communications Technology, Japan  
Marco Di Renzo, French National Center for Scientific Research (CNRS), France  
Walid Saad, Princeton University, USA  
Ashu Sabharwal, Rice University, USA  
Joachim Sachs, Ericsson Research, Germany  
Kei Sakaguchi, Tokyo Institute of Technology, Japan  
Yukitoshi Sanada, Keio University, Japan  
Shigenobu Sasaki, Niigata University, Japan  
Aydin Sezgin, Ulm University, Germany  
Stephen Shellhammer, Qualcomm Inc., USA  
Bin Shen, Inha University, Korea  
Hiroyuki Shiba, NTT, Japan  
Shabnam Sodagari, The Pennsylvania State University, USA  
Chunyi Song, National Institute of Information and Communications Technology, Japan  
Liang Song, University of Toronto, Canada  
Yang Song, IBM Research, USA  
Alkan Soysal, Bahcesehir University, Turkey  
Hang Su, Texas A&M University, USA  
Ahmed Sultan, Nile University, Egypt  
Chin-Sean Sum, National Institute of Information and Communications Technology, Japan  
Ki Won Sung, Royal Institute of Technology (KTH), Sweden  
Osamu Takyu, Tokyo University of Science, Japan  
Ha Nguyen Tran, National Institute of Information and Communications Technology (NICT), Japan  
Daniela Tuninetti, University of Illinois at Chicago, USA  
Kenta Umabayashi, Tokyo University of agriculture and technology, Japan  
Vaclav Valenta, ESIEE Paris and Brno University of Technology, Czech Republic  
Alessandro Vanelli-Coralli, University of Bologna, Italy  
R.R. Venkatesha Prasad, Delft University of Technology, The Netherlands  
Mai Vu, McGill University, Canada  
Junyi Wang, NICT, Japan  
Wendy Wong, Intel Corporation, USA  
Zhiqiang Wu, Wright State University, USA  
Alexander Wyglinski, Worcester Polytechnic Institute, USA  
Jie Xiang, Simula Research Laboratory, Norway  
Weidong Xiang, University of Michigan, Dearborn, USA  
Qin Xin, Simula Research Laboratory, Norway  
Feng Xue, Intel Research, Intel Corporation, USA  
Kazuto Yano, ATR, Japan  
Simon Yiu, Bell Labs, Alcatel-Lucent, USA  
Hiroyuki Yomo, Kansai University, Japan  
Ossama Younis, Telcordia Technologies, Inc., USA  
F. Richard Yu, Carleton University, Canada  
Liwen Yu, University of California, USA  
Chi Zhang, University of Florida, USA  
Honggang Zhang, Zhejiang University, USA  
Jin Zhang, Hong Kong University of Science and Technology, P.R. China  
Jun Zhang, The Hong Kong University of Science and Technology, Hong Kong  
Rui Zhang, Institute of Infocomm Research, Singapore  
Wenyi Zhang, University of Science and Technology of China, P.R. China  
Xi Zhang, Texas A&M University, USA  
Yan Zhang, Simula Research Laboratory and University of Oslo, Norway  
Chengshi Zhao, Inha University, Korea  
Qing Zhao, University of California at Davis, USA  
Jing Zhu, Intel, USA