# Cooperative and Cognitive Networks Workshop

International Wireless Communications & Mobile Computing Conference Website: <u>http://iwcmc.org/2015</u> Submission Link: <u>https://edas.info/newPaper.php?c=17297</u>

August 24-27, 2015, University of Dubrovnik, Dubrovnik, Croatia

Scope | Submission Guidelines | Important Dates | Workshop Chairs | TPC Members

# Scope

Cognitive radio (CR) networks have emerged as a promising solution to overcome the spectrum scarcity problem in communication systems. It can be used to increase the spectrum efficiency through its capabilities to detect and opportunistically access vacant spectrum slots. Cooperative networks have also been recognized as a key technology for improving bandwidth utilization. Although the theoretical promise and potentials of cooperative and cognitive networks that have been established, practical implementations closing the gap between theory and practice still need to be addressed. This workshop seeks original papers describing research contributions that address cognitive and cooperative related issues and challenges, ranging from theory to practice, from architecture to algorithms, and from policy to implementation. Technical papers should describe original research that is unpublished and not under review by any other conference/journal. Topics include, but are not limited to:

- Performance analysis and information-theoretical approaches
- Protocol design and optimization
- Interference mitigation
- Relaying techniques for Free Space Optical (FSO) networks
- Physical layer security with relaying techniques
- Multimedia support and QoS management
- MIMO techniques for cooperative and cognitive networks
- Coordinated multipoint (CoMP) transmission and reception
- Spectrum sensing/sharing techniques with outdated CSI
- MAC design and scheduling
- Multi-hop and multi-antenna techniques for cognitive networks

- Spectrum bidding and pricing for cognitive radios
- Cross-layer designs and techniques
- Energy aware protocols and techniques
- Simultaneous information and power transfer techniques for cooperative and cognitive networks
- Security, robustness, and reliability
- Machine learning and adaptive techniques
- Pricing models and regulatory policies
- Experimental prototyping and test-bed evaluation
- Application platforms and middleware
- Cognitive Spectrum Access in Cellular Networks
- Device-to-Device Communications
- Cognitive spectrum access for Machine-to-Machine Communications.

#### **Submission Guidelines**

Authors are invited to submit original papers of no more than 6 pages (standard IEEE proceedings, two-column, 10 pt font, etc.), including figures, tables, and references, in PDF format. Accepted papers will be published in the IWCMC15 conference proceedings, which will be submitted to IEEE Xplore database. Submission implies that at least one of the authors will register and present the paper at the conference. Electronic submission is accepted through the EDAS web site at https://edas.info/newPaper.php?c=17297.

#### **Important Dates**

Paper submission deadline:	February 15, 2015
Paper acceptance notification:	April 15, 2015
Camera-ready paper submissions:	May 10, 2015
Author registration:	May 10, 2015
Conference date:	August 24-27, 2015

## **Workshop Chairs**

Mahdi Ben Ghorbel, Qatar University, Qatar, mahdi.benghorbel@qu.edu.qa

Mamoun Guenach, Alcatel-Lucent Bell Labs, guenach@ieee.org

Kamel Tourki, Mathematical and Algorithmic Sciences Lab, France Research Center, Huawei Technologies Co, <u>kamel.tourki@gmail.com</u>

Bechir Hamdaoui, Oregon State University, USA, <u>hamdaoui@eecs.oregonstate.edu</u>

## **Technical Program Committee Members**

Fatma Abdelkefi, High School of Communications of Tunis (SUPCOM), Tunisia Ala Abu Alkheir, University of Ottawa, Canada

Hossam Afifi, Institut Telecom, France Javier Aguiar, University of Valladolid, Spain Mounir Arioua, Research group of Innovation & Telecoms Engineering, Morocco Mehdi Bennis, Centre of Wireless Communications, University of Oulu, Finland Zied Bouida, Concordia University, USA Marcello Caleffi, University of Naples "Federico II", Italy Houda Chafnaji, INPT Rabat, Morocco Wael Guibene, Semtech, France Noureddine Hamdi, INSAT, Carthage University, Tunisia Aissa Ikhlef, Newcastle University, UK Leila Najjar, High School of Communications of Tunis (SUPCOM), Tunisia Haewoon Nam, Hanyang University, Korea Aymen Omri, Qatar University, Qatar Zouheir Rezki, King Abdullah University of Science and Technologie (KAUST), Saudi Arabia Hina Tabassum, University of Manitoba, Canada Liang Yang, Guangdong University of Technology, China Serhan Yarkan, Istanbul Commerce University, Turkey Ammar Zafar, University of Technology Sydney (UTS), Australia