

Workshop Program

Cognitive Radio and Innovative Spectrum Sharing Paradigms for Future Networks (CRAFT 2016)

27th Annual IEEE International Symposium on Personal, Indoor, and Mobile Radio
Communications (PIMRC)

Sunday, September 4th, 2016

Valencia Congress Centre, Valencia, SPAIN

11:10 – 12:50 Session 1, “Innovations in Spectrum Sharing”

Session Chair: Andres Navarro Cadavid (Universidad Icesi, Columbia)

- 11:10 11:50 **Keynote speaker: “TV White Spaces: Technical trial results in Colombia, challenges and perspectives”, Martha Suarez, Director of Agencia Nacional del Espectro (ANE), Columbia**
- 11:50 12:10 **Sharing under Licensed Shared Access in a LTE real test network at 2.3-2.4 GHz**
- Doriana Guiducci (Fondazione Ugo Bordoni, Italy); Claudia Carciofi (FUB, Italy); Valeria Petrini (Fondazione Ugo Bordoni, Italy); Eva Spina (Italian Ministry of Economic Development, Italy); Domenico Massimi and Giuseppe De Sipio (Ministry of Economic Development, Italy); Pravir Chawdhry (Joint Research Centre of the European Commission, Italy)
- 12:10 12:30 **Potential Sharing between DTT and IoT Services in the UHF band**
- Gerardo Martinez-Pinzon and Kevin Llamas (Universitat Politecnica de Valencia, Spain); Narcis Cardona (The Polytechnic University of Valencia, Spain)
- 12:30 12:50 **Spectrum sharing efficiency analysis in rule regulated networks with decentralized occupation control**
- Alexandr Kuzminskiy (University of Surrey, United Kingdom); Yuri Abramovich (W R Systems, Ltd, USA); Pei Xiao and Rahim Tafazolli (University of Surrey, United Kingdom)

12:50 – 14:10 Lunch

14:10 – 15:50 Session 2, “Innovations in Cognitive Technologies”

Session Chair: Faouzi Bader (CentraleSupélec, France)

- 14:10 14:30 Weighted sum rate maximization with filtered multi-carrier modulations for D2D underlay communications**
Mylene Pischella, Rostom Zakaria and Didier Le Ruyet (CNAM, France)
- 14:30 14:50 Cooperative ARQ in full duplex cognitive radio networks**
Vahid Towhidlou (King's College London, United Kingdom);
Mohammad Shikh-Bahaei (King's college London, United Kingdom)
- 14:50 15:10 Non-cooperative superposition relaying for multicarrier cognitive networks**
Donatella Darsena (University of Napoli Parthenope, Italy); Giacinto Gelli (University of Napoli - Federico II, Italy); Francesco Verde (University of Napoli Federico II & National Inter-University Consortium for Telecommunications, Italy)
- 15:10 15:30 Network Architecture Self-adaption Technology in Cognitive Radio Networks**
Haijun Wang, Haitao Zhao and Jiaxun Li (National University of Defense Technology, P.R. China); Shan Wang (National University of Defense Technology & University of Montreal, Canada); Ji-Bo Wei (National University of Defense Technology, P.R. China)
- 15:30 15:50 Using Trust to Mitigate Malicious and Selfish Behavior of Autonomous Agents in CRNs**
Konstantinos Ntemos (National and Kapodistrian University of Athens); Nicholas Kolokotronis (University of Peloponnese, Greece); Nicholas Kalouptsidis (National and Kapodistrian University of Athens, Greece)

15:50 – 16:20 Coffee break

16:20 – 18:00 Session 3, “Spectrum Sharing and Coexistence Mechanisms for 5G”

Session Chair: Maziar Nekovee (Samsung Electronics, UK)

- 16:20 16:40 Distributed Beam Scheduling for Multi-RAT Coexistence in mm-Wave 5G Networks**
Maziar Nekovee (Samsung Electronics, United Kingdom); Yanan Qi (Samsung R&D Institute UK); Yue Wang (Samsung Electronics R&D Institute UK, United Kingdom)
- 16:40 18:00 Panel Discussion on Spectrum Sharing and Coexistence Mechanisms for 5G Networks**
Panel Chair: Maziar Nekovee (lead)

Panelists: Pravir Chawdhry (Joint Research Centre of the European Commission, Italy/EU), Martha Suarez (Agencia Nacional del Espectro, Columbia), Faouzi Bader (CentraleSupélec, France), Andres Navarro Cadavid (Universidad Icesi, Columbia)