10th IEEE Broadband Wireless Access (BWA 2014)

In conjunction with IEEE GLOBECOM 2014, 8-12 December 2014, Austin, USA

Workshop program

09:00 - 09:15: Opening Speech *(Room 416)*

09:15 - 09:45: Keynote Speech *(Room 416)*

Prof. Gerhard Fettweis, Vodafone Chair, TU Dresden, Germany
"***Charging-up the Data Rate with Turbo Cells***"

09:45 - 10:45: Morning sessions 1 & 2

Session 1:
(Room 416)

Downlink Overloaded Multiple Access Based on Constellation Expansion
Alberto G. Perotti, Huawei Technologies Sweden AB
Jaap van de Beek, Lulea University of Technology & Huawei Technologies
Branislav M. Popovic, Huawei Technologies Sweden AB

Performance of FBMC Multiple Access for Relaxed Synchronization Cellular Networks
Jean-Baptiste Doré, CEA-LETI, France
Vincent Berg, CEA-LETI, France
Dimitri Kténas, CEA-LETI, France

A Synchronization Algorithm to Facilitate Joint Detection
Andrew Apollonsky, Cooper Union, USA
Sam Keene, Cooper Union, USA

Joint RF and digital beam former design for wireless access systems: From algorithms to measurements
Vijay Venkateswaran, Bell Labs, Alcatel Lucent, Ireland
Florian Pivit, Alcatel Lucent, Ireland

Session 2:
(Room B)

Advanced Downlink MU-MIMO Receiver Based on Modulation Classification
Daiixy Zheng, Beijing University of Posts and Telecommunication, China
Chang Yongyu, Beijing University of Posts and Telecommunication, China
Rongqian Qin, Beijing University of Posts and Telecommunication, China
Hao Xu, Beijing University of Posts and Telecommunication, China
Dacheng Yang, Beijing University of Posts and Telecommunication, China

Reference Receiver Based Digital Self-Interference Cancellation in MIMO Full-Duplex Transceivers
Dani Korpi, Tampere University of Technology, Finland
Lauri Anttila, Tampere University of Technology, Finland
Mikko Valkama, Tampere University of Technology, Finland

A Unified Approach for Representing Wireless Channels using EM-Based Finite Mixture of Gamma Distributions
Omar Alhussein, Simon Fraser University, Canada
Sami Muhaidat, Khalifa University, UAE
Paul D Yoo, Khalifa University, UAE
Jie Liang, Simon Fraser University, Canada

Multi-Cell Multi-User MIMO Downlink with Partial CSIT and Decentralized Design
Yohan Lejosne, EURECOM, France
Atef Ben Nasser, Orange Labs, France
Dirk Slock, EURECOM, France
Yi Yuan-Wu, Orange Labs, France

10:45 -11:00: Coffee break

11:00 - 11:30: Keynote Speech *(Room 416)*

Mr. Hans-Peter Mayer, Lead Next Generation Wireless, Alcatel-Lucent, Germany
"*5G – Communication services and technologies for the 2020s*"

11:30 - 12:30: Morning paper sessions 3 & 4

Session 3:
(Room 416)

Near-Optimal Resource Block and Power Allocation Mechanisms in Uplink for LTE and LTE-Advanced
Naveen Mysore Balasubramanya, University of British Columbia, Canada
Lutz Lampe, University of British Columbia, Canada

Carrier Components Assignment Method for LTE and LTE-A Systems Based on User Profile and Application
Husnu S Narman, University of Okalhoma, USA

Mohammed Atiquzzaman, University of Oklahoma, USA

Power Allocation in OFDM based NOMA Systems: A DC Programming Approach
Priyabrata Parida, Indian Institute of Technology Kharagpur, India
Suvra Sekhar Das, Indian Institute of Technology Kharagpur, India

Session 4:
(Room B)

Distributed Consensus-based Estimation for Small Cell Cooperative Networks
Dirk Wübben, University of Bremen, Germany
Henning Paul, University of Bremen, Germany
Ban-Sok Shin, University of Bremen, Germany
Armin Dekorsy, University of Bremen & Institute for Telecommunications and High-Frequency Techniques, Germany

Cloud-aware power control for cloud-enabled small cells
Pavel Mach, Czech University in Prague, Czech Republic
Zdenek Becvar, Czech University in Prague, Czech Republic

Scalable Video Downlink Multicasting in Multi-cell Cellular Wireless Networks
Hung-Bin Chang, University of California at Los Angeles, USA
Izhak Rubin, University of California at Los Angeles, USA
Ofer Hadar, Ben-Gurion University of The Negev, Israel

12:30 - 14:00: Lunch break

14:00 - 14:30: Keynote Speech *(Room 416)*

Dr. Meziar Nekovee, Chief Scientist Engineer, Samsung R&D, UK
"***Technologies for unlocking spectrum above 6 GHz for 5G, including mm-Wave communications***"

14:30 - 15:00: Keynote Speech *(Room 416)*

Mr. Andrea Forte, Senior Member of Technical Staff, AT&T, USA

15:00 - 15:15: Coffee break

15:15 - 16:15: Afternoon paper sessions 5 & 6

Session 5:
(Room 416)

Performance Analysis of Network-Assisted Two-Hop D2D Communications
Jose Mairton Barros da Silva, Jr., Federal University of Ceara & Wireless Telecom Research Group, Brazil
Gabor Fodor, Ericsson Research & Royal Institute of Technology, Sweden
Tarcisio F. Maciel, Federal University of Ceara, Brazil

M2M Data Aggregation over Cellular Networks: Signaling-Delay Trade-offs
Nour Kouzhaya, American University of Beirut, Lebanon
Mona Jaber, American University of Beirut, Lebanon
Zaher Dawy, American University of Beirut, Lebanon

Reliable Activity Detection for Massive Machine to Machine Communication via Multiple Measurement Vector Compressed Sensing
Fabian Monsees, University of Bremen & Institute for Telecommunications and High-Frequency Tehcniques, Germany
Carsten Bocklmann, University of Bremen, Germany
Armin Dekorsy, University of Bremen & Institue for Telecommunications and High-Frequency Techniques, Germany

Session 6:

(Room B)

Radio Resource Sharing among Operators through MIMO based Spatial Multiplexing in 5G Systems
Osman Aydin, Alcatel-Lucent Bell Labs, Germany
Danish Aziz, Alcatel-Lucent Bell Labs, Germany
Eduard Jorswieck, TU Dresden, Germany

Two-Way Coding for Interference-Limited Regime -- Algorithms and Feedback Strategies in MISO Interference Channels
Byoung-Yoon Min, Yonsei University, Korea
Jae-Nam Shim, Yonsei University, Korea
Dong Ku Kim, Yonsei University, Korea

Enable Concurrent Transmissions with Beamforming for Broadband Wireless Access in CSMA/CA-based WLANs
Zhaohan Jia, University of Agder, Norway
Xin He, University of Agder, Norway
Frank Y. Li, University of Agder, Norway

16:15 - 17:15: Panel discussion
(*Room 416)*