

2nd International Workshop on Multiple Access Communications

affiliated with IEEE INTERNATIONAL CONFERENCE
ON COMMUNICATIONS - ICC-2009
14 June 2009, Dresden, Germany



1. 9:00 AM - 12:20 PM “PHY-techniques / cross-layer techniques”

Room: Saal 1 Chair: Adolf Finger (TU Dresden, Germany)

9:00 *Resource Allocation and Scheduling in FDD Multihop Cellular Systems*

Rainer Schoenen (RWTH Aachen University, Faculty 6, Germany); Arif Otyakmaz (RWTH Aachen University, Germany); Zhouyun Xu (Nokia, P.R. China)

9:25 *On Error Probabilities for DS-CDMA/MRC in Frequency Selective Nakagami Fading*

Mohammad Azizur Rahman (National Inst. of Info. and Commun. Tech. (NICT), Japan); Shigenobu Sasaki (Niigata University, Japan); Junyi Wang (NICT, Japan); Tuncer Baykas (National Institute of Information and Communications Technology, Japan); Chin-Sean Sum (National Institute of Information and Communications Technology, Japan); Ryuhei Funada (National Institute of Information and Communications Technology, Japan); Hiroshi Harada (National Institute of Information & Communications Technology (NICT), Japan); Shuzo Kato (NICT, Japan)

9:40 *On the performance of a FH-MC-CDMA system.*

Dmitry Osipov (IITP RAS, Russia)

9:55 *cdma2000 1x Rev. E Forward Link Voice Capacity*

Qiang Wu (Qualcomm, USA)

10:10 *Capacity Analysis of Downlink MIMO-OFDMA Resource Allocation with Resource Wise 1-bit Feedback*

Jouko Leinonen (University of Oulu, Centre for Wireless Communications (CWC), Finland); Jyri Hämäläinen (Helsinki University of Technology, Finland); Markku Juntti (University of Oulu, Finland)

10:25 *A Multi-User Multi-Rate OFDMA Transmission System based on Orthogonal Subcarrier Grouping*

Leandro D’Orazio (University of Trento, Italy); Massimiliano Panizza (University of Trento, Italy); Claudio Sacchi (University of Trento, Italy)

10:40 *Multiuser MIMO-OFDMA with Different QoS Using a Prioritized Channel Adaptive Technique*

Khaled Hassan (Jacobs University Bremen gGmbH, Germany); Werner Henkel (Jacobs University Bremen, Germany); Guftaar Sidhu (Jacobs University Bremen, Germany)

10:55 *Adaptive Equalization at HSDPA Symbol Level*

Ahmet Bastug (Vestel, Turkey); Andrea Ancora (Eurecom Institute, France); Dirk Slock (Eurecom, France)

11:10 *On Frame Synchronization for Multiple Access Channels*

Dawei Shen (Massachusetts Institute of Technology, USA); Wenyi Zhang (Qualcomm Research Center, USA)

11:25 *Superposition-Coding Aided Multiplexed Hybrid ARQ Scheme for Improved Link-layer Transmission Efficiency*

Rong Zhang (Univ. of Southampton, United Kingdom); Lajos Hanzo (University of Southampton, United Kingdom)

11:40 *Maximizing Admissions and Throughput in Opportunistic Interference Networks*

Joseph Thomas (Maryland, USA)

2. 2:00 PM - 4:30 PM “MAC layer protocols”

Room: Saal 1 Chair: Alexey Vinel (Saint-Petersburg Institute for Informatics and Automation, Russia)

14:00 *Advanced Features of Quality Achievement in Next Generation 802.11 WLANs*

Yevgeni Koucheryavy (Tampere University of Technology, Finland)

14:25 *Traffic Prioritization for Carrier Sense Multiple Access with Enhanced Collision Avoidance*

Jaume Barcelo (Universitat Pompeu Fabra, Spain); Boris Bellalta (Universitat Pompeu Fabra, Spain); Cano Cristina (Universitat Pompeu Fabra, Spain); Anna Sfairopoulou (Universitat Pompeu Fabra, Spain); Miquel Oliver (Pompeu Fabra University, Spain); Johan Zuidweg (Universitat Pompeu Fabra, Spain)

14:40 *Performance analysis of IEEE 802.15.4 Non-beacon Mode where Downlink Data Packets are Transmitted by Piggyback Method*

Jin Soo Park (USN Service Division, KT, Korea); Tae Ok Kim (Korea University, Korea); Kyung Jae Kim (Korea University, Korea); Bong Dae Choi (Korea University, Korea)

14:55 *Analytical Model of 802.15.4 Traffic Single-hop Data Aggregation in Wireless Sensor Networks*

Xiaoyun Li (University College Dublin, Ireland); David Hunter (University of Essex, United Kingdom)

15:10 *Performance Analysis of Sleep Mode Operation for IEEE 802.16m Advanced WMAN*

Sangkyu Baek (Korea University, Korea); Bong Dae Choi (Korea University, Korea)

15:25 *Overall Delay Analysis of IEEE 802.16 Network*

Sergey Andreev (Saint-Petersburg State University of Aerospace Instrumentation, Russia); Zsolt Saffer (Budapest University of Technology and Economics, Hungary); Alexey Anisimov (H&NM Motorola Software Organization, Russia)

15:40 *Evaluation of Medium Access Technologies for Next Generation Millimeter-Wave WLAN and WPAN*

Carlos Cordeiro (Intel Corporation, USA)

15:55 *An Auction Mechanism for Channel Access in Vehicle-to-Roadside Communications*

Ekram Hossain (University of Manitoba, Canada); Khajonpong Akkarajitsakul (University of Manitoba, Canada)

3. 4:30 PM - 5:30 PM “Queuing systems”

Room: Saal 1 Chair: Bong Dae Choi (Korea University, Korea)

16:30 *Optimal traffic splitting in mobile networks with concurrent access*

Rob van der Mei (Centrum voor Wiskunde en Informatica, The Netherlands)

16:55 *Queueing Model with Gated Service and Adaptive Vacations*

Alexander Dudin (Belarusian State University, Belarus); Valentina Klimenok (Belarusian State University, Belarus); Olga Semenova (Russian Academy of Sciences, Russia); Vladimir Vishnevsky (Russian Academy of Sciences, Russia)

17:10 *Multi-User Queueing Analysis Considering AMC for Wireless VoIP Services*

Howon Lee (Korea Advanced Institute of Science and Technology, Korea); Dong-Ho Cho (Korea Advanced Institute of Science and Technology, Korea)

17:25 *Approximate Analysis for M/G/1-Polling System with Adaptive Polling Mechanism*

Olga Semenova (Russian Academy of Sciences, Russia); Vladimir Vishnevsky (Russian Academy of Sciences, Russia); Alexander Dudin (Belarusian State University, Belarus); Valentina Klimenok (Belarusian State University, Belarus); Sergey Shpilev (Russian Academy of Sciences, Russia)