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Program

Time	Dülfer-Saal Mensa	Festsaal Rektorat	Barkhausen-Bau (BAR 172)
Wednesday, May 17			
08:00-09:00	REG: <i>Registration</i>		
09:00-10:00	KN1: <i>(Keynote) Ultra-Reliable Wireless Communications: Building Blocks and Models</i>		
10:00-10:30	<i>Coffee Break</i>		
10:30-12:00	W1.1: <i>(Workshop 1) COCOA - Competitive and COoperative Approaches for 5G networks</i>	W2.1: <i>(Workshop 2) GET-IoT - International Workshop on 5G Enabling Technologies for the Internet of Things</i>	
12:00-13:00	<i>Lunch break</i>		
13:00-14:30	W1.2: <i>(Workshop 1) continued...</i>	W2.2: <i>(Workshop 2) continued...</i>	
14:30-15:00	<i>Coffee Break</i>		
15:00-16:30	S1: <i>Energy Efficient Wireless</i>	S2: <i>Channel and Physical Layer</i>	
16:30-17:00	<i>Coffee Break</i>		
17:00-18:00	KN2: <i>(Keynote) Haptic communication for the Tactile Internet</i>		
18:00-20:00	<i>Welcome Reception</i>		
Thursday, May 18			
09:00-09:30	<i>Welcome addresses</i>		
09:30-10:30	KN3: <i>(Keynote) Networked minidrones: The hype is ripe</i>		
10:30-11:00	<i>Coffee Break</i>		
11:00-12:30	S3: <i>Mobility</i>	S4: <i>Algorithm</i>	
12:30-13:30	<i>Lunch break</i>		
13:30-15:00	S5: <i>Channel Access</i>	S6: <i>Software and Application</i>	
15:00-15:30	<i>Coffee Break</i>		
15:30-17:00	S7: <i>Modulation</i>	S8: <i>Practical Wireless & Network Coding</i>	
17:15-18:15	KN4: <i>(Keynote) "Subspace Sudoku" for Multiuser mmWave Communications</i>		
20:00-22:00	<i>Social Dinner (Cafe Central, Altmarkt)</i>		
Friday, May 19			
09:00-10:00	KN5: <i>(Keynote) Using Multipath TCP to enable smooth connectivity in 5G networks</i>		
10:00-10:30	<i>Coffee Break</i>		
10:30-12:00	S9: <i>Special Session on Industrial Radio</i>	S10: <i>mmWave</i>	S11: <i>MIMO</i>
12:00-13:00	<i>Lunch break</i>		
13:00-14:30	T1.1: <i>(Tutorial 1) Design and Evaluation of Highly Reliable Communication Systems for 5G</i>	T2.1: <i>(Tutorial 2) Virtualization and 5G</i>	T3.1: <i>(Tutorial 3) Hacking Network Coding for 5G Systems</i>

14:30-14:45	<i>Coffee Break</i>		
14:45-16:15	T1.2: <i>(Tutorial 1) continued...</i>	T2.2: <i>(Tutorial 2) continued...</i>	T3.2: <i>(Tutorial 3) continued...</i>
16:15-17:00	<i>Closing session + Coffee</i>		

Wednesday, May 17

Wednesday, May 17, 08:00 - 09:00

REG: Registration
Room: Dülfer-Saal Mensa

Wednesday, May 17, 09:00 - 10:00

KN1: (Keynote) Ultra-Reliable Wireless Communications: Building Blocks and Models
Prof. Dr. Petar Popovski (AAU, Denmark)
Room: Dülfer-Saal Mensa

Wednesday, May 17, 10:00 - 10:30

Coffee Break
Room: Dülfer-Saal Mensa

Wednesday, May 17, 10:30 - 12:00

W1.1: (Workshop 1) COCOA - Competitive and COoperative Approaches for 5G networks
Room: Dülfer-Saal Mensa

Resource Sharing for a 5G Multi-tenant and Multi-service Architecture

Marcos Rates Crippa (Technical University of Kaiserslautern, Germany); Paul Arnold (Telekom Innovation Laboratories, Germany); Vasilis Friderikos (King's College London, United Kingdom); Borislava Gajic (Nokia Bell Labs, Germany); Carmen Guerrero (University Carlos III of Madrid, Spain); Oliver Holland (King's College London, United Kingdom); Ignacio Labrador Pavon (ATOS, Spain); Vincenzo Sciancalepore (NEC Europe Ltd., Germany); Dirk V Hugo (Telekom Innovation Laboratories & Deutsche Telekom AG, Germany); Stan Wong (King's College London, United Kingdom); Faqir Zarrar Yousaf (NEC Laboratories, Europe, Germany); Bessem Sayadi (Nokia Bell-Labs, France)

Evolution of Cooperation in Device-to-Device Communication

Gualtiero Colombo (University of Cardiff, United Kingdom); Stuart Allen and Roger Whitaker (Cardiff University, United Kingdom); Young Jin Chun and Simon Cotton (Queen's University, Belfast, United Kingdom); W. Scanlon (Queen's University, Belfast)

Minority Games for Backhaul Management in Cache-Enabled Small Cell Networks

Kenza Hamidouche (Supélec, France); Walid Saad (Virginia Tech, USA); Mérouane Debbah (Huawei, France)

Clustering and subband allocation for CoMP-based MIMO-OFDMA networks with soft frequency reuse

Javier Pastor-Pérez, Felip Riera-Palou and Guillem Femenias (University of the Balearic Islands, Spain)

W2.1: (Workshop 2) GET-IoT - International Workshop on 5G Enabling Technologies for the Internet of Things
Room: Festsaal Rektorat

Sound Noise Collective Monitoring: Smartphones as Sensors

Felipe Torres (TIVO, EC, Ecuador); Gabriel Barros Gavilanes (Universidad del Azuay)

Consistency-Guaranteed and Energy Efficient Sleep Scheduling Algorithm with Data Aggregation for IoT

Haneul Ko, Jaewook Lee and Sangheon Pack (Korea University, Korea)

Wireless M-BUS in Industrial IoT: Technology Overview and Prototype Implementation

Krystof Zeman, Pavel Masek and Jan Krejci (Brno University of Technology, Czech Republic); Aleksandr Ometov (Tampere University of Technology, Finland); Jiri Hosek (Brno University of Technology, Czech Republic); Sergey Andreev (Tampere University of Technology, Finland); Franz Kröpfel (Telekom Austria Group, Austria)

Reliable IoT storage for sensor monitoring applications: Trading off early redundancy injection costs and repair costs

Xiaobo Zhao and Daniel E. Lucani (Aalborg University, Denmark); Xiaohong Shen and Haiyan Wang (Northwestern Polytechnical University, P.R. China); Juan A Cabrera (Technische Universität Dresden, Germany)

Wednesday, May 17, 12:00 - 13:00

Lunch break

Wednesday, May 17, 13:00 - 14:30

W1.2: (Workshop 1) continued...
Room: Dülfer-Saal Mensa

On the Efficiency of Nash Equilibria in the Interference Channel with Noisy Feedback

Victor Quintero and Samir M. Perlaza (INRIA, France); Jean-Marie Gorce (INSA-Lyon & CITI, Inria, France)

Reducing CoMP control message delay in PON backhauled 5G networks

Andrea Marotta (University of L'Aquila, Italy); Francesco Giannone (Scuola Superiore Sant'Anna, Italy); Koteswararao Kondepudi (Scuola Superiore Sant'Anna, Italy); Dajana Cassioli and Cristian Antonelli (University of L'Aquila, Italy); Luca Valcarengi and Piero Castoldi (Scuola Superiore Sant'Anna, Italy)

Centralized and Distributed Optimum Power Control and Beam-forming in Network Flooding

Abdelrahman Abdelkader, Eduard Jorswieck and Marco Zimmerling (TU Dresden, Germany)

W2.2: (Workshop 2) continued...
Room: Festsaal Rektorat

Exploiting D2D Communications at the Network Edge for Mission-Critical IoT Applications

Antonino Orsino (Tampere University of Technology, Finland); Ivan Farris (Aalto University, Finland); Leonardo Militano (Mediterranea University of Reggio Calabria, Italy); Giuseppe Araniti (University Mediterranea of Reggio Calabria, Italy); Sergey Andreev (Tampere University of Technology, Finland); Irina Gudkova (Peoples' Friendship University of Russia & Institute of Informatics Problems, Federal Research Center Computer Science and Control of Russian Academy of Sciences, Russia); Yevgeni Koucheryav (Tampere University of Technology, Finland); Antonio Iera (University Mediterranea of Reggio Calabria, Italy)

Internet of Radio-Light: 5G Broadband in Buildings

John Cosmas (Brunel University, United Kingdom); Yue Zhang (University of Bedfordshire, United Kingdom); Xun Zhang (Institut Supérieur d'Electronique de Paris, France)

Wednesday, May 17, 14:30 - 15:00

Coffee Break

Wednesday, May 17, 15:00 - 16:30

S1: Energy Efficient Wireless
Room: Dülfer-Saal Mensa

An Energy-Efficient NOMA for Small Cells in Heterogeneous CRAN Under QoS Constraints

Quoc-Tuan Vien and Tuan Anh Le (Middlesex University, United Kingdom); Ca V. Phan (Ho Chi Minh City University of Technology and Education, Vietnam); Michael Opoku Agyeman (University of Northampton, United Kingdom)

Modeling of Power Consumption by Wireless Transceivers for System Level Simulations

Pawel Kryszkiewicz and Adrian Kliks (Poznan University of Technology, Poland)

Energy Efficient Relay Selection Method for Clustered Wireless Sensor Network

Mohamad Cheikh, Yichuang Sun and Oluyomi Simpson (University of Hertfordshire, United Kingdom)

Millimeter Wave Receiver Comparison Under Energy vs Spectral Efficiency Trade-off

Waqas Bin Abbas (National University of Computer and Emerging Sciences, Pakistan & University of Padova); Felipe Gómez-Cuba (Stanford University, USA & University of Padova, Italy); Michele Zorzi (University of Padova, Italy)

Cloud of Mobile Small-cells for Higher Data-rates and Better Energy-efficiency

Ayman Radwan and Jonathan Rodriguez (Instituto de Telecomunicações, Portugal)

S2: Channel and Physical Layer

Room: Festsaal Rektorat

An Efficient Architecture for Modeling Path Loss on Forest Canopy Using LiDAR and Wireless Sensor Networks Fusion

Yunus Egi and Carlos Otero (Florida Institute of Technology, USA)

WiPLUS: Towards LTE-U Interference Detection, Assessment and Mitigation in 802.11 Networks

Michael Olbrich, Anatolij Zubow and Sven Zehl (Technische Universität Berlin, Germany); Adam Wolisz (TUB, Germany)

Control-aware Uplink Resource Allocation for Cyber-Physical Systems in Wireless Networks

Mikhail Vilgelm and Onur Ayan (Technical University of Munich, Germany); Samuele Zoppi and Wolfgang Kellerer (Technical University of Munich)

Physical Cell ID Detection Probabilities Using Frequency Domain PVS Transmit Diversity for NB-IoT Radio Interface

Aya Shimura and Mamoru Sawahashi (Tokyo City University, Japan); Yoshihisa Kishiyama (NTT DOCOMO, INC., Japan)

Low-Cost Highly Accurate Energy Profiling of IEEE 802.11n Communication Driver

Cornel Isbiceanu (Politehnica University of Timisoara, Romania); Marius Marcu (Politehnica University of Timisoara & Intuitive Software Timisoara, Romania); Valentin Stangaciu and Sebastian Fuicu (Politehnica University of Timisoara, Romania)

Wednesday, May 17, 16:30 - 17:00

Coffee Break

Room: Dülfer-Saal Mensa

Wednesday, May 17, 17:00 - 18:00

KN2: (Keynote) Haptic communication for the Tactile Internet

Prof. Dr.-Ing. Eckehard Steinbach (TUM, Germany)

Room: Dülfer-Saal Mensa

Wednesday, May 17, 18:00 - 20:00

Welcome Reception

Room: Dülfer-Saal Mensa

Thursday, May 18

Thursday, May 18, 09:00 - 09:30

Welcome addresses

Room: Dülfer-Saal Mensa

Thursday, May 18, 09:30 - 10:30

KN3: (Keynote) Networked minidrones: The hype is ripe

Prof. Dr.-Ing. Christian Bettstetter (AAU, Austria)

Room: Dülfer-Saal Mensa

Thursday, May 18, 10:30 - 11:00

Coffee Break

Room: Dülfer-Saal Mensa

Thursday, May 18, 11:00 - 12:30

S3: Mobility

Room: Dülfer-Saal Mensa

An Adaptive Access Class Barring Scheme for Handling Massive M2M Communications in LTE-A

Israel Leyva-Mayorga (Universitat Politècnica de València, Spain); Miguel-Angel Rodriguez Hernandez (Universidad Politécnica de Valencia, Spain); Vicent Pla, Jorge Martinez-Bauset and Luis Tello-Oquendo (Universitat Politècnica de Valencia, Spain)

Downlink Data Rate Analysis of 5G-U (5G on Unlicensed Band): Coexistence for 3GPP 5G and IEEE802.11ad WiGig

Xi Lu, Maria Lema, Toktam Mahmoodi and Mischa Dohler (King's College London, United Kingdom)

Cell discovery based on historical user's location in mmWave 5G

Raúl Parada and Michele Zorzi (University of Padova, Italy)

Resource Allocation for Practical Two-Tier Heterogeneous Cellular Networks

Obinna Oguejiofor, Li Zhang and Naveed Nawaz (University of Leeds, United Kingdom)

A Trade-off Between Unnecessary Handover and Handover Failure for Heterogeneous Networks

Mohanad Alhabo, Li Zhang and Naveed Nawaz (University of Leeds, United Kingdom)

S4: Algorithm

Room: Festsaal Rektorat

Deep Learning for Proactive Resource Allocation in LTE-U Networks

Ursula Challita (The University of Edinburgh, United Kingdom); Li Dong (University of Edinburgh, United Kingdom); Walid Saad (Virginia Tech, USA)

A Framework to Calculate Delay-Optimal Oracle Solutions based on DTN Contact Graphs

Silvia Krug and Jochen Seitz (Technische Universität Ilmenau, Germany)

Expected Q-learning for Self-Organizing Resource Allocation in LTE-U with Downlink-Uplink Decoupling

Ye Hu (Beijing University of Posts and Telecommunications, P.R. China); Richard MacKenzie (BT Technology, Service and Operations, United Kingdom); Mo Hao (Tsinghua SEM Advanced ICT Lab, P.R. China)

SCMA Codebooks Optimization Based on Genetic Algorithm

Vyacheslav Klimentyev (Saint Petersburg Electrotechnical University, Russia); Alexander B. Sergienko (St. Petersburg Electrotechnical University, Russia)

Assessing Genetic Algorithms for Placing Flow Processing-aware Control Applications

Sébastien Auroux and Swante Scholz (Paderborn University, Germany); Holger Karl (University of Paderborn, Germany)

Thursday, May 18, 12:30 - 13:30

Lunch break

Thursday, May 18, 13:30 - 15:00

S5: Channel Access

Room: Dülfer-Saal Mensa

Non-Orthogonal Multiple Access with Multi-carrier Index Keying

Eleftherios Chatziantoniou and Youngwook Ko (Queen's University Belfast, United Kingdom); Jinho Choi (Gwangju Institute of Science and Technology (GIST), Korea)

Slotted ALOHA Filtered Tree (SAFT) for a Reliable LTE RACH

Halit Murat Gürsu and Alberto Martinez Alba (Technical University of Munich, Germany); Wolfgang Kellerer (Technische Universität München, Germany)

Full-Duplex vs. Half-Duplex: Delivery-Time Optimization in Cellular Downlink

Ali Karimneshad, Soheil Gharekhloo and Aydin Sezgin (RUB, Germany)

Radio Access Protocols with Multi-User Detection for URLLC in 5G

Stephan Saur (Nokia, Germany); Marco Centenaro (University of Padova, Italy)

On the Asymptotic Behavior of Ultra-Densification under a Bounded Dual-Slope Path Loss Model

Yanpeng Yang (KTH Royal Institute of Technology, Sweden); Jihong Park (Aalborg University, Denmark); Ki Won Sung (KTH Royal Institute of Technology, Sweden)

S6: Software and Application

Room: Festsaal Rektorat

On the Performance of Multiplexing Real-Time VBR Traffic with Multiple Hysteresis Areas

Min Zhang (University of Agder, Norway); Lei Jiao (University of Agder & Department of Information and Communication Technology, Norway)

Autonomic Network Management for Software-Defined and Virtualized 5G Systems

Wei Jiang (German Research Center for Artificial Intelligence & Technical University (TU) of Kaiserslautern, Germany); Mathias Strufe (DFKI GmbH, Germany); Hans D. Schotten (University of Kaiserslautern, Germany)

Feasibility of Compound Chained Network Functions for Flexible Packet Processing

Wolfgang Hahn (Nokia, Germany); Borislava Gajic (Nokia Networks, Germany); Florian Wohlfart (Technische Universität München, Germany); Daniel Raumer, Paul Emmerich and Sebastian Gallenmüller (Technical University of Munich, Germany); Georg Carle (Technische Universität München, Germany)

Sound Noise Levels Calibration with Smart-phones

Felipe Torres (TIVO. EC, Ecuador); Gabriel Barros Gavilanes (Universidad del Azuay)

Performance of Mobile Networks with UAVs: Can Flying Base Stations Substitute Ultra-Dense Small Cells?

Zdenek Becvar (Czech Technical University in Prague, Czech Republic); Michal Vondra (KTH Royal Institute of Technology, Sweden); Pavel Mach and Jan Plachy (Czech Technical University in Prague, Czech Republic); David Gesbert (Eurecom Institute, France)

Thursday, May 18, 15:00 - 15:30

Coffee Break

Thursday, May 18, 15:30 - 17:00

S7: Modulation

Room: Dülfer-Saal Mensa

Symbol Error Outage Performance Analysis of MCIC-OFDM over Complex TWDP Fading

Thien Van Luong and Youngwook Ko (Queen's University Belfast, United Kingdom)

An FPGA-based Design of a Packetized Fronthaul Testbed with IEEE 1588 Clock Synchronization

Igor Freire (Federal University of Pará, Brazil); Chenguang Lu (Ericsson Research, Sweden); Miguel Berg (Ericsson AB, Sweden); Aldebaro Klautau (Universidade Federal do Pará, Brazil)

Adaptive OFDM Transmission in TDD Systems with Fixed Minimum Distance of Received Constellations

Alexander B. Sergienko (St. Petersburg Electrotechnical University, Russia)

A Precoding-based PAPR Reduction Technique for UF-OFDM and Filtered-OFDM Modulations in 5G Systems

Mouna Ben Mabrouk (Supélec, France); Marwa Chafii (CentraleSupélec & IETR, France); Yves Louët (SUPELEC-Rennes Campus, France); Faouzi Bader (CentraleSupélec, France)

Minimization of OFDM Clipped Samples Power by Tone Reservation Algorithm

Pawel Kryszkiewicz and Adrian Kliks (Poznan University of Technology, Poland)

S8: Practical Wireless & Network Coding

Room: Festsaal Rektorat

Implementation of a Hybrid Optical-RF Wireless Network with Fast Network Handover

Muhammad Saad Saud (University Of Oulu, Finland); Marcos D Katz (University of Oulu, Finland)

Network Coded Caching and D2D Cooperation in Wireless Networks

Anil Kumar Chorpapath (Technical University of Dresden, Germany); Jens Hackel (TU Dresden, Germany); Frank H.P. Fitzek (Technische Universität Dresden & ComNets - Communication Networks Group, Germany)

Taking the Trash Back In: Practical Joint Channel and Network Coding for Improving IEEE 802.11 Networks

Juan A Cabrera and Giang T. Nguyen (Technische Universität Dresden, Germany); Daniel E. Lucani and Morten V. Pedersen (Aalborg University, Denmark); Frank H.P. Fitzek (Technische Universität Dresden & ComNets - Communication Networks Group, Germany)

Role of intermediate nodes in Sparse Network Coding: characterization and practical recoding

Pablo Garrido (University of Cantabria, Spain); Daniel E. Lucani (Aalborg University, Denmark); Ramón Agüero (University of Cantabria, Spain)

Random Linear Network Coding Schemes for Reduced Zero-Padding Overhead: Complexity and Overhead Analysis

Maroua Taghouti (Tunisia Polytechnic School, University of Carthage, Tunisia); Daniel E. Lucani (Aalborg University, Denmark); Frank H.P. Fitzek (Technische Universität Dresden & ComNets - Communication Networks Group, Germany); Ammar Bouallegue (National School of Engineers of Tunis, Tunisia)

Thursday, May 18, 17:15 - 18:15

KN4: (Keynote) "Subspace Sudoku" for Multiuser mmWave Communications

Prof. Dr.-Ing. Wolfgang Utschick (TUM, Germany)

Room: Dülfer-Saal Mensa

Thursday, May 18, 20:00 - 22:00

Social Dinner (Cafe Central, Altmarkt)

Friday, May 19

Friday, May 19, 09:00 - 10:00

KN5: (Keynote) Using Multipath TCP to enable smooth connectivity in 5G networks

Prof. Dr. Costin Raicu (PUB, Romania)

Room: Dülfer-Saal Mensa

Friday, May 19, 10:00 - 10:30

Coffee Break

Room: Dülfer-Saal Mensa

Friday, May 19, 10:30 - 12:00

S9: Special Session on Industrial Radio

Room: Dülfer-Saal Mensa

From Radio Design to System Evaluations for Ultra-Reliable and Low-Latency Communication

Shehzad A. Ashraf (Ericsson Research, Germany); Y.-P. Eric Wang (Ericsson Research, USA); Sameh Eldessoki and Bernd Holfeld (Fraunhofer Heinrich Hertz Institute, Germany); Donald Parruca (University of Paderborn, Germany); Martin Serror (RWTH Aachen University, Germany); James Gross (KTH Royal Institute of Technology, Sweden)

On Hybrid MAC Approaches within MC-CDMA Systems for the use in Wireless Industrial Communications

Michael Karrenbauer, Andreas Weinand and Hans D. Schotten (University of Kaiserslautern, Germany)

Application of Machine Learning for Channel based Message Authentication in Mission Critical Machine Type Communication

Andreas Weinand, Michael Karrenbauer, Raja Sattiraju and Hans D. Schotten (University of Kaiserslautern, Germany)

A Coordination Architecture for Wireless Industrial Automation

Ismet Aktas and Junaid Ansari (Ericsson Research, Germany); Sébastien Aurox (Paderborn University, Germany); Donald Parruca (University of Paderborn, Germany); María Guirao (WiseSense, Germany); Bernd Holfeld (Fraunhofer Heinrich Hertz Institute, Germany)

Study of Combined Indoor Communication and Localisation Systems for Industrial Applications

Bastian Lindner (TU Dresden, Germany); Niko Joram and Frank Ellinger (Technische Universität Dresden, Germany)

S10: mmWave

Room: Festsaal Rektorat

A Millimeter Wave Testbed For Repeatable High Velocity Measurements

Erich Zöchmann (TU Wien, Austria); Robert Langwieser and Sebastian Caban (Vienna University of Technology, Austria); Martin Lerch, Stefan Pratschner and Ronald Nissel (TU Wien, Austria); Christoph F Mecklenbräuer (Vienna University of Technology, Austria); Markus Rupp (TU Wien, Austria)

Impact of Interference Spatial Distribution on Line-of-Sight Millimeter-Wave Communications

Fulvio Babich, Massimiliano Comisso and Alessandro Cuttin (University of Trieste, Italy)

Noise Bounds in Multicarrier mmWave Doppler Measurements

Martin Lerch and Erich Zöchmann (TU Wien, Austria); Sebastian Caban (TU Wien); Markus Rupp (TU Wien, Austria)

Multicast Transmissions in Directional mmWave Communications

Alessandro Bision (University of Padova, Italy); Michele Zorzi (Università degli Studi di Padova, Italy)

Spatial Modulation and Spatial Multiplexing Capacity Analysis over 3D mmWave Communications

Salma Elkawafi and Abdelhamid Younis (University of Benghazi, Libya); Raed Mesleh (German Jordanian University, Jordan); Abdulla Ali Abouda (Almadar Aljadid Co., Libya); Ahmed Elbarsha (University of Benghazi, Libya); Mohammed Salem Elmusrati (University of Vasa, Finland)

S11: MIMO

Room: Barkhausen-Bau (BAR 172)

Aligned TDD Transmission for Massive MIMO

Majid Nasiri Khormuji (Huawei Technologies Sweden AB, Sweden)

Distributed Precoding by In-Network Processing for Small Cell Networks

Guang Xu and Henning Paul (University of Bremen, Germany); Thorsten Schier and Patrick Svedman (ZTE Wistron Telecom AB, Stockholm, Sweden); Armin Dekorsy (University of Bremen, Germany)

Massive MIMO Aided Multi-Pair Relaying with Underlaid D2D Communications

Kaifeng Guo, Sida Dai and Congchi Zhang (RWTH Aachen University, Germany); Gabor Fodor (Ericsson Research & Royal Institute of Technology (KTH), Sweden); Gerd H. Ascheid (RWTH Aachen University, Germany)

Robust Regularized Block Diagonalization for Mitigating TDD Channel Estimation Errors

Hilal Guler (Ecole Polytechnique Federale de Lausanne, Switzerland); Samer Bazzi (Huawei Technologies & European Research Center, Germany); Wen Xu (Huawei & Huawei Technologies Duesseldorf GmbH - European Research Center (ERC), Germany)

Sum Power Minimization for TDD-Enabled Full-Duplex Bi-Directional MIMO Systems Under Channel Uncertainty

Omid Taghizadeh (RWTH Aachen University, Germany); Ali Cagatay Cirik (University of British Columbia, Canada); Rudolf Mathar (RWTH Aachen University, Germany); Lutz Lampe (University of British Columbia, Canada)

Friday, May 19, 12:00 - 13:00**Lunch break****Friday, May 19, 13:00 - 14:30****T1.1: (Tutorial 1) Design and Evaluation of Highly Reliable Communication Systems for 5G**

Prof. Andreas Timm-Giel (Hamburg University of Technology) and Maciej Mühleisen (Ericsson Research)

Room: Dülfer-Saal Mensa

T2.1: (Tutorial 2) Virtualization and 5G

Prof. Fabrizio Granelli (University of Trento, Italy)

Room: Festsaal Rektorat

T3.1: (Tutorial 3) Hacking Network Coding for 5G Systems

Juan A. Cabrera and Sreekrishna Pandi (TU Dresden, Germany)

Room: Barkhausen-Bau (BAR 172)

Friday, May 19, 14:30 - 14:45**Coffee Break****Friday, May 19, 14:45 - 16:15****T1.2: (Tutorial 1) continued...**

Prof. Andreas Timm-Giel (Hamburg University of Technology) and Maciej Mühleisen (Ericsson Research)

Room: Dülfer-Saal Mensa

T2.2: (Tutorial 2) continued...

Prof. Fabrizio Granelli (University of Trento, Italy)

Room: Festsaal Rektorat

T3.2: (Tutorial 3) continued...

Juan A. Cabrera and Sreekrishna Pandi (TU Dresden, Germany)

Room: Barkhausen-Bau (BAR 172)

Friday, May 19, 16:15 - 17:00**Closing session + Coffee**

Room: Dülfer-Saal Mensa