

Monday April 1 18:00-20:00 Informal get-together, Scandic Rukahovi

Tuesday April 2

8:50-9:00 Welcome address

9:00 - 9:45 Plenary 1: Janne Peisa, "5G Evolution and Beyond"

9:45-10:30 Plenary 2: Preben Mogensen, "Experimental research towards 5G industrial use-cases"

10:30-11:00 Coffee & Tea & Discussion on future directions of System and Network Optimization for Wireless

11:00-12:00 Contributed session 1: Mobile Communication Systems (2 presentations)

 C. Beckman: "The Benefits of Providing Connectivity to Trains by Aggregating Multiple Links"

 A. Ponomarenko-Timofeev, V. Semkin, O. Galinina, S. Andreev, "The Effects of Human-Body Blockage on the 60 GHz Path Loss in a Public Transportation Setup"

12:00-13:00 Lunch

13:00-16:00 Networking

16:00 - 17:00 Contributed session 2: Wireless Networks (2 presentations)

 D. P. Moya Osorio, E. E. Benitez Olivo, H. Alves, "Untrusted Relaying Networks in the Partial Secrecy Regime: Performance Analysis and Optimal Power Allocation"

 M. Matinmikko-Blue, "On Recent 5G Spectrum Assignment Decisions for the Establishment of Local 5G Networks"

17:00 - 17:45 Plenary 3: Geert Leus: "Graph Signal Processing: Distributed Graph Filters"

17:45 - 18:15 Poster Session, Coffee & Tea

 M. Bica and V. Koivunen, "Methods for Spectrum Sharing and Coexistence Among Radar and Communications Systems"

 K. Lähtekangas, "Sensing LTE access points with energy detectors"

 O. L. Alcaraz Lopez, H. Alves, R. D. Souza, S. Montejo-Sanchez, "Statistical Analysis of Multiple Antenna Strategies for Wireless Energy Transfer"

 J. Partala, L. Loven, E. Peltonen, P. Porambage, M. Ylianttila, "EdgeAI: A Vision for Privacy-preserving Machine Learning on the Edge"

 P. Porambage, T. Kumar, M. Liyanage, J. Partala, L. Loven, M. Ylianttila, "Sec-EdgeAI: A Vision for using Artificial Intelligence for Securing the Edge"

 E. Peltonen and L. Loven, "EdgeAI: Network-powered Computing Platform for AI and ML"

 M. Moltafet, M. Leinonen, M. Codreanu, "On the Age of Information with Multi-Class Queueing Model"

 N. H. Mahmood, A. Karimi, "On the Resource Utilization of Multi-Connectivity Transmission for URLLC Services in 5G NR"

 A. Kosta, N. Pappas, A. Ephremides, V. Angelakis, "Towards Information Freshness in Multiaccess Networks with Heterogeneous Traffic"

18:15 - 19:45 Contributed session 3: Signal processing (3 presentations)

 J. Miettinen, S. Chepuri, E. Ollila, S. Vorobyov, "Reliability aware graph-Laplacian principal component analysis"

V. Koivunen, Y. Cui, "Interference Management and Degrees of Freedom in Radar-Comms Co-existence"
R. Schaefer, "On the Algorithmic Computability of the Capacities of Secure Communication Systems"

Wednesday April 3

9:00 - 9:45 Plenary 4: Marco Lops, "Radar and Communication Systems in Spectral Overlap"
9:45-10:00 Poster Session Cont'd; Coffee/Tea
10:00-12:00 Contributed session 4: Compressed sensing special session (4 presentations)
U. L. Wijewardhana, M. Codreanu, "Signal Recovery in Compressive Sensing via Multiple Sparsifying Bases"
E. M. Mozafari, V. Koivunen, "Scalable Robust and Sparse Inference for Large Scale Data"
M. Leinonen, M. Codreanu, M. Juntti, "Sparse Signal Reconstruction Under Quantized Noisy Compressed Sensing"
R. Rajamäki, V. Koivunen, "Sparse Sensor Array Configurations and Signal Processing for Wireless"
12:00-13:00 Lunch
13:00-16:00 Networking
16:00 - 16:45 Plenary 5: Giuseppe Caire, "Achieving Spatial Scalability and Low Subpacketization Order in Wireless Coded Caching Networks"
16:45-17:00 Coffee/Tea
17:00 - 19:00 Contributed session 5: MIMO (4 presentations)
A. K. Kocharlakota, K. Upadhyay, S. A. Vorobyov, "On Achievable Rates for Massive MIMO System with Imperfect Channel Covariance Information"
J. M. Barros da Silva Jr., H. Ghauch, G. Fodor, C. Fischione, "Antenna Splitting in Full-Duplex Cellular Networks"
M. Juntti, "Beamforming and Transceiver Design for mmWave and THz Bands"
O. Tirkkonen, "Channel Charting: Locating Users within the Radio Environment using Channel State Information"
19:30- 22:30 Workshop banquet

Thursday April 4

9:00 - 10:00 Contributed session 6: Networking (2 presentations)
L. Loven, E. Peltonen, T. Leppänen, J. Partala, E. Harjula, P. Poromaa, M. Ylianttila, J. Riekkio "EdgeAI: A Vision for Distributed Artificial Intelligence on the Edge"
T. Braud, P. Hui, "Towards Future Multimedia Protocols"
10:00-10:15 Coffee/Tea

10:15-12:15	Contributed session 7: Resource allocation (4 presentations) X. Jiang, Z. Pang, M. Zhan, D. Dzung, M. Luvisotto, C. Fischione, "Packet Detection by Single OFDM Symbol in URLLC for Critical Industrial Control: a Realistic Study" T. Farjam, T. Charalambous, H. Wymeersch, "On the Resource Allocation Problem in Wireless Networked Control Systems" H. Al-Tous, I. Barhumi, "Towards Optimal Resource Allocation for Energy Harvesting Wireless Sensor Networks" M. Shehab, H. Alves, M. Latva-aho, "Optimal Power Allocation for MTC in Empty buffer probability model with retransmissions"
12:15-13:15	Lunch