The Fifth Nordic Workshop on System and Network Optimization for Wireless

Technical Program

Wednesday, 2nd of April

- Keynote talk (8:30 – 9:15)

Energy-Efficiency of Mobile Networks (GreenTouch), Ulrich Barth, Chair of GreenTouch Mobile Communication Working Group, Alcatel-Lucent Bell Labs, Germany.

- Coffee break and posters session (9:15 – 10:00)

Transmission Power Variance Constrained Power Allocation for Iterative Frequency Domain Multiuser SIMO Detector, Valtteri Tervo , A Tölli, J. Karjalaineny, Tad Matsumoto.

Worst-Case Weighted Sum-Rate Maximization for MISO Downlink Systems via Branch and Bound, S. Joshi, U. L. Wijewardhana, M. Codreanu, and M. Latva-aho.

Trade-offs of Energy Efficiency versus Performance in Cognitive Wireless Networks, Maice Costa, and Anthony Ephremides.

Performance and Energy Efficiency of Cognitive Full-Duplex under Spectrum Sharing Constraints, Hirley Alves, Richard Demo Souza and Matti Latva-aho.

Reduced Complexity Transceiver Processing for MIMO FBMC Systems, Madushanka Soysa, Nandana Rajatheva and Matti Latva-aho.

Effect of Diversity on Estimation Error Outage for Scalar Gauss-Markov Models Sent Over Fading Channels, Reza Parseh and Kimmo Kansanen.

- Talks (10:00 – 12:00)

Interference Cancellation based Cell-edge Inversion in Downlink Cellular Systems, Liang Zhou, Kalle Ruttik, Olav Tirkkonen, Randall Berry.

Decentralizing the Optimal Multi-cell Beamforming via Large System Analysis, Antti Tölli, Hossein Asgharimoghaddam and Nandana Rajatheva.

5G Architectures for Small Cells with Wireless Backhaul and Two-Way Communication, Petar Popovski and Elisabeth de Carvalho.

Variable Overhead Effective CSI Signaling for Coordinated Beamforming in TDD MIMO Systems, Petri Komulainen, Antti Tölli, and Markku Juntti.

Energy-Efficiency of Mobile Networks (GreenTouch), Ulrich Barth.

Thursday 3rd of April

- Keynote talk (15:00 – 15:45)

Vehicle Cloud Services, Mario Gerla, Professor, University of California, Los Angeles, USA.

- Coffee break and posters (15:45 – 16:30)

Equilibrium Models of Wireless Networks with Moving Users, Igor V. Konnov, Erkki Laitinen and Olga Piniaguina.

MAC-aware Routing Metrics for Low Power and Lossy Networks, Piergiuseppe Di Marco, Carlo Fischione, George Athanasiou, Prodromos-Vasileios Mekikis.

An Improvement and Analysis of Horizontal Sector Offset Scheme for LTE Networks, Jianhua He, Zuoyin Tang, Wenqing Cheng, Keith Blow.

Performance Study for Small Cell Deployments in Densely Populated Informal Settlements, Parth Amin, Nadew Sikuwaru, Edward Mutafungwa, Beneyam B. Haile and Jyri Hämäläinen.

On Minimum-Time Scheduling Problem in a Class of Wireless Networks, Qing He, Vangelis Angelakis, Anthony Ephremides and Di Yuan.

Strategies for Communications in Platooning Scenarios, Le-Nam Hoang, Elisabeth Uhlemann and Magnus Jonsson.

- Talks (16:30 – 19:00)

Moving Cells/Networks, Tommy Svensson.

Distributed Association Control and Relaying in Millimeter Wave Wireless Access Networks, Yuzhe Xu, George Athanasiou, Carlo Fischione, and Leandros Tassiulas.

Improved Channel Access in Network Assisted WLAN Deployments, Aleksandr Ometov.

Buffer-Aided Relaying in Cooperative Networks, Themistoklis Charalambous and Mikael Johansson.

Improving minimal flow for wireless mesh networks by optimizing antenna placement, Yuan Li, Michal Pioro, Antonio Franco.

On Secure Communication in Large Cooperative Wireless Networks, Mahtab Mirmohseni and Panagiotis Papadimitratos.

Friday 4th of April

- Talks (14:30 – 16:10)

Location-awarenesss in 5G Wireless Networks, Henk Wymeersch.

Game Theoretic Model for Cluster-based Content Distribution in Vehicular Networks, Chuchu Wu and Mario Gerla.

Distributed Approach to the Optimal Power Flow Problem, S. Magnusson, P. C. Weeraddana and C. Fischione.

The Maximum Stable Throughput Region of the Two-User Interference Channel, Nikolaos Pappas, Marios Kountouris, Anthony Ephremides.

- Cofee break and posters (16:10 – 16:50)

Basic Fundamental Optimization Topology Design for Free Space Optical Networks, Scott Fowler and Yuan Li.

Bayesian Approach for Recursive Compressed Sensing, Uditha L. Wijewardhana, Marian Codreanu, and Matti Latva-aho.

A Power-saving Extension for 802.11-based Protocols, Alexander Pyattaev.

Presence and Sensor Platform, Stefano Napoli and Alberto Pollastro.

Particle Swarm Optimization Based Precoder in CoMP with Measurement Data, Tilak Rajesh Lakshmana and Tommy Svensson.

- Talks (16:50 – 19:00)

Reducing Consecutive Errors in Industrial Wireless Networks Using Relaying and Packet Aggregation, Svetlana Girs, Elisabeth Uhlemann, Mats Björkman.

Analysis and Optimization of Random Sensing Order in Cognitive Radio Systems, Hossein Shokri-Ghadikolaei and Carlo Fischione.

Compressed Data Acquisition and Progressive Signal Recovery in Wireless Sensor Networks, Markus Leinonen, Marian Codreanu and Markku Juntti.

Compressive Sensing for Bridge Damage Detection, Joel Höglund, Bo Wei, Wen Hu and Raid Karoumi.

A Unified Graph Labeling Algorithm for Consecutive-Block Channel Allocation in SC-FDMA, Lei Lei, Di Yuan, Chin Keong Ho, and Sumei Sun.