

**Technical Programme  
European Wireless 2019  
Aarhus, Denmark  
Location: Navitas Auditorium**

**Thursday May 2<sup>nd</sup>, 2019**

8:00 – 8:30	Welcome coffee
8:30 – 9:00	Welcome address
9:00 – 10:30	<b>Keynote from Paulo Mendes (Airbus):</b> Internet of Space: Communication Systems for Future Space-based Internet Services
10:30 – 11:00	Coffee break
11:00 - 12:30	<p><b>Session 1: Network Coding</b></p> <p>1) Tunable Expansion Packets for Fulcrum Codes <i>Vu Nguyen, Elif Tasdemir, Giang T. Nguyen, Daniel E. Lucani, Frank H.P. Fitzek</i></p> <p>2) Hierarchical FEC and Modulation in Network-coded Two-way Relay Channel <i>Dongho You, Dong Ho Kim, Hani Salah, Frank H.P. Fitzek</i></p> <p>3) Accelerated Processing for Maximum Distance Separable Codes Using Composite Extension Fields <i>Diego Ruano, Daniel E. Lucani, Olav Geil</i></p> <p>4) Enhancing Opportunistic Routing for Dynamic Environments <i>Hani Salah, Achim Schade, Ievgenii Anatolijovuch Tsokalo, Frank H.P. Fitzek</i></p> <p>5) A Multi-Threaded Approach to Encoding with Random Linear Network Coding <i>Lars Nielsen, René Rydhof Hansen, Daniel E. Lucani</i></p>
12:30 – 14:00	Lunch (Buffet)
14:00 – 15:30	<b>Keynote from Jeroen Wigard (Nokia Bell Labs):</b> Enabling reliable communications for aerial vehicles through cellular networks
15:30 – 16:00	Coffee break

16:00 – 17:30	<p><b>Session 2: Emerging Trends</b></p> <p>1) Analysis of Blockchain Forking on an Ethereum Network <i>Tatiana Madsen, Sebastian Damsgaard, Francisco Silva, Mikki Alexander Mousing, Sørensen, Flavien Marty, Bandar Altariqi, Eleftheria Chatzigianni, Hans-Peter Schwefel</i></p> <p>2) How to Measure the Average and Peak Age of Information in Real Networks? <i>Basel Barakat, Hachem Yassine, Simeon Keates, Ian James Wassell, Kamran Arshad</i></p> <p>3) FileTribe: Blockchain-based Secure File Sharing on IPFS <i>László Sári, Márton Sipos</i></p> <p>4) Towards a Better Understanding of Live Migration Performance with Docker Containers <i>Roberto Torre, Elena Urbano, Hani Salah, Giang T. Nguyen, Frank H.P. Fitzek</i></p> <p>5) An Algebraic Approach to Network Slicing <i>Riccardo Bassoli, Fabrizio Granelli</i></p>
18:30 – 22:00	<b>Reception at Navitas</b>

**Friday May 3<sup>rd</sup>, 2019**

8:30 – 9:00	Welcome coffee
9:00 – 10:30	<p><b>Session 3: IoT</b></p> <p>1) Allocation of Repetition Redundancy in LoRa <i>Siddhartha Borkotoky, Christian Bettstetter, Christian Raffelsberger, Udo Schilcher</i></p> <p>2) Generalized Deduplication: Lossless Compression for Large Amounts of Small IoT Data <i>Rasmus Vestergaard, Daniel E. Lucani, Qi Zhang</i></p> <p>3) Minimizing Bandwidth Use in IoT Storage with Random Device Failures <i>Xiaobo Zhao, Daniel E. Lucani, Xiaohong Shen, Haiyan Wang</i></p> <p>4) Study of a Self-Powered UWB Sensor Network for Industrial Applications <i>Jorge F. Schmidt, Denis Chernov, Manfred Pauritsch, Christian Bettstetter</i></p> <p>5) Enabling Secure Multicast Group Communications in IP Wireless Networks for the Internet of Things <i>Nestor Hernandez, Jacob H. Lauritsen, Kasper K. Jacobsen, Rune Hylsberg Jacobsen</i></p>
10:30 – 11:00	Coffee break
11:00 - 12:30	<b>Keynote from Lars Dittmann:</b> Design and applications for reliable and ultra-reliable wireless access networks

12:30 – 14:00	Lunch (Buffet)
14:00 – 15:30	<p><b>Session 4: Cellular Networks and 5G</b></p> <p>1) Edge Computing Enabled Mobile Augmented Reality with Imperfect Channel Knowledge, <i>Jianhui Liu, Qi Zhang</i></p> <p>2) System Level Analysis of K-Repetition for Uplink Grant-Free URLLC in 5G NR <i>Thomas Haaning Jacobsen, Renato Barbosa Abreu, Gilberto Berardinelli, Klaus Pedersen, István Z. Kovács, Preben Mogensen</i></p> <p>3) Performance Analysis and Optimization of Cooperative Caching in Cellular Networks <i>Fengming Cao, Ziming Zhu, Mahesh Sooriyabandara, Zhong Fan, Ayalvadi Ganesh, Simon Armour</i></p> <p>4) Dynamic Uplink Resource Dimensioning for Massive MTC in 5G Networks Based on SCMA <i>Luciano Miuccio, Daniela Panno, Salvatore Riolo</i></p> <p>5) Initial Concept of an Oracle-Structured Stream Compression Protocol for Arbitrary Network Flows <i>Máté Tömösközi, Mingchuan Luo, Frank H.P. Fitzek, Péter Ekler</i></p>
15:30 – 16:00	Coffee break
16:00 – 17:30	<p><b>Session 5: Wireless Communications</b></p> <p>1) Exploiting CSMA/ECA and Adaptive Sensitivity Control for Simultaneous Transmit and Receive in IEEE 802.11 WLANs <i>Adnan Aijaz, Parag Kulkarni</i></p> <p>2) On the Different Mathematical Realizations for the Digital Synthesis of LoRa-Based Modulation <i>Tallal Elshabrawy, Phoebe Edward, Mohamed Ashour, Joerg Robert</i></p> <p>3) Quality-Aware Broadcasting Strategies for Position Estimation in VANETs <i>Federico Mason, Marco Giordani, Federico Chiariotti, Andrea Zanella, Michele Zorzi</i></p> <p>4) UWB Connectivity Inside a Space Launch Vehicle <i>Daniel Neuhold, Jorge F. Schmidt, Christian Bettstetter, Johannes Sebald, Jirka Klaue</i></p> <p>5) Comparing DASH Adaptation Algorithms in a Real Network Environment <i>Davide Talon, Luca Attanasio, Federico Chiariotti, Matteo Gadaleta, Andrea Zanella, Michele Rossi</i></p>
18:30 – 22:00	<b>Banquet at Musikhuset Aarhus</b>