

30. VDE/ITG Fachtagung Mobilkommunikation

- 5G Lösungen und 6G Ausblick -

12. - 13. Mai 2026, Osnabrück

Programm:

Dienstag, 12. Mai 2026

9:00 Registrierung

9:30 Begrüßung

Karsten Morisse, Dekan der Fakultät Ingenieurwissenschaften und Informatik
Joachim Sachs, ITG Fachausschuss Kommunikationsnetze und -systeme, Ericsson
Ralf Tönjes, Sprecher des Programmkomitees, HS Osnabrück

9:50 Key Note

Thomas Heyn (FhG-IIS): Non-Terrestrial Networks in 5G/6G

10:30 Invited Talk

Gerald Kunzmann (Nokia): Beyond 5G Security: Emerging Risks and Mitigation Strategies for 6G

11:00 Kaffeepause

11:30 Sitzung 1: Cell Free and Non-Terrestrial Networks

Sitzungsleitung: Maciej Muehleisen (Ericsson)

11:30 Yevhenii Shudrenko (TUHH): Feasibility Study - Multiple User Access for Cell Free Massive MIMO with Wave Field Synthesis

11:50 Muhammed F. Özkoca (TU Chemnitz): Dynamic Cluster Formation for User-centric Cell-Free MIMO Networks with heterogeneous Traffic Demand

12:10 Mohammad A. Vakilifard (Uni Bremen): Deep Learning Based Link Quality Prediction for Direct-to-Device LEO Communication Under Inter-Constellation Interference

12:30 Mittagspause und Demonstrationen

13:20 Key Note

Michael Bahr (Siemens): Wireless Communication for Industrial Applications

14:00 Poster Session & Coffee: Spezielle Lösungen und neue Ansätze

- Tran H. Bui (Frankfurt Uni. of Applied Science): Evaluation of Auracast-Enabled Audio Broadcasts for Public Address (PA) Systems
- Wenqing Dai (DFKI): Multi-Objective RIS Deployment Optimization for Physical Layer Security in ISAC Networks
- Zahra H. Fard (Adtran): LSTM-Based Prediction of Roaming Events in Residential Wi-Fi Mesh Networks
- Immanuel König (Uni Kassrel): The Wireless Sausage: Ahle Wurst facilitated by AI
- Marvin Reski (RPTU Kaiserslautern): A Flexible and Nomadic Kubernetes-Based 5G Network Using OpenAirInterface
- Annika Tjabben (DFKI): A Numerical and Experimental Evaluation of Microbubble Communication Using OpenFOAM

15:00 Sitzung 2: Campus Network Performance

Sitzungsleitung: Stefan Geißler (Uni Würzburg)

15:00 Shreya Tayade (Ericsson): Probability of Exceeding Survival Times for Closed-Loop Control Application over 5G NR

15:20 Jayabadrinath Krushnan (HS Schmalkalden): Open RAN-Based 5G Campus Networking for Industrial Robotics Applications in 6G Terafactory, Real-World Measurements

15:40 Christian Schellenberger (RPTU Kaiserslautern): Experimental Results of Seasonal and Environmental Impact on a 5G Non-Public Network

16:00 Kaffeepause und Demonstrationen

16:30 Sitzung 3: 5G Network Configuration and Digital Twins

Sitzungsleitung: Ulrich Trick (Frankfurt Uni. of Applied Science)

16:30 Lukas Schumann (Uni Würzburg): Towards Repeatable 5G Research: An Automated Configuration Framework for Private Networks

16:50 Simon Raffeck (Uni Würzburg): UE or Not UE: Investigating the Impact of Modem Choice on 5G NR Uplink Performance

17:10 Anjali Binesh und Pavithran Padmanaban (Frankfurt Uni. of Applied Science): Digital Twin Network of a 5G COTS Device: Concept, Implementation Limitations, and Classification

17:30 Ende des 1. Tages

19:30 Abendveranstaltung: Gemeinsames Abendessen in der Brauereigaststätte Rampendahl

Mittwoch, 13. Mai 2026

9:00 Key Note

Aydin Sezgin (Uni Bochum): Turning the Environment into a Network Component: The Rise of Reconfigurable Intelligent Surfaces in 6G

9:40 Kaffeepause und Demonstrationen

10:10 Sitzung 4: Advances in 6G

Sitzungsleitung: Gerald Kunzmann (Nokia)

10:10 Babitha Nadar (Frankfurt Uni. of Applied Science): A View of 6G from the Perspectives of Standardization, Research, Network Operators, and Vendors

10:30 Matthias Rüb (DFKI): Expressing Sustainability in ICT Systems: Resource Usage, Accountability, and Adaptability

10:50 Simon Häger (Uni Dortmund): Reflection Instead of Densification: Experimental Insights into IRS-Aided Industrial 6G mmWave

11:10 Kaffeepause und Demonstrationen

11:40 Sitzung 5: IoT Networks

Sitzungsleitung: Michael Bahr (Siemens)

11:40 Johannes Königs (Uni Bremen): Event-Based Communication for Variable-Bandwidth Signals using FSKOOK

12:00 Viktoria Vomhoff (Uni Würzburg): MARKlab Mobility Extension: Measuring the Impact of Mobility on Cellular IoT Connectivity

12:20 Anas Bin Muslim (HS Osnabrück): An Overview of TSN-5G Integration Challenges and the Corresponding Open Source Solutions

12:40 Mittagspause und Demonstrationen

13:40 Key Note

Jörg Benze (Deutsche Telekom): 8ra/IPCEI-CIS: Europas souveräne Multi-Provider Cloud-Edge Infrastruktur

14:20 Kaffeepause und Demonstrationen

14:50 Sitzung 6: Security and Cloud Infrastructure for 6G Applications

Sitzungsleitung: Peter Roer (HS Osnabrück)

14:50 Florian Lehn (DFKI): Secure Authentication in Wireless IoT: Hamming Code Assisted SRAM PUF as Device Fingerprint

15:10 Andrey Ruzhanskiy (Deutsche Telekom): Towards secure and cloud-ready next Generation 5G Infrastructure

15:30 Matthias Rüb (DFKI): Guidance on the Selection of Wireless Technologies for Medical Applications

15:50 Abschlussdiskussion

16:00 Ende der Veranstaltung