ITG Fachgruppe „Angewandte Informationstheorie”

Program of the 45. Meeting, 03.12.2026

— Next Generation Computing and Communications —

Technische Universität Dortmund
Institute of Communications Engineering
Raum P1-03-316
Otto-Hahn-Str. 4, 44227 Dortmund

9:00 – 9:05	Dirk Wübben, *Department of Comm. Engineering, University of Bremen* **Welcome**

Session I

9:05 – 9:25	Parmida Geranmayeh, *Institute of Comm. Engineering, TU Dortmund* **Learning under Jamming: Joint Jammer Identification and Beam-Power Control in mmWave Networks**
9:25 – 10:05	Onur Günlü, *Institute of Communications Engineering, TU Dortmund* **Fundamentals and Feedback Code Constructions for Secure ISAC: Security Can Come for Free**
10:05 – 10:25	Daniel Seifert, *Chair of Info. Theory and Machine Learning, TU Dresden* **Learned Codes for Secure Integrated Sensing and Communications Systems**
10:25 – 10:55	**Coffee break**

Session II

10:55 – 11:15	Hasanal Heidari, *Institute of Communications Engineering, TU Dortmund* **Security of MIMO-OFDM ISAC**
11:15 – 11:35	Simon Calderon, *Division of Information Coding, Linköping University* **Empirical Ciphertext Distinguishability Testing of KEMs and Hybrid Encryption via Deep Learning**
11:35 – 11:55	Paul Heinisch, *Satellite Communication & Radar Systems, JMU Würzburg* **GHZ State Generation in Quantum Networks**
11:55 – 12:15	Yasmin Yaraghi Esfahani, *Institute for Digital Comm. Systems, RU Bochum* **Robust and Scalable Communication and Computing using Graph Neural Network via Joint Uncertainty Injection**
12:15 – 13:15	**Lunch break**

Session III

13:15 – 13:35	Anh Thi Bui, *Institute for Digital Comm. Systems, Ruhr University Bochum* **AI-Native Joint Computing and Networking in HAPS-Ground Integrated Systems via Deep Unfolding**
13:35 – 13:55	Maciej Skórski, *University of Luxembourg & University of Warsaw* **Unpredictability from Parity: Understanding Linear Correctors for Markovian Sources**
13:55 – 14:15	Adam Umra, *Institute for Digital Comm. Systems, Ruhr University Bochum* **Emulating Large Arrays with Conditional Diffusion: Direction-of-Arrival Estimation in MIMO Radar**
14:15 – 14:45	**Coffee break**

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Session IV

14:45 – 15:05	Robert-Jeron Reifert, *Institute for Digital Comm. Systems, RU Bochum* **Agentic AI-Based Joint Computing and Networking via Mixture of Experts and Large Language Models**
15:05 – 15:25	Constantin Runge, *Institute for Communications Engineering, TU Munich* **Peak-power-constrained rate adaptation via probabilistic shaping**
15:25 – 15:45	Jan Niklas Stickart, *Communication Systems Group, Uni Paderborn* **Communication-efficient Multi-Hop Federated Learning**
15:45 –	**Closing**