ITG Fachgruppe „Angewandte Informationstheorie”

Program of the 44. Meeting, 29.10.2025

— Shannon- and Post-Shannon-Information Theory —

Technische Universität Braunschweig
Institute for Communications Technology
Room SN 22.2
Schleinitzstr. 22, 38106 Braunschweig

9:00 – 9:06	Dirk Wübben, *Department of Communications Engineering, University of Bremen* **Welcome**
9:05 – 9:20	Eduard Jorswieck, Christian Deppe, *Institute for Communications Technology, TU Braunschweig* **Welcome by the host**

Session I

9:20 – 9:40	Mojan Wegener, *Institute for Comm. Technology, TU Braunschweig* **Age of Information in Short Packet Multi-Connectivity**
9:40 – 10:00	Abdalla Ibrahim, *Institute for Communications Engineering, TU Munich* **Stealthy Communication Over Noisy Channels: Channel Capacity and the Role of Randomization**
10:00 – 10:20	Marcel Mross, *Institute for Comm. Technology, TU Braunschweig* **The Second-Order Coding Rate of Identification via Simple-Dispersion DMCs with Feedback**
10:20 – 10:50	**Coffee break**

Session II

10:50 – 11:10	Ömer Karakas, *Fraunhofer IIS, Erlangen* **A NN-based Channel Coding Scheme for Analog Transmission**
11:10 – 11:30	Jyun-Sian Wu, *Institute for Comm. Technology, TU Braunschweig* **Wrap-Decoding in Asynchronous Unsourced Multiple Access**
11:30 – 11:50	Adam Umra, *Institute for Digital Communication Systems, Ruhr University Bochum* **Towards Smarter Sensing: A Reinforcement Learning Perspective**
11:50 – 12:10	Yiqi Chen, *Chair of Theoretical Information Technology, TU Munich* **Integrated Sensing and Communication with Distributed Rate-limited Helpers**
12:10 – 13:10	**Lunch break**

Session III

13:10 – 13:30	Maximilian Tillmann, *Department of Communications Engineering, University of Bremen* **Semantic Communication for Task Execution**
13:30 – 13:50	Ahmad Halimi, *Department of Communications Engineering, University of Bremen* **Cooperative Multi-Task Semantic Communication with Implicit Optimal Prior**

ITG Fachgruppe „Angewandte Informationstheorie”

13:50 – 14:10	Jonas Hawellek, *Institute for Comm. Technology, TU Braunschweig* **Entanglement-Assisted Classical Communication**
14:10 – 14:40	**Coffee break**

Session IV

14:40 – 15:00	Aymen Khaleel, *Institute for Digital Communication Systems, Ruhr University Bochum* **A Jack of All Trades, Master of What? When and Where RIS Fails, Derails, or Prevails**
15:00 – 15:20	Marjan Boloori, *Institute for Digital Communication Systems, Ruhr University Bochum* **Optimizing Movable Antenna Position and Transmissive RIS Phase for Efficient Base Station Design**
15:20 – 15:40	Pin-Hsun Lin, *Institute for Communications Technology, TU Braunschweig* **Information leakage estimation and its applications**
15:40 –	**Closing**