ITG Fachgruppe „Angewandte Informationstheorie”

Program of the 40. Meeting, 17.11.2023

— RIS for 6G: Theory and Implementations —

Ruhr-Universität Bochum, Lehrstuhl für Digitale Kommunikationssysteme
Gebäude ID, Ebene 03, Raum 401
Universitätsstraße 150, 44801 Bochum

9:00 – 9:05	Dirk Wübben, *Department of Communications Engineering, University of Bremen* **Welcome**
9:05 – 9:20	Aydin Sezgin, *Institute for Digital Communications Systems, RU Bochum* **Welcome by the host**

Session I

9:20 – 9:45	Simon Tewes, *Institute for Digital Communications Systems, RU Bochum* **Live-Demo: RIS prototype in the 5 GHz band**
9:45 – 10:10	Hossein Rezaei, *Fraunhofer-Institut für Integrierte Schaltungen IIS, Nürnberg* **RIS for next generation wireless backhaul (RIS4NGWB)**
10:10 – 10:35	Fatemeh Lotfi, *Institute for Digital Communications Systems, RU Bochum* **Under Whose Umbrella: The Collaborative Benefits of RS and RIS in Covert Communications**
10:35 – 11:00	**Coffee break**

Session II

11:00 – 11:25	Friedemann Laue, *Fraunhofer-Institut für Integrierte Schaltungen IIS, Erlangen* **Beam Training for Self-Sustainable RIS**
11:25 – 11:50	Chu Li, *Institute for Digital Communications Systems, RU Bochum* **IRS-Assistance with Outdated CSI: Element subset selection for secrecy performance enhancement**
11:50 – 12:15	Ramprasad Raghunath, *Inst. for Communications Technology, TU Braunschweig* **RISnet: A Scalable Approach for Reconfigurable Intelligent Surface Optimization with Partial CSI**
12:15 – 13:20	**Lunch break**

Session III

13:20 – 13:45	Mohamed Rihan Elmeligy, *Department of Communications Engineering, University of Bremen* **The role of RIS in improving the performance of Integrated Sensing and Communication Systems**
13:45 – 14:10	Lorenzo Zaniboni, *Information and Technology Chair of Communications Engineering, TU Munich* **Beam Alignment with an Intelligent Reflecting Surface for Integrated Sensing and Communication**

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14:10 – 14:35	Srivardhan Sarma Sivadevuni, *Institute for Digital Communications Systems, RU Bochum* **RIS-aided JCAS: Resilience against Blockage**
14:35 – 15:00	**Coffee break**

Session IV

15:00 – 15:20	Tim Düe, *Department of Communications Engineering, University of Bremen* **AI Based Fault Tolerant Processing in Satellites**
15:20 – 15:40	Paul Zheng, *Chair of Information Theory and Data Analytics, RWTH Aachen* **Joint Sensing and AirComp-FL: Over-the-Air Computation (AirComp) Federated Learning (FL)**
15:40 – 16:00	Fengcheng Pei, *Communications Engineering Lab, TU Darmstadt* **Joint Optimization of Beamforming and 3D Array-Steering for UAV-Aided ISAC**
16:00 – 16:20	Seyedsadra Seyedmasoumian Charandabi, *Chair of Information Theory and Data Analytics, RWTH Aachen* **Fairness-Aware Rate Splitting Multiple Access Scheme**
16:20 –	**Closing**