6G-RIC
Research and
Innovation Cluster

@ Berlin 6G Conference 2025

Sessions

With funding from the:
Federal Ministry of Research, Technology and Space

6G Conference 2025 —Sessions Tuesday, July 1st

Time / Room	Title	
14:00-15:30 / A06	Digital Twins in 6G: Connecting the Digital and Physical Worlds	
	Involved Projects:	6G-RIC
	Session Chair:	Ehsan Tohidi, Patrick Agostini
14:00-15:30 / tba	Sub-THz Semiconductor Technologies, Photonic and Microwave Circuits and Systems	
	Involved Projects:	6G-RIC, Open6GHub
	Session Chair:	Ramez Askar, Michael Peter
	6G-RIC Talks:	Corrado Carta – „SiGe BiCMOS ICs and Modules for Resilient Communication and Sensing at D-Band“
16:00-18:00 / A04	Germany’s Open RAN Vision	
	Involved Projects:	6G-RIC
	Session Chair:	Ehsan Tohidi
	Panelists:	Martin Kasparick
		Kenan Turbic
	6G-RIC Talks:	Martin Kasparick (airpuls) - “Potentials and Challenges of Open Modular Private Networks”
		Kenan Turbic (Fraunhofer HHI) - “Open RAN – Research Testbed Development”

With funding from the: Federal Ministry of Research, Technology and Space

6G Conference 2025 —Sessions Tuesday, July 1st

Time / Room	Title
16:00-18:00 / A05	Sub-THz Channel Measurements and Modeling for 6G and Beyond
	Involved Projects: 6G-Sentinel, Open6GHub, 6G-RIC
	Session Chairs: PThomas Kürner, Michael Peter, Ramez Askar
	6G-RIC Talks: Lucas Cândido Ribeiro (Technische Universität Braunschweig): "Channel Measurements and Modeling in THz Bands: The Efforts of the ETSI ISG THz towards Standardisation and the first recommended ABG Channel Model"
	Alper Schultze (Fraunhofer HHI): "Sub-THz channel characterization for industrial environments: Measurements at 160 GHz in a production hall"

With funding from the: Federal Ministry of Research, Technology and Space

6G Conference 2025 —Sessions Wednesday, July 2nd

Time / Room	Title	
16:00-18:00 / tba	Extreme MIMO	
	Involved Projects:	6G-RIC, 6G-Life
	Session Chair:	Giuseppe Caire, Gerhard Fettweis
	Panelists:	
16:00-18:00 / tba	6G Transceiver Realisations -From Concept to Implementation	
	Involved Projects:	6G-RIC, Open6GHub
	Session Chair:	Friedel Gerfers, Amelie Hagelauer
	Panelists:	Corrado Carta – „SiGe BiCMOS Circuits for Integrated Beamsteering Transceivers Operating over the Full D-Band “

With funding from the: Federal Ministry of Research, Technology and Space

6G Conference 2025 —Sessions Thursday, July 3rd

Time / Room	Title	
09:00-10:00 / A05	Reconfigurable Intelligent Surfaces	
	Involved Projects:	6G-RIC
	Session Chair:	Aydin Sezgin, Robert Schober, Ehsan Tohidi
	6G-RIC Talks:	Intelligently Learning to Reconfigure
	Panelists:	Michael Meyer, Kai Numssen, Bernd Schröder, Eduard Jorswieck, Hossein Rezaei, Alejandro Jiménez Sáez, João Ferreira, Wilhelm Keusgen, Andreas Benzin, Christian Wietfeld, Markus Heinrichs
09:00-10:30 / A05	Reconfigurable Intelligent Surfaces 1	
	Involved Projects:	6GEM, 6G-RIC, 6G-LICRIS
	Session Chair:	Aydin Sezgin, Robert Schober, Ehsan Tohidi
	Panelists:	Eduard Jorswieck, Hossein Rezaei
	6G-RIC Talks:	Eduard Jorswieck - “Intelligently Learning to Reconfigure”
		Hossein Rezaei - “Hardware Limitations and Optimization Approach in 1-Bit RIS Design at 28GHz”
09:00-10:30 / C01	6G and Sustainability	
	Involved Projects:	GreenICT
	Session Chair:	Stefan Wunderer, Wolfgang Heinrich
	Panelists:	Eduard Jorswieck, Hossein Rezaei
	6G-RIC Talks:	Ehsan Tohidi - “Load-adaptive optimization of mobile networks for energy saving”

With funding from the: Federal Ministry of Research, Technology and Space

6G Conference 2025 —Sessions Thursday, July 3rd

Time / Room	Title	
11:00-12:30 / tba	6G and Sustainability	
	Involved Projects:	6G-RIC
	Session Chair:	Stefan Wunderer, Wolfgang Heinrich
	Panelists:	Stefan Wunderer, Ehsan Tohidi, Wolfgang Heinrich
	6G-RIC Talks:	Stefan Wunderer (NOKIA) - “Sustainable Microelectronics Pave The Way To 6G”
		Ehsan Tohidi (Fraunhofer HHI) - „Load-adaptive optimization of mobile networks for energy saving”
		Wolfgang Heinrich (FBH), „Carbon footprint of a D-band link – status and benchmarking”
11:00-12:30 / A03	Energy-Efficient Coding for 6G	
	Involved Projects:	6G-RIC, 6G Life, Open6G hub
	Session Chair:	Gianluigi Liva (DLR, 6G-RIC)
	6G-RIC Talks:	G. Liva (DLR, 6G-RIC) - “Ultra-Reliable Low-Latency Communications in 6G: Codes and (New) Bounds”
11:00-12:30 / A05	Reconfigurable Intelligent Surfaces 2	
	Involved Projects:	6GEM, 6G-RIC, 6G-LICRIS
	Session Chair:	Aydin Sezgin, Robert Schober, Ehsan Tohidi
	6G-RIC Talks:	Andreas Benzin – “tba”
		“Revisiting Cell-Free Massive MIMO Versus Small Cells”

With funding from the: Federal Ministry of Research, Technology and Space

6G Conference 2025 —Sessions Thursday, July 3rd

Time / Room	Title	
14:00-15:30 / A04	AI-Assisted Communications	
	Involved Projects:	6G-RIC
	Session Chair:	Eduard Jorswieck, Stephan Ten Brink, Aydin Sezgin
	6G-RIC Talks:	Giuseppe Caire (TU Berlin) "Fairness Scheduling and Fronthaul Optimization in Cell-Free User-Centric Massive MIMO Networks" Lorenzo Miretti (Fraunhofer Heinrich Hertz Institute, Berlin & TU Berlin) "Revisiting Cell-Free Massive MIMO Versus Small Cells"
14:00-15:30 / A01	Higher-Layer Aspects of 6G Technology	
	Involved Projects:	6G-RIC
	Session Chair:	André C. Drummond, Zoran Utkovski
	6G-RIC Talks:	Holger Karl (Hasso-Plattner-Institut – open6GHub) - "AI for SMO - necessary, useful, or are we just lazy?" Umar Toseef (Nokia, 6G-ANNA) – "GenAI & O-RAN: Accelerating the Autonomous 6G Network" Osman Basaran (TU Berlin, 6G-RIC) – "AI-Native Architecture Design for 6G " Giuseppe Caire (TU Berlin, 6G-RIC) - "Two Cross-Layer Optimization Problems in Cell-Free User-Centric Wireless Networks: Fairness Scheduling and Fronthaul Optimization" Thomas Bauschert (TU Chemnitz, 6G-RIC) – "Fronthaul Dimensioning for Cell-Free User-centric Massive MIMO Networks" Max Franke (TU Berlin, 6G-RIC) - "Topology considerations for cell-free fronthaul"

With funding from the: Federal Ministry of Research, Technology and Space

6G Conference 2025 —Sessions Thursday, July 3rd

Time / Room	Title
14:00-15:30 / A03	Sensing Technologies for Health in 6G Networks

Involved Projects: 6G-RIC, 6G-Health
Session Chair: Johannes Dommel, Slawomir Stanczak
6G-RIC Talks:
Gerhard Hindricks (Deutsches Herzzentrum der Charité) "tba"
Stefan Wunderer (NOKIA) "How 6G Innovations Can Contribute to the Future of Healthcare"
Nastassia Vysotskaya (Infineon AG) "Radar2ECG: Radar Technology for Predicting Heart Rate Variability"
Kamakshi Srikumar (NXP Semiconductors) "Aging in Place: UWB Radar based Fall Detection for Elderly Care"
Shweta Devani (Fraunhofer HHI) "Cooperative Sensing for Contactless Beat-to-Beat Hemodynamic Monitoring"