

## 1st International Workshop on Metrology for THz Communications

Braunschweig, 28 June 2022

9.00-9.30h	<i>Introduction to DFG FOR 2863 Meteracom</i> Thomas Kürner, TU Braunschweig, Germany
9.30-10.00	<i>Invited Talk: Propagation measurements and models in the mmwave band</i> Sana Salous, Durham University
10.00-10.20	<i>Metrology in wireless communication: Channel Sounder Measurement Verification Using Over-the-Air Artifact</i> Mohanad Al-Dabbagh, PTB, Germany
10.20-10.40	<i>Mitigation of thermal crosstalk for integrated THz-photonics signal processing</i> Souvaraj De, PTB, Germany
10.40-11.00	<i>Calibration and verification of multidimensional channel sounder for THz applications</i> Diego Dupleich, Technische Universität Ilmenau, Germany
11.00-11.30	Coffee break
11.30-12.00	<i>Invited Talk: From 5G to 6G: Key challenges from a 6G-RIC perspective</i> Slawomir Stanczak, Fraunhofer Heinrich-Hertz-Institut, Germany
12.00-12.20	<i>Characterization of building materials in the THz range</i> Fatima Taleb, Philipps-Universität Marburg, Germany
12.20-12.40	<i>Sensitivity Analysis of a 280 – 312 GHz Superheterodyne Terahertz Link Targeting IEEE802.15.3d Applications</i> Dominik Wrana, Universität Stuttgart, Germany
12.30-13.00	<i>Invited Talk: Leveraging photonics techniques for THz communications: measurements of active passive functions in the 300 GHz range</i> Guillaume Ducourneau, Lille University, France
13.00-14.00	Lunch break
14.00-14.30	<i>Invited Talk: Key Challenges of THz Communications for 6G Era</i> Ho-Jin Song, Pohang University, Korea
14.30-14.50	<i>ENOB analysis in photonic orthogonal sampling systems for Terahertz signal reception</i> Younus Mandalawi, Technische Universität Braunschweig, Germany
14.50-15.10	<i>Ultra-low phase noise frequency synthesis for THz metrology using low-jitter femtosecond lasers</i> Christoph J. Scheytt, Paderborn University, Germany
15.10-15.40	Coffee break
15.40-16.10	<i>Invited Talk: THz Physical Layer Security</i> Edward Knightly, Rice University, Houston, USA
16.10-16.30	<i>How image reconstruction can improve THz communications – A compressed sensing-assisted device discovery approach</i> Tobias Doeker, Technische Universität Braunschweig, Germany
16.30-16.50	<i>Challenges of Hardware Acceleration in THz Communication</i> Anouar Nechi, Universität zu Lübeck, Germany
16.50-17.10	<i>A THz Control Plan for Adaptive Coding and Modulation</i> Cao Vien Phung, Technische Universität Braunschweig, Germany
17.10-17.20	<i>Closing Remarks</i> Thomas Kürner, TU Braunschweig, Germany