463. Title:Channel and propagation measurements at 300 GHz
Authors:Priebe, Sebastian (1); Jastrow, Christian (2); Jacob, Martin (1); Kleine-Ostmann, Thomas (2); Schrader, Thorsten (2); Kürner, Thomas (1)
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Abstract:Ultrabroadband Terahertz communication systems are expected to help satisfy the ever-growing need for unoccupied bandwidth. Here, we present ultra broadband channel measurements at 300 GHz for two distinct indoor scenarios, a point-to-point link of devices on a desktop and the connection of a laptop to an access point in the middle of an office room. In the first setup, measurements are taken with regard to distance, different antenna types and device displacements. Additionally, an interference constellation according to the two-ray model is examined. In the second setup, the focus is on the detection and characterization of the LOS- and the NLOS-paths in an indoor environment, including a maximum of two reflections. Temporal channel characteristics are examined with regard to maximum achievable symbol rates. Furthermore, ray obstruction due to objects in the transmission path is investigated.