

Body-to-Body Communications: a Measurement-based Channel Model At 2.45 GHz

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Abstract:

This paper presents a channel characterisation for Body-to-Body communications. Starting from indoor real-time measurements at 2.45 GHz, the radio channel was modeled, both in Line-of-Sight (LOS) and Non Line-of-Sight (NLOS) conditions, through a mean channel gain component plus a fading contribution, the latter arising from the body movements. The body shadowing effect was also evaluated considering the orientation of one human body with respect to another one. Two different antennas were employed in the measurements, to assess their impact on the radio channel characteristics.