

Invited talk at SEMCAD/Sim4Life workshop at Eucap 2016, Davos Switzerland, Wednesday April 13, 2016

Title RF EMF exposure evaluation of an ultra high density wireless access network

A novel wireless access architecture (ATTO) that will allow bitrates of 100 Gb/s with very high reliability is evaluated from exposure point of view. The concept is based on very small cells (called ATTO-cells of typical size 15x15 cm²) that are integrated into the floor and optimized for establishing a 100 Gbps communication stream to any mobile object positioned on this floor. Radio-frequency fields and absorption have been assessed by both finite-difference time-domain simulations in a 3D heterogeneous male phantom and validation measurements of electric fields and specific absorption rate in a homogeneous phantom.

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