

Industrial Workshop IW01

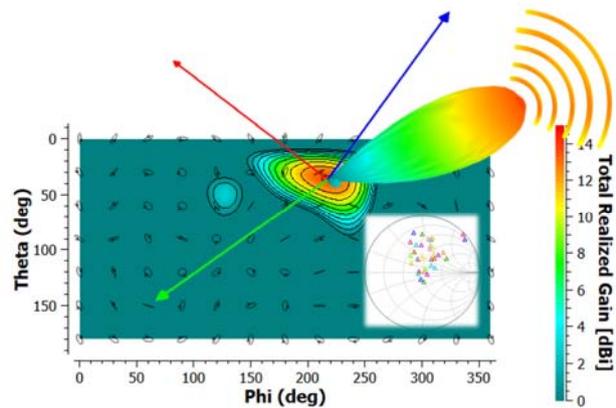
Broadband compact mm-wave antenna array performance optimization (by Optenni Ltd.)



Abstract:

An economical option to implement mm-wave arrays is to etch patch elements on the surface of a high frequency PCB substrate. Patch antennas are, however, inherently narrowband. The design problem is further complicated, because the mutual coupling detunes the antenna impedances when arranged in a compact array. The impedances are detuned again when the array is operational, due to active impedances. This leads to complication in EM design that can be mostly eliminated by handling both detuning mechanisms with matching circuits.

In this workshop we demonstrate how to properly relax the EM design criteria and to optimize the array performance in order to provide value to both newcomers to the field and experienced researchers alike.



Workshop Program (Tuesday 23 March 2021, 11.40-13.10h)

The workshop has the format of webinar, including software demonstrations. The audience is encouraged to make questions and comments in the Q&A section in the end. Moreover, all attendees are invited to visit Optenni virtual booth for individual discussions.