

The 16th European Conference on Antennas and Propagation (EuCAP) 27 March – 1 April 2022



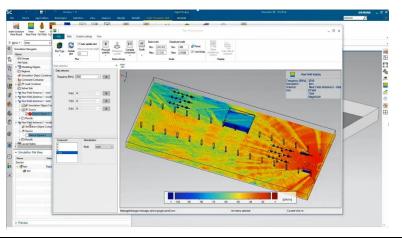
Simcenter 3D for Electromagnetics: update on new capabilities for antenna design, array design, system integration and environment modelling

Abstract:

Simcenter 3D is the multi-discipline, multi-physics simulation platform from SIEMENS. Simcenter 3D provides an intuitive Geometry/CAD-centric user experience, for creating, handling and running 3D CAE models. The platform is multi-physics supporting Mechanical, Thermal, Fluid and Electromagnetics capabilities from one user environment. For Electromagnetics, Simcenter 3D integrates Low Frequency solvers and tools based on an adaptive, non-linear FEM framework. For the high frequency use cases, advanced full-wave solvers, based on MoM and MLFMA, complemented with asymptotic technologies are available. The workshop will show in particular the capabilities for High Frequency analysis, covering the design of antenna's, arrays and radars, installation aspects and propagation into the field. An example of antenna installation into a factory in context of 5G will be demonstrated.

Workshop outline:

 Both Siemens and IDS experts will contribute to the workshop, on the one hand showing through demonstrations the capabilities of the solution as well as highlighting industrial experiences





Koen De Langhe carries 25 years of expertise in the area of CAE, primarily 3D mechanical analysis: Structural Dynamics, Acoustics, NVH analysis and since several years as well solutions for Electromagnetics including Motors, Transformers, EMC/EMI, antenna and radar.

Within Product Management, Koen is setting the product strategy and roadmap for a range of 3D simulation products, and bringing existing products to the market and to customers.