

Simulation of Optical Nanostructures with CST MICROWAVE STUDIO

Frank Demming-Janssen, CST AG

In CST MICROWAVE STUDIO® 2013, several new features for simulations in the optical frequency range have been introduced. This talk will highlight the new functionalities, such as the extended material library, non linear materials, automated power loss calculation and the advanced frequency sweep techniques for broadband problems. In addition, the pros and cons of various solver algorithms for the simulation of optical nanostructures will be discussed, namely FIT Time Domain, FEM Frequency Domain and MoM.

The talk concludes with an online demonstration of the simulation of a thin film solar cell, showing how the new features simplify the workflow for optical simulations.