

SIMULIA Workshop: Modeling and Simulation of Antenna Array Design System, Non-Parametric Optimization, and Python Workflow Enhancement

Abstract

This SIMULIA workshop explores the design and simulation of advanced antenna array systems. During this session, we will examine modeling and simulation of phased array antennas and how non-parametric optimization dramatically improves simulation efficiency. Discover how to bridge design gaps through unified modeling and simulation of antenna arrays with active front-end circuits, achieving superior system performance. Crucially, this work addresses the joint approach between CST Studio and VISION as modeling and simulation tools, paving the way for global optimization of RF systems. Finally, learn to enhance your CST simulation workflows using Python, streamlining your processes and unlocking new potential. Join us to gain practical knowledge and insights into these critical areas of RF and Antenna design, empowering you to create next-generation antenna systems.

Speakers



Sajid Asif, an Industry Process Consultant at Dassault Systèmes, leads SIMULIA EuroNorth's technical sales engagements, specializing in Electromagnetics technology across multiple industries. Previously, as an Antenna Engineer, he focused on designing, developing, and testing passive RF/microwave circuits and phased array antennas for Satcom and terrestrial applications. Alongside his industry work, he served as a Researcher and Lecturer at various academic institutions. Besides his B.Sc. and M.Sc. degrees, Dr. Asif also holds a PhD in Electrical & Computer Engineering from North Dakota State University, USA. He is a member of IET and holds senior membership in IEEE.



Wafae EL FENNOURI graduated in 2023 as an Electronics and Telecommunications Engineer from ENSIL-ENSCI engineering school in Limoges, France. Following her diploma, she gained expertise in high-power amplifier modeling and system simulation at AMCAD ENGINEERING. Over two and a half years, she built seniority as an Application Engineer within the circuit and simulation R&D team, contributing to advanced application developments.



Vesna Somero is an EM Simulation Specialist at PLM Group, where she has been working since September 2024. She holds an MSc in Electronics and Microwave Engineering and has over 15 years of experience in product development within the consumer and telecom industries. Vesna specializes in antenna and RF design and simulation, hardware product development, simulation strategies and workflows in antenna and EMC. Vesna is dedicated to empowering engineers in harnessing the full potential of their simulation capabilities.

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Henrik Kryh work as EM Simulation Engineer at TECHNIA and received his MSc from Chalmers University of Technology in 2013. He has 10+ years of experience within RF product development.