Industrial Workshop

Company/Organization: ANSYS

Title: Design flow methodology including thermal and active circuit impact in Antenna Design and Antenna Integration

Abstract: This presentation demonstrates the design flow methodology for Antenna design using Ansys, emphasizing integration with real-environment performance scenarios. Higher frequencies pose greater integration challenges, including the impact of radome and challenges in integrating active circuits. Additional considerations involve addressing thermal design challenges, as well as issues like corona or multipaction in space applications. The presentation also highlights the analysis of desired or undesired communication on a platform through accurate physics-based models within an end-to-end multiscale simulation framework.

The workshop will illustrate new and emerging antenna design flow methodologies utilizing a range of connected physics workflows, including a live demo using Ansys software to illustrate key points, as necessary.

Dave Prestaux is a Principal Applications engineer at Ansys, focusing on the Ansys high frequency analysis tools (HFSS, Slwave, Q3D, STK), and supporting a wide range of customer application areas including antennas, PCBs, RFICs, EMC etc.