

Electromagnetic Modeling and Complex Natural Frequency Characterization of Objects Behind Walls

Principal Investigator: Dr. Ahmad Hoorfar

Summary:

The project involves FDTD simulation of impulse waveform interacting with various physical configurations of objects and a wall in some cases. It includes laboratory data collections for small selected number of configurations for purpose of simulation validation. The impulse waveform is synthesized from the series of CW waveforms collected in the laboratory. Poles are calculated for both the FDTD data and the laboratory collected data so that a comparison of results may be made.