

Departmental Seminar

Seminar Title : Application of Pradovera's Algorithm for Adaptive Frequency Sampling in Electromagnetic Simulation
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Venue : Seminar Room, EE-205
Date and Time : 08 Jan 2025 (5:15 PM)
Abstract : In this work,we have implemented Davide Pradovera's minimal sampling algorithm for adaptive frequency sampling in electromagnetic simulation. This algorithm is basically a modified AAA (Adaptive Antoulas– Anderson) version. Compared to the conventional AAA algorithm, this approach does not require a prior user-defined dataset to find out the next frequency sample point while meeting the specified error criteria. Pradovera has introduced a pseudo error to find out the next frequency sample in an adaptive way incorporating the AAA algorithm. MATLAB R2023a was used to demonstrate two examples of electromagnetic simulation. This algorithm shows outstanding accuracy and speed performance.