# Abstracts

## The Studies of the Stability of FDTD with Mur's Absorbing Boundary Condition of Second Order in 3-D Scattering Problems

*Z. Yusheng and W. Wenbing. "The Studies of the Stability of FDTD with Mur's Absorbing Boundary Condition of Second Order in 3-D Scattering Problems." 1996 Microwave and Guided Wave Letters 6.3 (Mar. 1996 [MGWL]): 120-122.*

In this letter, the numerical implementation of Mur's absorbing boundary condition (Mur's ABC) of second order in finite-difference time-domain (FDTD) is analyzed and studied in three-dimensional (3-D) scattering problems. Two new stable upwind finite-difference approximations of Mur's ABC are pre-sented and the later-time instability of FDTD with second-order Mur's ABC in 3-D scattering problems is overcomed. Numerical results clearly exhibit the availability of the two upwind finite-difference approximations of Mur's ABC.

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