

Efficient time-domain electromagnetic analysis using CDF biorthogonal wavelet expansion

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The multi-resolution time-domain (MRTD) algorithm is implemented using Cohen-Daubechies-Feauveau (CDF) wavelet bases, resulting in a computationally efficient numerical scheme for electromagnetic field analysis. The application to a simple scattering problem demonstrates the advantages of the method versus the conventional finite-difference time-domain (FDTD) technique.

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