

## Space- and time-adaptive gridding using MRTD technique

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*E.M. Tentzeris, R.L. Robertson, L.P.B. Katehi and A. Cangellaris. "Space- and time-adaptive gridding using MRTD technique." 1997 MTT-S International Microwave Symposium Digest 1. (1997 Vol. 1 [MWSYM]): 337-340.*

The MRTD scheme is applied to the analysis of waveguide problems. Specifically, the field pattern and the S-parameters of a dielectric-loaded parallel-plate waveguide are calculated. The use of wavelets enables the implementation of a space- and time-adaptive gridding technique. The results are compared to those obtained by use of the conventional FDTD scheme to indicate considerable savings in memory and computational time.

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