

# Abstracts

## Fast hybrid integral equation-neural network method for the modeling of multiconductor transmission lines

---

*P.-M. Piel, J. Griffith, T.-T. Lam and G.W. Pan. "Fast hybrid integral equation-neural network method for the modeling of multiconductor transmission lines." 1999 MTT-S International Microwave Symposium Digest 99.4 (1999 Vol. IV [MWSYM]): 1673-1676 vol.4.*

Multiconductor transmission lines (MTL) have been modeled by distributed parameters R, L C and G in many commercial CAD packages, where most of the parameters are frequency independent or at most  $R/\sqrt{\epsilon}$  prop// $\sqrt{\epsilon}$  radic/f. We present a new and fast technique based on neural network and integral equation methods (IEM) to accurately evaluate this frequency dependence, while dramatically reducing the computation time.

 [Return to main document.](#)