# Abstracts

## Neuromodeling of microwave circuits exploiting space mapping technology

*J.W. Bandler, M.A. Ismail, J.E. Rayas-Sanchez and Q.J. Zhang. "Neuromodeling of microwave circuits exploiting space mapping technology." 1999 MTT-S International Microwave Symposium Digest 99.1 (1999 Vol. I [MWSYM]): 149-152 vol.1.*

Space mapping (SM) technology based neuromodels decrease the cost of training, improve generalization ability and reduce the complexity of the ANN topology w.r.t. classical neuromodeling. Three novel techniques are proposed to generate SM based neuromodels: space-mapped neuromodeling (SMN), frequency dependent space-mapped neuromodeling (FDSMN), and frequency-space-mapped neuromodeling (FSMN). Huber optimization is proposed to train the neuro-space-mapping (NSM). The techniques are illustrated by a microstrip right angle bend.

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