

SEMINAR NOTICE

Department of Electrical and Systems Engineering

**A Stability Analysis for A Time-Domain
Method of Moments Analysis
Of A One-Dimensional Double-Negative Transmission Line**

by

Yuming Zhang

The stability of time-domain simulations is examined for a generalized lossy double-negative transmission line. This is accomplished using a “modified” version of the Courant-Friedrichs-Lewy stability criterion and an analytic expression derived by combining the Z-transform with von Neumann methods. The time-domain simulation is implemented using a method-of-moments formulation with the generalized transmission line equations. The credibility of simulated time-domain results is verified through comparison with modal behavior determined using a frequency domain treatment for a periodic structure.

DATE: Friday, August 11, 2006
TIME: 10:00 a.m.
PLACE: Bryan Hall, Room 305

Research advisor:
Barry E. Spielman

This seminar is in partial fulfillment
of the Doctor of Science Degree