Session K

New Guided Wave Physical Effects

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This session will introduce new physical effects in guided wave phenomena. The first paper in the session will demonstrate that contrary to usual belief, the bound (TEM) ode on conventional stripline becomes leaky when a narrow air gap is introduced, which may easily happen during fabrication. The second paper shows that a new surface-wave-like mode is present on CPWs of infinite width, and that its presence explains the cancellation effect found earlier just above the onset of leakage. The third paper addresses the propagation characteristics of leaky waves in thick coupled microstrip lines integrated on substrate with infinite and finite widths. The last paper deals with the continuum of slotline in full hybrid form. Its simple application to the problem of a transverse metal strip is demonstrated, providing details of radiation patterns.

3:00 p.m.–4:10 p.m., Tuesday, June 2, 1992
Mesilla/Pecos