香港城市大學 City University of Hong Kong

Department of Electronic Engineering

毫米波國家重點實驗室 State Key Laboratory of Millimeter Waves

IEEE (HK) Section AP/MTT

Seminar on

Half-Width Leaky-Wave Antennas: A Progress Report

by

Dr. Leo Kempel
Michigan State University, Michigan, USA

Abstract

Microstrip leaky-wave antennas have been a scholarly topic of interest for nearly three decades. Seminal work include that of Oliner and Mentzel. The former work presented an effective method for predicting the radiation properties of such antennas using the Transverse Resonance Method (TRM).

Schneider and Thiele introduced the concept of a half-width leaky-wave (HWLW) antenna to simplify the feed requirements. The inclusion of a metallic septum results in the potential for using only one feed point since the septum suppresses the fundamental mode but not the first higher-order mode. Significant improvements have been made on this aperture over the past five years that not only improved understanding of the properties of such an antenna but also facilitated greater functionality.

During the evolution of this antenna design, better control over both bandwidth and radiation patterns has been obtained. The talk will present the results of this past five years and offer perspective on the future.

Biography

Leo Kempel is presently serving as the Acting Dean of Engineering at Michigan State University having previously served as Associate Dean for Research in the College of Engineering. He is a Fellow of IEEE and ACES and is currently serving on the IEEE Fellow Board. His research interests span the gamut of applied electromagnetics with a recent emphasis on material characterization methods and wide bandwidth, conformal apertures. He served as an Associate Editor for the IEEE Transactions on Antennas and Propagation and as an elected member of the Antennas and Propagation Society Administrative Committee. He is a member of the US Air Force Scientific Advisory Board.

Dr. Kempel joined Michigan State University as an Assistant Professor in 1998 after spending four years in the private sector. He was born in Akron Ohio in 1965 and earned degrees from the University of Cincinnati and the University of Michigan.

Date : 03 Oct., 2013 (Thursday)
Time : 11:00am – 12:00noon
Venue : G6302, 6/F, Green Zone, Academic 1,
City University of Hong Kong

***** ALL ARE WELCOME *****

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