

Seminar On

A Personal Overview of The Development of The U-Slot Patch Antenna

Professor Kai Fong Lee

Dean Emeritus, School of Engineering,
Professor Emeritus, Electrical Engineering
The University of Mississippi

- Date** : 24 November 2023 (Friday)
Time : 5:00 pm – 6:00 pm
On-site Venue : Room G7603, 7/F, Yeung Kin Man Academic Building,
City University of Hong Kong (Lift 2)
ZOOM Registration : <https://forms.gle/HW3u3WE61KekayUk7>
By 22 November 2023; 11:59 pm (Hong Kong Time)

Abstract

While thinking about what topic to speak in this seminar, I came across the outline of the invited talk I gave in the history session of the 2016 IEEE AP-S/URSI meeting in San Juan, Puerto Rico. The title of that talk was “A Personal Overview of the Development of the Microstrip Patch Antenna.” I was struck by the fact that, in discussing the five design topics of the patch antenna for various applications, namely, broad-banding, circular polarization, dual/triple band, reconfigurability, and small-size, the U-slot technique appears in four of them. It then occurred to me that a talk on “A Personal Overview of the Development of the U-slot Patch Antenna” may be of interest to this audience.

The talk begins by posing the question “When and where the U-slot patch made its first public appearance?” After getting the answers to this question from the audience, the talk proceeds in memory lane to the beginning and early history of this antenna, followed by the applications of the U-slot technique to the various design requirements, and the international cast of researchers who contributed to its development. The story of how the cousin of the U-slot, the E patch, appeared on the scene is then told. The talk ends with some conclusions, which include a short account of the work of antenna pioneer John Kraus.

Biography

Professor Kai Fong Lee received his B.Sc. and M.Sc. degrees from Queen’s University Canada and his Ph.D. degree from Cornell University, all in electrical engineering. He is Dean Emeritus, School of Engineering at the University of Mississippi, where he served from 2001 to 2011. His prior academic positions included the founding Head of the Department of Electronic Engineering at the City University of Hong Kong, Chairman and Lapierre Professor of Electrical Engineering at the University of Missouri-Columbia, Chairman of Department of Electrical Engineering at The University of Toledo, Ohio, and Reader in Electronics at the Chinese University of Hong Kong. He also held research positions at UCLA, UCSD, NASA, and several National Laboratories in the US. While his main interests since retirement in 2011 are non-engineering related, Professor Lee had nevertheless been invited to give short courses and seminars on patch antenna design at the City University of Hong Kong, National University of Singapore and Nanyang Technological University. He was invited to speak on the history of the development of patch antennas at the 2016 IEEE AP-S meeting in Puerto Rico. In 2017, he completed, with Professor K. M. Luk and Dr. H. W. Lai, the second edition of the book “Microstrip Patch Antennas”. His other books included “Principles of Antenna Theory” (1985) and “Advances in Microstrip and Printed Antennas” (Editor, 1997). In April 2018, he was invited to serve as a member of the International External Review Committee on Electronic Engineering of Tsinghua University, Beijing. Professor Lee is a Life Fellow of IEEE. In 2009, he received the IEEE.AP-S John Kraus Antenna Award for inventing the U-Slot Patch Antenna.

*** ALL ARE WELCOME ***

Enquiries:

Professor Kwai Man Luk, State Key Laboratory of Terahertz and Millimeter Waves
Tel.: (852) 3442 7352 Fax: (852) 3442 0353 Email: ekmluk@cityu.edu.hk