



THE CHINESE UNIVERSITY OF HONG KONG
Department of Electronic Engineering
Seminar



**Surface Electromagnetics:
Theory and Applications**

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Date: 25 Jan 2024 (Thursday)

Time: 3:30 p.m.

Place: Rm 222, Ho Sin Hang Engineering Building, CUHK

Abstract

Electromagnetics is a fundamental science discipline that describes the temporal and spatial behaviors of electric and magnetic fields. This talk will explain the fundamental theory and applications of surface electromagnetics which has become a very hot topic of research in Antennas and Propagation Society, Microwave Theory and Techniques Society, Computational Electromagnetics Society as well as wireless communications and radar remote sensing societies. This research field has potential of wide applications in future generations of wireless communications and remote sensing systems.

Biography

Professor Fan Yang (Fellow, IEEE) is a Professor at Tsinghua University, Beijing, China, and the Director of Research Institute of Antennas and Microwave Engineering, Tsinghua University.

He received the B.S. and M.S. degrees from Tsinghua University, Beijing, China, in 1997 and 1999, respectively, and the Ph.D. degree from the University of California at Los Angeles (UCLA), Los Angeles, CA, USA, in 2002. From 1994 to 1999, he was a Research Assistant at the State Key Laboratory of Microwave and Digital Communications, Tsinghua University. From 1999 to 2002, he was a Graduate Student Researcher at the Antenna Laboratory, UCLA. From 2002 to 2004, he was a Post-Doctoral Research Engineer and an Instructor at the Electrical Engineering Department, UCLA. In 2004, he joined the Electrical Engineering Department, University of Mississippi, Oxford, MS, USA, as an Assistant Professor, where he was promoted to an Associate Professor in 2009. In 2011, he joined the Electronic Engineering Department, Tsinghua University, as a Professor, where he has been the Director of the Microwave and Antenna Institute since 2011. He has published over 300 journal articles and conference papers, six book chapters, and five books including “Reflectarray Antennas: Theory, Designs, and Applications” (IEEE-Wiley, 2018), “Analysis and Design of Transmitarray Antennas” (Morgan & Claypool, 2017), “Scattering Analysis of Periodic Structures Using Finite-Difference Time-Domain Method” (Morgan & Claypool, 2012), “Electromagnetic Band Gap Structures in Antenna Engineering” (Cambridge University Press, 2009), and “Electromagnetics and Antenna Optimization Using Taguchi’s Method” (Morgan & Claypool, 2007). His research interests include antennas, surface electromagnetics, computational electromagnetics, and applied electromagnetic systems. Dr. Yang is a fellow of the Applied Computational Electromagnetics Society (ACES). He was a recipient of several prestigious awards and recognitions, including the Young Scientist Award of the 2005 URSI General Assembly, the 2007 International Symposium on Electromagnetic Theory, the 2008 Junior Faculty Research Award of the University of Mississippi, the 2009 inaugural IEEE Donald G. Dudley Jr. Undergraduate Teaching Award, and the 2011 Recipient of Global Experts Program of China. He was the Technical Program Committee (TPC) Chair of the 2014 IEEE International Symposium on Antennas and Propagation and the USNC-URSI Radio Science Meeting. He served as an Associate Editor for the IEEE Transactions on Antennas and Propagation from 2010 to 2013 and the Associate Editor-in-Chief of Applied Computational Electromagnetic Society Journal from 2008 to 2014. He has been a Distinguished Lecturer of IEEE APS since 2018.

*** ALL ARE WELCOME ***

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