

THE CHINESE UNIVERSITY OF HONG KONG Department of Electronic Engineering Seminar



Overview of Electromagnetic Selective Structures

Professor Zhongxiang SHEN Strategic Scientist

Yangtze Delta Region academy of Beijing Institute of Technology, China

Date: 26 Mar 2024 (Tuesday) 28 Mar 2024 (Thursday) Time: 2:30 p.m. 2:00 p.m. Place: Rm 418, Ho Sin Hang Engineering Building, CUHK

<u>Abstract</u>

In this talk, we intend to provide a brief overview of electromagnetic selective surfaces/structures (EMSS). According to the properties of an incident electromagnetic wave, EMSS can be divided into four categories: frequency-selective structure (FSS), polarization-selective surface (PSS), angle-selective surface (ASS), and energy-selective surface (ESS). Recent developments and advances in the design of EMSS will also be briefly introduced. Finally, future opportunities in the areas of the design and analysis of EMSS will be suggested.

Biography

Prof. Zhongxiang Shen received the B. Eng. degree from the University of Electronic Science and Technology of China, Chengdu, China, in 1987, the M. S. degree from Southeast University, Nanjing, China, in 1990, and the PhD degree from the University of Waterloo, Waterloo, Ontario, Canada, in 1997, all in electrical engineering.

From 1990 to 1994, he was with Nanjing University of Aeronautics and Astronautics, China. He was with Com Dev Ltd., Canada, as an Advanced Member of Technical Staff in 1997. He was a Postdoctoral Fellow with Harvard University and the University of Michigan in 1998. From Jan. 1999 to December 2023, he was with Nanyang Technological University (Assistant, Associate and Full Professor). He is now a Strategic Scientist at Yangtze Delta Region Academy of Beijing Institute of Technology, China.

Dr. Shen served as an AdCom member of IEEE AP-S from Jan. 2010 to Aug. 2019. He served as an Associate Editor of the IEEE Transactions on Antennas and Propagation from July 2016 to July 2022. Prof. Shen is currently the Editor-in-Chief of IEEE Open Journal of Antennas and Propagation.

Prof. Shen is an IEEE Fellow. His research interests include small and planar antennas for various wireless communication systems, analysis and design of frequency-selective structures and absorbers, hybrid numerical techniques for modeling RF/microwave components and antennas. He has authored more than 240 journal papers and nearly 200 papers at international conferences.

*** ALL ARE WELCOME ***