







Seminar On

Spoof Surface Plasmon Polaritons By Dr Jia Yuan Yin Xidian University, China

- Date : 21 August 2018 (Tuesday)
- Time : 11:00 am 12:00 noon

Venue : Room 15-202, meeting room of State Key Laboratory of Millimeter Waves, 15/F, Lau Ming Wai Academic Building, City University of Hong Kong

## Abstract

Surface plasmon polaritons (SPPs) are special electromagnetic waves in optical frequency region, which are bound to the metal/dielectric interface owing to the negative permittivity behavior of metals. However the inevitable loss impedes the development of SPPs in optical frequency. So researchers proposed spoof surface plasmon polaritons at microwave and THz frequencies to mimic the characteristic of SPPs. Since then, spoof SPP becomes a research hotspot. The report will introduce the concept of spoof SPP briefly, and its unique property. As a new method to manipulate electromagnetic waves, the ability to control both surface wave and space wave will be illustrated emphatically. Some applications in electromagnetic wave controlling will be given as well.

## **Biography**

**Jia Yuan Yin** received the B.S. degree and the Ph.D. degree from Southeast University, Nanjing, China, in 2013 and 2017, respectively. Since 2017, she has been a lecturer with the School of Physics and Optoelectronic Engineering, Xidian University, Xi'an, China. She has been engaged in research of metamaterials and metasurface, spoof surface plasmon polaritons and propagation of electromagnetic waves.

## \*\*\* ALL ARE WELCOME \*\*\*

**Enquiries:** Professor Chi Hou Chan, State Key Laboratory of Millimeter Waves Tel.: (852) 3442 9360 Fax: (852) 3442 0353 Email: eechic@cityu.edu.hk