Department of Electrical Engineering
香港城市大學
City University of Hong Kong

Department of Electrical Engineering
Presents an online seminar on

Meta-Atoms for 3D Printing Metamaterials

by

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Director, Symeta Research Centre

Abstract

In this talk we will introduce the concept and uses of Meta-Atoms (MTAs) in Electromagnetic metamaterials. MTAs take the form of metallic or dielectric meso scale cuboid inclusions which could be 3D-printed in multi- layered metamaterials with different periodicities.

Potentially these meta-atoms could be varied in constitution and geometry to augment a variety of artificial magnetodielectric properties. The effect of their periodicity on the effective EM properties (constitutive parameters) is examined by placing the 3D- printed samples in a waveguide or on a resonator. Some of these structures have been applied in engineering applications such as antennas and microwave lenses, prototypes of which will be shown.

Biography

Yiannis Vardaxoglou is the director of Symeta research centre, (www.symeta.co.uk) funded by an EPSRC Grand Challenge award, researching in a wide-ranging topics applicable to cutting-edge wireless communications technology. His current research focuses primarily on metamaterial structures, additive manufacturing (3D printing) for RF/micro/mm wave engineering. He has authored some 300 publications, several book chapters and a pioneering book on Frequency Selective Surfaces (FSS). Symeta collaborates with many internationally leading companies and universities.

Date	:	25 March 2020 (Wednesday)
Time	:	5:00pm – 6:00pm
Language	:	English
Online Registration	:	Please register for the Zoom session HERE (*Please register with [EID]@cityu.edu.hk for email address.)

**** ALL ARE WELCOME ****

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