IEEE (HK) Section AP/MTT

State Key Laboratory of Terahertz and Millimeter Waves
香港城市大學 City University of Hong Kong

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

Seminar On

FAMA-OFDM

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Department of Electronic and Electrical Engineering
University College London, The United Kingdom

Date : **20 February 2025 (Thursday)**

Time : **10:30 am – 11:30 am**

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

Abstract

The Fluid Antenna System (FAS) represents a groundbreaking advancement in reconfigurable antenna technologies, offering unparalleled flexibility in both shape and positioning for wireless communications. While FAS is widely recognized for introducing a new degree of freedom to the physical layer, thereby enhancing performance across a range of wireless applications, a key question remains: How does FAS perform when integrated with Orthogonal Frequency Division Multiple Access (OFDM), the waveform used in 5G and beyond systems? It is clear that a position optimal for one frequency subcarrier may not be ideal for others, raising concerns about the effectiveness of FAS in OFDM systems. This talk aims to address these concerns by exploring how FAS can be seamlessly integrated with OFDM, presenting system-level simulation results in a 5G context. Our findings demonstrate significant performance improvements when FAS is used in OFDM systems.

Biography

(Kit) Kai-Kit Wong was born in Hong Kong and received the BEng, the MPhil, and the PhD degrees, all in Electrical and Electronic Engineering, from the Hong Kong University of Science and Technology, Hong Kong, in 1996, 1998, and 2001, respectively. He is Chair Professor of Wireless Communications at the Department of Electronic and Electrical Engineering, University College London after taking appointments at University of Hong Kong and University of Hull and visiting positions at Lucent Technologies, Bell Labs and Stanford University. His current research centers around 6G and beyond mobile communications. He is one of the early researchers who proposed multiuser MIMO. His first paper on multiuser MIMO was published in WCNC 2000 which appeared to be the first ever research paper on this topic. He is Fellow of IEEE and IET. He served as the Editor-in-Chief for IEEE Wireless Communications Letters between 2020 and 2023.

***** ALL ARE WELCOME *****

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