# SEMINAR ANNOUNCEMENT

### DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING COLLEGE OF DESIGN AND ENGINEERING Website: https://cde.nus.edu.sg/ece

# Area: Microwave & Radio Frequency

Host: Professor Chen Zhi Ning

Antenna Engineering Day 2023: Industry Session & Marina Forum 2023 Session Jointly Organized by ECE NUS, ARTIC NUS, Huawei SG Antenna Lab, and IEEE Singapore RFID

TOPIC	:	Technology Trends and Research Directions of Base Station Antennas
SPEAKER	:	Dr. LIU Wei, Director of Huawei SG Antenna Lab
DATE	:	Monday, 14 August 2023
TIME	:	09:30AM to 12:00PM: Industry Session: Talk, Briefing of Huawei Antenna Innovation Cup 2023, and Dialogue 2:00PM to 4:00PM: Marina Forum Session: Student Paper Competition and Student Interactive Forum
VENUE	:	Industry session: Block E4, E4-04-05/06/07, E-CUBE 1/2/3 College of Design and Engineering, National University of Singapore Marina Forum session [online]: Registration is required at <u>http://www.marinaforum.org/</u>
ARSTRACT		

#### ABSTRACT

Antenna, as a key technology is of paramount importance in 5G/6G because it is able to revolutionize communication networks. With advanced beamforming and massive MIMO, it facilitates faster data transmission, lower latency, and increased network capacity. Smart antennas improve energy efficiency, extend device battery life, and enable seamless integration into compact devices like smartphones and wearables. Antennas optimize spectrum utilization, enhancing overall network efficiency and supporting the vision of trillions of interconnected IoT devices. Ultimately, antennas underpin the creation of a fully interconnected world, transforming how we interact, work, and experience the digital age.

#### **BIOGRAPHY**



LIU Wei received the Ph.D. degree from the Department of Electronic Engineering and Information Science, University of Science and Technology of China (USTC), Hefei, China. Since 2021, Dr. Liu has been with Huawei, where he is currently the Director of Huawei SG Metantenna Lab. Prior to joining Huawei, he has worked with National University of Singapore and the Institute for Infocomm Research, A\*STAR, Singapore. His main research interests include the theory, modeling, and design of metamaterial/metasurface antennas and arrays.

Dr. Liu was the recipient of Institution of Engineers Singapore (IES) Prestigious Engineering Achievement Award 2014. He has authored and co-authored one Book Chapter and more than 50 peer-reviewed journal and conference papers. He has served as the TPC Member, Session Chair and Award Jury Member for a number of academic conferences.

## CONTACT PERSON

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