Seminar On

Millimeter-Wave Multi-Beam Lens Antennas

By

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Date : **11 December 2017 (Monday)**
Time : **04:00 pm – 05:00 pm**
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

Millimeter-wave multi-beam lens antennas are widely used for wireless communication and radar systems because of significant advantages of wide-angle scanning characteristic, enhanced channel capacity and reduced installation space. This talk will introduce some designs of millimeter-wave lens antennas. The ray tracing method and theory of aperture antenna will be employed to explain the operating principle of these antennas. A number of design examples will be presented to demonstrate the high performance of millimeter-wave lens antennas. These lens antennas have advantages of simple structure, good machinability, low cost, high efficiency, and convenience to implement multi-beam. Possible research topics for further investigation are suggested and existing challenges are also mentioned at the end of the talk.

Biography

Changzhou Hua received the B.S. degree in electronics information engineering and the Ph.D. degree in communication engineering, both from the Nanjing University of Science and Technology (NUST), Nanjing, China, in 2007 and 2013, respectively. He was a visiting researcher at the Department of Information and Electronic Engineering, Zhejiang University (ZJU), Hangzhou, China, during 2009–2012. From 2013 to 2015, he was with the School of Electrical and Electronic Engineering, Nanyang Technological University (NTU), Singapore, as a Research Fellow. He has been an Associate Professor with the Faculty of Electrical Engineering and Computer Science, Ningbo University, Ningbo, China, since Apr. 2015. His research interests include microwave/millimeter-wave active and passive devices and circuits, multi-beam lens antenna, and liquid antennas. He has authored or co-authored more than 40 journal papers and conference papers.

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

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