國立陽明交通大學電信工程研究所
系統組論文研討

OFDM RADAR PROCESSING BASED ON PERIODOGRAM APPROACH

Speaker：Dr. Pei-Jung Chung, Principle Engineer, Metanoia Communications

Date：November 26, 2025 (Wednesday)
Time: 13:20-15:20
Venue: ED219

Abstract

OFDM radar sensing is considered as a promising technology for realizing integrated and communication systems (ISAC) in next generation mobile networks. The popular periodogram based algorithm has the advantage of robust performance and low computational complexity.
In this presentation, we will introduce periodogram based algorithms for estimation and detection of targets. Further, the effects of modulation schemes on the performance will be discussed as well.

Biography

Pei-Jung Chung received Dr.-Ing. in 2002 from Ruhr-Universität Bochum, Germany with distinction. From 2002 to 2004 she held a post-doctoral position at Carnegie Mellon University and University of Michigan, Ann Arbor, USA, respectively. From 2004 to 2006 she was Assistant Professor with National Chiao Tung University, Hsinchu, Taiwan. From 2006 to 2013, she was Lecture at the Institute for Digital Communications, School of Engineering, the University of Edinburgh, UK. From 2013-2020, she was with Delta Research Center of Delta Electronics in Taipei, Taiwan. Since 2020, she is with Metanoia (義傳科技) in Hsinchu, Taiwan.

Her current research interests are mmWave hybrid beamforming, beam tracking, integrated sensing and communications and OFDM radar systems.