



Department of  
Mechanical Engineering  
The University of Hong Kong



## SEMINAR

### High-dimensional photodetection assisted by dispersion

**Date:** 16 May, 2024 (Thursday)  
**Time:** 11:00 a.m.  
**Venue:** Room 7-35, Haking Wong Building  
HKU  
  
**Speaker:** Professor Wei Li  
Changchun Institute of Optics  
Chinese Academy of Sciences  
China



#### Abstract:

Intensity, polarization, and wavelength are fundamental attributes of light. Capturing high-dimensional information of intensity, polarization, and spectrum of the light fields is highly demanded but challenging, and often requires complicated integration of polarization/wavelength sensitive elements across space or time domain. In this talk, I will discuss our recent efforts along this direction (Nature 2024, in press). Specifically, I will show how spatial and frequency dispersive thin-film interfaces facilitate the acquisition of high-dimensional intensity-spectrum-polarization information of light in a single-shot fashion.

#### Biography:

Wei Li is a professor at Changchun Institute of Optics, Fine Mechanics and Physics (CIOMP), Chinese Academy of Sciences (CAS). He also serves as the Director of GPL Photonics Laboratory at CIOMP and Deputy Head of State Key Laboratory of Luminescence and Technology. Before joining CAS, he did his Ph.D. and postdoc at Vanderbilt University and Stanford University, respectively. His research interests include thermal photonics, nanophotonics, and their applications in next-generation energy and information technologies. He is a Highly Cited Researcher (Clarivate) and the recipient of MIT Technology Review Innovator Under 35 (TR35 Asia Pacific), Key Program PI (National Natural Science Foundation of China), and others. He is the associate editor of npj Nanophotonics and the faculty advisor of IEEE Student Chapter and the Optica Student Chapter at CIOMP, CAS.

ALL INTERESTED ARE WELCOME

For further information, please contact Prof. X.B. Yin at 3910 2659.