



THE CHINESE UNIVERSITY OF HONG KONG
Department of Information Engineering
Seminar

Towards ultra-wideband and low-latency optical fibre communications

by

Dr. HONG Yang
Nokia Bell Labs, France

Date : 24 May 2023 (Wednesday)

Time : 10:00am to 11:00am

Venue : Room 801, Ho Sin Hang Engineering Building, CUHK

Abstract

The significant growth in capacity demand over recent years is arguably the greatest challenge for optical fibre transmission, which lays the fundamental base of modern data communications. In this talk, I will present enabling technologies to tackle the potential fibre capacity crunch. Specifically, we demonstrate that extending the optical bandwidth of currently installed single-mode fibres represents a viable and cost-effective solution, whereas exploring the use of novel hollow-core fibres offers the ultimate low-latency solution for next-generation optical communications. Finally, I will conclude this talk by introducing my current research, which aims to realize secure optical communications by leveraging coherent transmission technologies.

Biography

Dr Yang Hong is a Research Scientist at Nokia Bell Labs, France. He received his PhD degree from The Chinese University of Hong Kong in 2018. After graduation, Dr Hong joined the Optoelectronics Research Centre at the University of Southampton as Research Fellow and was promoted to Senior Research Fellow in January 2022. His research interests include ultra-wideband transmission, optical wireless communications and networking, and advanced signal processing. Dr Hong has published more than 90 publications in top-tier journals and flagship conferences, including a number of Cover/Invited/Top-Scored/Highlighted/Editor's Pick papers. He has been listed among the world's top 2% of most-cited scientists by Stanford University since 2020.

**** ALL ARE WELCOME ****