

City University of Hong Kong  
Department of Electrical Engineering &  
Optica Student Chapter  
Jointly present a Seminar on

# Heterogeneous laser integration for silicon and silicon nitride photonics

by

**Dr. Chao Xiang**

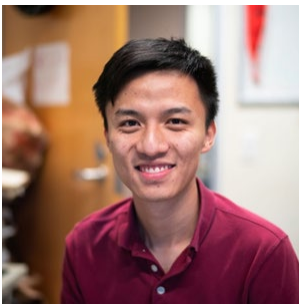
*Department of Electrical and Electronic Engineering  
University of Hong Kong*

- Date : **26 August 2022 (Friday)**  
Time : **10:00 am – 11:00 am**  
Venue : **G4702, Yeung Kin Man Academic Building  
City University of Hong Kong**  
Language : **English**  
Note : **Everyone must do RAT on the day before entering the venue.**

## Abstract

Silicon photonics is evolving rapidly into advanced photonic integrated circuits. Heterogeneous photonic integration provides efficient III-V gain and laser sources on silicon. This technology has not only enabled commercially-available products in datacenter interconnects but also shows fundamental advantages in improving the laser performance. On the other hand, silicon nitride is emerging in applications where low loss is the key factor. In this talk I'll discuss the recent progress of heterogeneous laser integration for silicon and silicon nitride photonics, which could enable the next-generation high-performance photonic integrated circuits for applications including interconnects, sensing, metrology and so on.

## Biography



Dr. Chao Xiang is currently an Assistant Professor at the Department of Electrical and Electronic Engineering (EEE), the University of Hong Kong (HKU). His research focuses on heterogeneous photonic integration, silicon photonics, semiconductor lasers and photonic integrated circuits. Before joining HKU, he was a Postdoctoral Scholar and obtained his Ph.D. degree both at University of California, Santa Barbara. He obtained his B.E degree from Huazhong University of Science and Technology and M.Phil. degree from the Chinese University of Hong Kong.

~~~~~ All are welcome ~~~~~