



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

PHD STUDENT SEMINAR

Phase Retrieval with OPU device

By

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Abstract

The phase retrieval problem is to recover a signal x from m phaseless measurements $y_i = |a_i^T x|$ for $i = 1, \dots, m$. The optical processing unit (OPU) is a device which accelerates a multiplication by a dense random matrix followed by an element-wise non-linearity using optics. In order to take advantage of the speed of this operation, we propose an algorithm to apply OPU device to phase retrieval problem, and numerical experiments show the effectivity of the algorithm.

Date : 4 May 2021 (Tuesday)

Time : 1:30pm

Zoom Meeting : <https://hkust.zoom.us/j/94042503969> (Passcode: 123456)

All are Welcome!