



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

Summer Research Program 2022

PG STUDENT SEMINAR

Deep Generative Learning via Schrödinger Bridge

By

Mr. Gefei WANG

<u>Abstract</u>

In this seminar we will first review the background of deep generative modeling. Then we will introduce our recently proposed method, which learns a generative model with a Schrödinger Bridge. At the population level, the generating task is characterized via a stochastic differential equation on the time interval [0, 1] with a time varying drift term. Deep learning techniques are adopted to estimate the drift term in our algorithm. Under mild smoothness assumptions, we prove the consistency of our approach.

Date : 14 July 2022 (Thursday) Time : 11:00am Zoom Meeting : https://hkust.zoom.us/j/96895006068 (Passcode: 310729)

All are Welcome!