



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

Summer Research Program 2022

STUDENT-FACULTY COLLOQUIUMS

Dualities in Financial Mathematics

By

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Abstract

Dualities play an important role in financial mathematics. In a complete market satisfying no-arbitrage condition, there exists a unique risk-neutral probability measure, and the price of the financial derivatives is uniquely determined by this measure. In case where the market is not complete, the concept of price is replaced by super-replication and sub-replication price bounds, and the pricing-hedging duality is the central concept. In this talk, I shall first briefly introduce the dualities in financial mathematics, and then discuss their relationships to some recent developments in robust finance.

Date : 2 August 2022 (Tuesday)

Time : 11:00am

Zoom Meeting : <https://hkust.zoom.us/j/94749872437> (Passcode: 286300)

All are Welcome!