

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research
Department of Mathematics*

COLLOQUIUM

Behavioral Portfolio Selection and Asset Pricing: An Interplay between Mathematics and Financial Economics

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Abstract

This talk presents an overview of our recent research on behavioral portfolio selection and asset pricing under the cumulative prospect theory and the rank dependent utility theory. Financial motivations and mathematical challenges of the problem are highlighted. We develop a systematic approach, called the “quantile formulation” which is essentially based on the Hardy–Littlewood inequality, to overcome the difficulty arising from the probability weighting inherent in behavioral models, and to derive explicitly optimal portfolios and Arrow-Debreu equilibria. Based on the result we reach several findings, including that asset prices depend upon agents’ subjective beliefs regarding overall consumption growth, that an uncorrelated security’s entire probability distribution and its interdependence with the other part of the economy should be priced, and that there is a direction of thinking about the equity premium and risk-free rate puzzles.

Date: March 13, 2017 (Monday)

Time: 4:00 – 5:00pm

Place: Room 210, Run Run Shaw Bldg., HKU

All are welcome