



DEPARTMENT OF APPLIED MATHEMATICS

應 用 數 學 系

**The Hong Kong Polytechnic University
Department of Applied Mathematics**

Colloquium

Rank-based equity market models with uncertainty

by

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Abstract

We discuss the equity market models with rank-based characteristics. Under appropriate stability conditions these models induce stable capital distribution curves. This result coincides with the empirical studies on the long-term stability of the log-log capitalization curve in the US equity markets. Ergodic properties, strong solvability of the system and rankings of processes are examined. We also introduce uncertainty in the rank-based drift and volatility parameters. In the context of such models we discuss properties of various investment strategies.

Date : 19 August, 2016 (Friday)

Time : 11a.m. – 12noon

Venue : TU801, The Hong Kong Polytechnic University

***** ALL ARE WELCOME *****