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Seminar

From optimal rebalancing to information geometry

Professor Leonard Ting-Kam WONG
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Abstract

What is the optimal frequency to rebalance a portfolio? For the class of functionally generated portfolios in stochastic portfolio theory, we show that the answer is given in terms of a "dualistic" Pythagorean theorem. Along the way, we establish fascinating connections with optimal transport and information geometry - the differential geometry of probability distributions. A key role is played by the concept of L-divergence which generalizes the diversification return (aka excess growth rate) of a portfolio. Our results extend the classical information geometry of Bregman divergence developed by Amari and others. This is joint work with Soumik Pal.

Date: 7 August 2017 (Monday)
Time: 11:00am – 12:00noon
Venue: C1, Lady Shaw Building
The Chinese University of Hong Kong, Shatin

All are Welcome