



DEPARTMENT OF APPLIED MATHEMATICS

應 用 數 學 系

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

Colloquium

Supply and Shorting in Speculative Markets

by

Prof. Marcel Nutz

Department of Mathematics and Department of Statistics, Columbia University

Abstract

We study the formation of prices in equilibrium. In our model, agents who “agree to disagree” interact in continuous time and give rise to a tractable equilibrium that is described by a PDE of Hamilton-Jacobi-Bellman type and reveals the influence of speculation, short-selling, and exogenous supply. Joint work with Jose Scheinkman (Economics, Columbia University).

Biography

Prof. Marcel Nutz got his Ph.D. in Mathematics from ETH Zurich in 2010. He joined the Department of Mathematics at Columbia University as J.F. Ritt Assistant Professor in 2011 and then the Assistant Professor in 2014. He got promoted to Associate Professor in 2016 in the Department of Mathematics and the Department of Statistics. He was the Minerva Foundation Fellow during 2011-2014 and is the Alfred P. Sloan Research Fellow during 2016-2018. He is the leading expert in many research topics including the weak dynamic programming, super-replication under model uncertainty and martingale optimal transport.

Date : 21 April, 2017 (Friday)

Time : 3:00p.m. – 4:00p.m.

Venue : Y407, The Hong Kong Polytechnic University

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