For favour of posting

DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE
THE UNIVERSITY OF HONG KONG

Departmental Seminar

Dr. Mario GHOSSOUB

Department of Statistics and Actuarial Science
University of Waterloo
Canada

will give a talk
entitled

BILATERAL RISK SHARING WITH HETEROGENEOUS BELIEFS AND EXPOSURE CONSTRAINTS

Abstract

We study bilateral risk sharing under no aggregate uncertainty, where one agent has Expected-Utility preferences and the other agent has Rank-Dependent Utility preferences, with a general probability distortion function. We impose exogenous constraints on the risk exposure for both agents (as a reflection of risk management constraints, regulatory constraints, etc.), and we allow for any type or level of belief heterogeneity. We show that Pareto-optimal risk-sharing contracts can be obtained via a constrained maximization of an agent's utility under a participation constraint of the counterparty. This allows us to give an explicit characterization of optimal risk-sharing contracts. In particular, we show that an optimal contract is a monotone function of a likelihood ratio obtained from a Lebesgue decomposition of the agent's beliefs with respect to the counterparty's beliefs. (This is based on joint work with Tim Boonen: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3345149)

on

Wednesday, April 10, 2019

(Refreshments will be served from 10:45 a.m. outside Room 301 Run Run Shaw Building)

11:00 a.m. – 12:00 noon

at

Room 301, Run Run Shaw Building

Visitors Please Note that the University has limited parking space. If you are driving please call the Department at 3917 2466 for parking arrangement.

All interested are welcome