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Hong Kong - Singapore joint Seminar Series in Financial Mathematics/Engineering

Stochastic Control and Limited Commitment
Prof. Alain Bensoussan
City University of Hong Kong and University of Texas at Dallas

Abstract

The theory of investment and growth of firms has been an important source of stochastic control problems. The issue of CEO compensation has been addressed more recently. A seminal paper has been written by H. Ai and R. Li, with a model of CEO compensation under limited commitment. It leads to a new type of stochastic control problem, where a stochastic constraint captures the limited commitment. The authors introduce a Bellman equation, with unusual boundary conditions. Many formal arguments are used in the proof, although the amount of intuition is impressive. The objective of this work is to provide a rigorous and complete theory for this Bellman equation and to solve the corresponding stochastic control problem. Joint work with N. Nguyen and A. Rivera.

About the speaker

Prof. Alain Bensoussan is Chair Professor of Risk and Decision Analysis at the City University of Hong Kong, Lars Magnus Ericsson Chair and Director of ICDRiA at the University of Texas at Dallas. He is a member of the French Academy of Sciences, French Academy of Technology, Academia Europae, and International Academy of Astronautics. His distinctions include AMS Fellow, IEEE Fellow, SIAM Fellow, Von Humboldt award, the NASA public service medal. Professor Bensoussan has received the W.T. and Idalia Reid Prize from SIAM in 2014.

Date

June 22, 2022 (Wed)
(HK Time)

Time

11:00am – 12:00noon (HK Time)

Zoom

https://polyu.zoom.us/j/95526300055?pwd=elMwbWp5cDdjMkJHNG03Z0h6ZW84dz09

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