

Department of Information and Systems Management
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Seminar Announcement

Optimal Contracts in Continuous-Time Portfolio Delegation

by

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11:00am – 12:00pm
Conference Room 4379 (lift 17-18)

~~~~~ All interested are welcome ~~~~~

**Abstract**

Motivated by the classical problems of portfolio management and principal-agent models, we present a general model for portfolio delegation, where the investor delegates the investment to a mutual fund manager. Optimal compensation for the manager and optimal investment are discussed in the framework of principal-agent models. We derive the stochastic maximum principle which offers the sufficient and necessary conditions for the optimality, using the technique of backward stochastic differential equations. We introduce the State-Contingent compensation, which gives a theoretical basis for benchmark-based compensation. For risk sharing model, we give a sufficient condition for the optimal compensation to be linear.

**Biography**

Mr Xuhu Wan is the PhD Candidate of Financial Mathematics working with Professor Jaksa Cvitanic at the Department of Mathematics, University of Southern California.

His current research includes Incentive Theory, Stochastic Control in Continuous Time, Executive Compensation, Dynamic Risk Measures/Control, Enterprise Risk Management, Valuation of Commercial Mortgages, in both theoretical and empirical aspects. He has widely collaborated with professors from departments of Mathematics, Economics, Finance, School of Planning and Policy in USC, Department of Mathematics in Shandong University of China, and Department of Finance in Central University of Taiwan.

Mr Wan received his bachelor's degree in Biology from Nanjing University, and his master's degree in Statistics from USC.