



复旦大学数学科学学院 数学综合报告会

报告题目: Some recent developments in optimal investment problems

报告人: Professor Gechun Liang

(King's College, London)

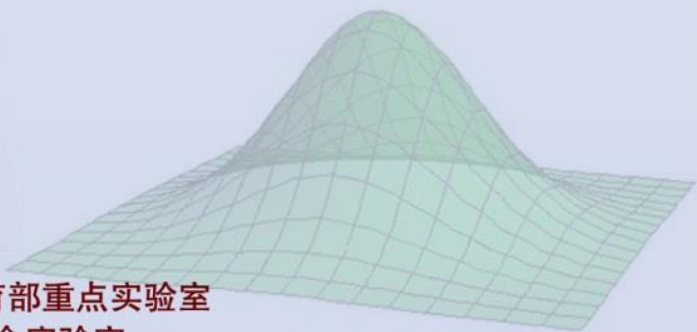
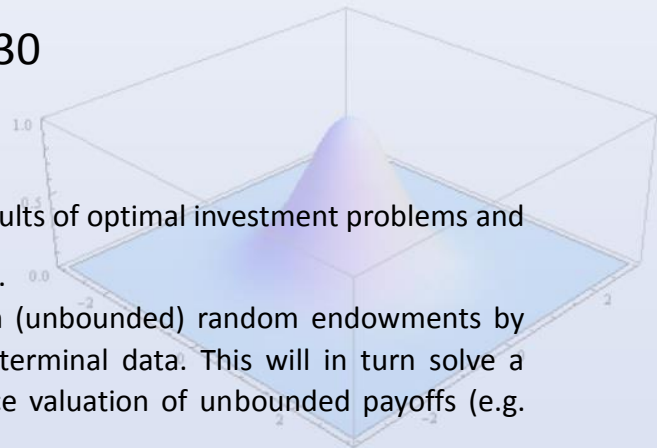
时间: 2017-07-17 星期一 10:30-11:30

地点: 光华东主楼 1801

摘要: In this talk, we will discuss about some recent results of optimal investment problems and related backward stochastic differential equations (BSDE).

In the first part, we will solve utility maximization with (unbounded) random endowments by using the tools from quadratic BSDE with unbounded terminal data. This will in turn solve a long-term outstanding problem about utility indifference valuation of unbounded payoffs (e.g. call options). Joint work with Ying Hu and Shanjian Tang.

In the second part, we will present a new class of dynamic utilities, called forward performance criteria, firstly introduced by Musiela and Zariphopoulou. We will show how they can be constructed by using ergodic BSDE and infinite horizon BSDE. As an application, we will study the large maturity behavior of (forward) entropic risk measures. Joint work with Alfred Chong, Ying Hu and Thaleia Zariphopoulou.



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