

Istituto Metodi Quantitativi - Università L. Bocconi

Viale Isonzo, 25 - 20135 Milano

Tel. 02-58365632 - Fax 02-58365630

## ***SEMINARIO***

**"A large deviations approach to maximizing expected utility from terminal wealth in the long term limit in the presence of unhedgeable risks."**

**Scott Robertson**  
(Boston University)

**Martedì, 29 Maggio 2007 - ore 12.15**  
**Aula 137 - Viale Isonzo 25 - 20135 Milano**

---

Abstract:

We consider the problem of maximizing utility from terminal wealth in the long term limit for ergodic processes under power utility. We use the occupancy time large deviations results of Donsker and Varadhan to construct trading strategies and identify equivalent local martingale measures which maximize the long term utility growth rate. We consider the case when the risky assets display dependence upon a common set of state variables. We fully characterize the optimal solutions in the case of a single state variable and provide examples. Time permitting, we will discuss the multi-state variable case, highlighting the problems that arise.