# DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE THE UNIVERSITY OF HONG KONG

#### Seminar

## Dr. Julia EISENBERG

Research Unit Financial and Actuarial Mathematics Vienna University of Technology Austria

will give a talk

entitled

# MAXIMIZING CONSUMPTION UNDER DETERMINISTIC INCOME AND DIFFERENT INTEREST RATE MODELS

### Abstract

We consider an individual or household endowed with an initial wealth, having an income and consuming goods and services. The wealth development rate is assumed to be either a constant or a deterministic continuous function of time. The objective is to maximize the discounted consumption over a finite time horizon. At first, we assume a constant preference rate; in the next step, we go over to a stochastic interest rate. We solve the problems via the Hamilton--Jacobi--Bellman approach. Furthermore, we derive an algorithm for explicit calculation of the value function and optimal strategy. The method is illustrated by several examples.

on

Friday, July 18, 2014

11:00 a.m. - 12:00 noon

at

Room 524, Meng Wah Complex (behind the Chong Yuet Ming Amenities Centre)

<u>Visitors Please Note</u> that the University has limited parking space. If you are driving please call the Department at 2859 2466 for parking arrangement.

All interested are welcome