



Math Club Colloquium

Optimal Life Insurance, Consumption and Investment Decisions

Speaker – Dr. Diogo Pinheiro
Brooklyn College
Department of Mathematics

Abstract: We will discuss an extension to Merton's famous continuous-time model of optimal consumption and investment, under which a wage earner with a random lifetime allocates some portion of her income to consumption and life insurance purchase, while investing her savings in a financial market. The wage earner's problem is to find the optimal consumption, investment, and insurance purchase decisions in order to maximize the expected utility of her family consumption, of the size of her estate in the event of premature death, and of her total wealth at the time of retirement, provided she lives that long. We will see how to use optimal control techniques to obtain explicit solutions for such problem in the case of discounted constant relative risk aversion utility functions, providing also some economic interpretation. We will conclude with a discussion of possible extensions.

Date: Tuesdays March 18, 2014

12:30 pm -1:30 pm

Location: 1127N (Lunch will be Served)

BC Math Club is an ACA Member

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