

# GRADUATE SEMINAR

Mark Atkinson

## An Orlicz space approach to a utility maximization problem within an incomplete financial market

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and Dr. Ejaz Ahmed*

**Tuesday, December 1st**

1:30pm

Math Lounge (CW307.20)

**Abstract:** Utility maximization of a stochastic portfolio within an incomplete financial market where the stochastic portfolio is a stochastic integral comprised of an admissible  $R^d$  - valued  $S$  - integrable predictable process  $H$  as the integrand and a càdlàg unbounded  $R^d$  - valued semimartingale  $S$  as the integrator. The utility maximization problem is embedded in Orlicz spaces and the existence of the solution to the problem is found by using convex duality analysis.