

DEPARTMENT OF MATHEMATICAL SCIENCES

Stochastic Analysis Common Seminar Series

Jonathan Chavez-Casillas University of Rhode Island

Title: A limit order book model with dependent rates

Abstract: In this talk, a model for a level-1 Limit Order Book, in the same spirit as the model discussed by Cont and deLarrard (2014), will be presented. However, as empirical evidence shows, the intensity function of the price process driving the arrivals of orders is non-constant. To account for that fact, the assumption of homogeneous Poisson arrivals is relaxed and more general non-homogeneous Poisson arrivals are considered. This becomes part of an effort to understand the macroscopic long-run price dynamics and the different limiting price processes when the orderbook is analyzed from the market micro-structure.

Tuesday, December 4, 2018 4:00 PM-5:00 PM Stratton Hall 308