September 28th, 2015 KAP 414 2:00 P.M. – 3:00 P.M.

Professor Andrey Saranstev

(University of California, Santa Barbara)

"Market Models with Splits and Mergers"

Abstract: Consider a model of a stock market: Each stock is represented by a positive stochastic process, jointly governed by a system of SDEs. We introduce splits and mergers in this model, so that the quantity of stocks is not constant. Under certain conditions, we show this model does not allow arbitrage.