



Statistical Sciences
UNIVERSITY OF TORONTO

SEMINAR

February 11, 2016 at 3:30pm

**Refreshments at 3:10pm*

Sidney Smith Hall, Room 2106

Speaker: Zhou Zhou, University of Minnesota

Hosts: Jamie Stafford

Arbitrage and hedging with American options

We consider a financial market in discrete time where stocks are available for dynamic trading, and liquid American options are available for static trading. We assume that the American options are infinitely divisible, and can only be bought but not sold. We first establish the fundamental theorem of asset pricing (FTAP) and the dualities for the hedging prices of European and American options within a given model. Then we extend the FTAP and hedging duality results to the case where the market admits non-dominated model uncertainty.