October 7, 2013 KAP 414 2:00 PM – 3:00 PM

Dr. Peter Carr (Morgan Stanley)

"Risk, Return and Ross Recovery"

Abstract: Recently, Stephen Ross has shown that the real---world transition probabilities of a finite state Markov chain can be recovered from Arrow Debreu security prices by assuming that the pricing kernel enjoys transition independence. We motivate this restriction by deriving it as a consequence of restricting the form and dynamics of the numeraire portfolio. Working with a diffusion process for a short interest rate, we indicate how one can recover real world transition probabilities on both bounded and unbounded domains.