

1116-60-1675 **Tomoyuki Ichiba*** (ichiba@pstat.ucsb.edu). *Rank-based markets with model uncertainty.*

In this talk we shall enhance Knightian uncertainty to a class of rank-based equity market models where drift and diffusion coefficients are piece-wise constants in each polyhedral domain. We study stochastic differential equations with constraints on the coefficients in terms of supermartingale problems, and then discuss long-term performance of Markovian portfolio rules under the models with uncertainty. (Received September 21, 2015)