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Duy Nguyen* (d.nguyen@mc1a.edu). *Optimal asset trading under regime switching models.*

This talk focuses on identifying buy and sell prices in both theoretical and computational aspects. Our studies incorporate both buying and selling actions. Asset prices are modeled by a geometric Brownian model, a mean-reversion model or a combination of these two models. The studies establish the existence of the buy and sell threshold levels in such switchable markets. As a result, a sequence of optimal buying and selling times could be constructed using these thresholds. Maximal return can be obtained if trades are done accordingly. Numerical examples are reported to demonstrate the results. (Received August 27, 2013)