October 27, 2014
KAP 414
2:00 PM – 3:00 PM

Prof. Rene Carmona

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"Trading Frictions in High Frequency Markets"

Abstract: Two structural relationships of high frequency markets are proposed and studied. The first is a self-financing wealth equation in which the trader's wealth is decomposed into three components: frictionless wealth, transaction costs and instantaneous adverse selection. The second relationship quantifies this instantaneous adverse selection. We derive these relationships theoretically and tests them on empirical data. We conclude by deriving their continuous time counterpart with an application to option pricing under transaction costs and price impact.