Graduate Student Lecture: An Introduction to High Frequency Financial Econometrics

Based on the paper: <http://pubs.aeaweb.org/doi/pdfplus/10.1257/jel.50.4.1007>

joint with Jean Jacod.

This paper describes a simple methodology to decompose asset returns sampled at high frequency into their base components (continuous, small jumps, large jumps), determine the relative magnitude of the components, and analyze the finer characteristics of these components such as the degree of activity of the jumps. We extend the existing theory to incorporate to effect of market microstructure noise on the test statistics, apply the methodology to high frequency individual stock returns, transactions and quotes, stock index returns and compare the qualitative features of the estimated process for these different data and discuss the economic implications of the results.