



The University of Chicago  
Department of Statistics  
Seminar Series

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Princeton University

**Jump Activity in High Frequency Financial Data  
(Joint work with Jean Jacod)**

**MONDAY, October 27, 2008 at 4:00 PM**  
**133 Eckhart Hall, 5734 S. University Avenue**  
*Refreshments following the seminar in Eckhart 110.*

**ABSTRACT**

We propose statistical tests to discriminate between the finite and infinite activity of jumps in a semimartingale discretely observed at high frequency. The two statistics allow for a symmetric treatment of the problem: we can either take the null hypothesis to be finite activity, or infinite activity. When implemented on high frequency stock returns, both tests point towards the presence of infinite activity jumps in the data. We then define a degree of activity for infinitely active jump processes, and propose estimators of that degree of activity.