Abstract:

Realized multipower variation, originally introduced to eliminate jumps, can be extremely useful for inference in pure-jump models. In particular, I show how to build a superior estimator of the jump activity index of a semimartingale observed at high-frequency by comparing different multipowers. The novel methodology remains valid for both Brownian and pure-jump semimartingales, hence allowing to distinguish the two classes of models. The implementation on the most liquid US stocks clearly indicates the presence of the Brownian component in the driving force of the price process.