

Nonparametric Estimation for Levy-Type Processes

by

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Abstract

We propose a nonparametric approach to estimate drift and the scale parameters, the Poisson rate and the underlying jump size distribution for Levy-type processes. Levy-Type processes generalize the Gaussian distribution in the specifications of Levy processes with stable distributions, and hence allow heavier tails than those allowed under the Gaussian distribution. The index parameter of the stable distribution is estimated from data, alone with other parameters and unknown distributions as mentioned earlier.