

# COLLOQUIUM

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## Approximating Tempered Operator Stable Random Variables

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10:20 a.m. - 11:10 a.m.

Refreshments: 10:00 a.m.

### Abstract

Generating operator stable random variables with a non-trivial spectral measure is not straight forward. Usually sample paths of an operator stable motion are approximated using random vectors that are in the domain of attraction of the operator stable. Exponentially tempered random vectors have been introduced in large parts to head off criticism of models that use stable processes as they usually have non-physical infinite moments. However having finite moments forces the tempered random vectors into the domain of attraction of the Gaussian, making a more detailed analysis of above approximation method necessary in order to show that the approximate sample paths still mimic the behaviour of the tempered operator stable motion and that particle tracking codes do what they were designed to do.

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