# A CENTRAL LIMIT THEOREM FOR THE SAMPLE AUTOCORRELATIONS OF A LÉVY DRIVEN CONTINUOUS TIME MOVING AVERAGE PROCESS

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In this talk we consider Lévy driven continuous time moving average processes observed on a lattice, which are stationary time series. We show asymptotic normality of the sample mean, the sample autocovariances and the sample autocorrelations. A comparison with the classical setting of discrete moving average time series shows that in the last case a correction term should be added to the classical Bartlett formula that yields the asymptotic variance. An application to the asymptotic normality of the estimator of the Hurst exponent of fractional Lévy processes is also deduced from these results.

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