



ECONOMETRIC RESEARCH SEMINAR

- January 29, 2009, 9:15 am
- SZVI
Institut für Höhere Studien
Stumpergasse 56, 1060 Wien

Alex C. GONZAGA,

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***“Wavelet-based Whittle Estimation of Generalized
Long-memory Stochastic Volatility”***

In this talk, some asymptotic properties of the autocovariance and the spectral density of the wavelet coefficients of a generalized long-memory (k-GARMA) stochastic volatility model will be presented. These extend and generalize the properties derived in Gonzaga (2006), Digital Signal Processing. Using these properties we propose a wavelet-based Whittle estimator that simultaneously denoises and estimates model parameters. The estimator will be shown to be consistent and relatively efficient in the presence of uncorrelated noise. The results will be applied to the Microsoft stock, modeling the intraday seasonal patterns of its realized volatility.

with Michael Hauser (Vienna University of Economics and Business Administration).