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" Fractal Brownian Motion Analysis Using Continuous Wavelet Transform "

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This article is dedicated for Fractal Brownian process analysis using Continuous Wavelet Transform (Direct and Inverse). Wavelet Analysis of stochastic processes is very important for financial time series analysis, risk estimation and financial time series forecasting. Wavelet Analysis is very precious for scalability analysis, because of its ability to analyze the signal (process) in scaling and shifting dimensions. In current research, Fractal Brownian motion is analyzed using Direct and Inverse Continuous Wavelet Transform, wavelet coefficients probability density function is estimated, wavelet coefficients lower and upper bounds are calculated using Mexican hat mother wavelet function. At the end estimation results are illustrated.

Späť