

Localization of multifractals in short-term Hurst exponents

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The nonlinear behavior of economic time series is locally inhomogenous, and the local Hurst exponent has a different value in the respective local site. Particularly, using the difference function, we specify the short-term Hurst exponent by the magnitude of the local difference. For our case, we derive formula for the local difference of time series meant by the exponent of different orders. This result is expected to support the short-term variation of multifractals.