

(Anti)coherence and (Anti)persistence in Natural and Mathematical Time Series¹

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A few characteristic exponents describing power law behaviors of the roughness (coherence) and intermittency (persistence) of stochastic time series are recalled and compared to each other. Mention of relevant techniques used to determine them through analysis of fractional Brownian motion and financial time series are recalled. A conjecture is given on why the linear relationships between these exponents do not always seem to hold.

¹ Dedicated to Grégoire Nicolis on the occasion of his 60th birthday, wishing him many more years enjoying physics and life, with his wife, family, friends, and colleagues.

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