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## **Significance Testing Wavelet Coherency**

**D. Maraun** (1) and J. Kurths (1)

Physics Institute, Potsdam University, Am Neuen Palais 10, 14469 Potsdam, Germany (maraun@agnld.uni-potsdam.de)

Wavelet Coherency is the wavelet counterpart of Fourier Coherency and measures the time and scale resolved coherent oscillation of two processes. Two basic assumptions valid for Fourier Analysis do no longer hold for wavelets: Firstly, for small scales, the central limit theorem is not yet fulfilled. Secondly, neighbouring scales are not uncorrelated for a white noise process. We study the effect of these two restrictions on significance testing of wavelet coherency.