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2.2.2. Self-similarity2.2.3. Long-range dependence; 2.2.4. Local regularity; 2.2.5. Fractional Brownian motion: paradigm of scale invariance; 2.2.6. Beyond the paradigm of scale invariance; 2.3.Wavelet transform; 2.3.1. Continuous wavelet transform; 2.3.2. Discretewavelet transform; 2.4. Wavelet analysis of scale invariant processes; 2.4.1. Self-similarity; 2.4.2. Long-range dependence; 2.4.3. Local regularity; 2.4.4. Beyond second order; 2.5. Implementation: analysis, detection and estimation; 2.5.1. Estimation of the parameters of scale invariance 2.5.2. Emphasis on scaling laws and determination of the scaling range2.5.3. Robustness of the wavelet approach; 2.6. Conclusion; 2.7. Bibliography; Chapter 3. Wavelet Methods for Multifractal Analysis of Functions; 3.1. Introduction; 3.2. General points regarding multifractal functions; 3.2.1. Important definitions; 3.2.2. Wavelets and pointwise regularity; 3.2.3. Local oscillations; 3.2.4. Complements; 3.3. Random multifractal processes; 3.3.1. Levy processes; 3.3.2. Burgers' equation and Brownian motion; 3.3.3. Random wavelet series; 3.4. Multifractal formalisms
3.4.1. Besov spaces and lacunarity3.4.2. Construction of formalisms; 3.5. Bounds of the spectrum; 3.5.1. Bounds according to the Besov domain; 3.5.2. Bounds deduced from histograms; 3.6. The grand-canonical multifractal formalism; 3.7. Bibliography; Chapter 4. Multifractal Scaling: General Theory and Approach by Wavelets; 4.1. Introduction and summary; 4.2. Singularity exponents; 4.2.1. Holder continuity; 4.2.2. Scaling of wavelet coefficients; 4.2.3. Other scaling exponents; 4.3. Multifractal analysis; 4.3.1. Dimension based spectra; 4.3.2. Grain based spectra
4.3.3. Partition function and Legendre spectrum

Sommario/riassunto

Scaling is a mathematical transformation that enlarges or diminishes objects. The technique is used in a variety of areas, including finance and image processing. This book is organized around the notions of scaling phenomena and scale invariance. The various stochastic models commonly used to describe scaling ? self-similarity, long-range dependence and multi-fractals ? are introduced. These models are compared and related to one another. Next, fractional integration, a mathematical tool closely related to the notion of scale invariance, is discussed, and stochastic processes with prescribed