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Titolo	Fractal Geometry and Stochastics V // edited by Christoph Bandt, Kenneth Falconer, Martina Zähle
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Descrizione fisica	1 online resource (339 p.)
Collana	Progress in Probability, , 1050-6977 ; ; 70
Disciplina	514.742
Soggetti	Probabilities Geometry Measure theory Probability Theory and Stochastic Processes Measure and Integration
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"The first conference of the series "Fractal Geometry and Stochastics," which took place in 1994, was the first meeting in Europe devoted to the mathematics of fractals."
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Preface -- Introduction -- Part 1: Geometric Measure Theory -- Sixty Years of Fractal Projections -- Scenery flow, conical densities, and rectifiability -- The Shape of Anisotropic Fractals: Scaling of Minkowski Functionals -- Projections of self-similar and related fractals: a survey of recent developments -- Part 2: Self-similar Fractals and Recurrent Structures -- Dimension of the graphs of the Weierstrass-type functions -- Tiling \mathbb{Z}^2 by a set of four elements -- Some recent developments in quantization of fractal measures -- Apollonian Circle Packings -- Entropy of Lyapunov-optimizing measures of some matrix cocycles -- Part 3: Analysis and Algebra on Fractals -- Poincaré functional equations, harmonic measures on Julia sets, and fractal zeta functions -- From self-similar groups to self-similar sets and spectra -- Finite energy coordinates and vector analysis on fractals -- Fractal zeta functions and complex dimensions: A general higher-dimensional theory -- Part 4: Multifractal Theory -- Inverse problems in multifractal analysis -- Multifractal analysis based on p-exponents and lacunarity exponents -- Part 5: Random Constructions -- Dimensions of Random

Sommario/riassunto

This book brings together leading contributions from the fifth conference on Fractal Geometry and Stochastics held in Tabarz, Germany, in March 2014. The book is divided into five sections covering different facets of this fast developing area: geometric measure theory, self-similar fractals and recurrent structures, analysis and algebra on fractals, multifractal theory, and random constructions. There are state-of-the-art surveys as well as papers highlighting more specific recent advances. The authors are world-experts who present their topics comprehensibly and attractively. The book provides an accessible gateway to the subject for newcomers as well as a reference for recent developments for specialists. Authors include: Krzysztof Barański, Julien Barral, Kenneth Falconer, De-Jun Feng, Peter J. Grabner, Rostislav Grigorchuk, Michael Hinz, Stéphane Jaffard, Maarit Järvenpää, Antti Käenmäki, Marc Kesseböhmer, Michel Lapidus, Klaus Mecke, Mark Pollicott, Micha Rams, Pablo Shmerkin, and András Telcs.
