

1. Record Nr.	UNINA9910254304003321
Titolo	Recent developments in fractals and related fields : conference on fractals and related fields III, île de Porquerolles, France, 2015 // edited by Julien Barral, Stéphane Seuret
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Birkhäuser, , 2017
ISBN	3-319-57805-7
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XII, 312 p. 31 illus., 15 illus. in color.)
Collana	Trends in Mathematics, , 2297-0215
Disciplina	514.742
Soggetti	Dynamics Ergodic theory Functional analysis Measure theory Probabilities Combinatorics Number theory Dynamical Systems and Ergodic Theory Functional Analysis Measure and Integration Probability Theory and Stochastic Processes Number Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	New exponents for pointwise singularity classification (Abry, Jaffard, Leonarduzzi, Melot, Wendt) -- The two-dimensional density of Bernoulli Convolutions (Bandt) -- Iterated Functions Systems, Blenders and Parablenders (Berger, Crovisier, Pujals) -- Multifractal properties of convex hulls of typical continuous functions (Buczolich) -- Fourier bases and Fourier frames on self-affine measures (Dutkay, Lai, Wang) -- Self-similar sets: Projections, Sections and Percolation (Falconer, Jin) -- Some problems on the boundary of fractal geometry and additive combinatorics (Hochman) -- Random covering sets, hitting

probabilities and variants of the covering problem (Järvenpää) -- Small Union with Large Set of Centers (Keleti) -- Some Recent developments of self-affine tiles (Lai, Lau) -- A class of random Cantor measures, with applications (Shmerkin, Suomala) -- A survey on the dimension theory in dynamical Diophantine approximation (Wang, Wu) -- (S)PDE on Fractals and Gaussian Noise (Zähle).

Sommario/riassunto

This contributed volume provides readers with an overview of the most recent developments in the mathematical fields related to fractals, including both original research contributions, as well as surveys from many of the leading experts on modern fractal theory and applications. It is an outgrowth of the Conference of Fractals and Related Fields III, that was held on September 19-25, 2015 in île de Porquerolles, France. Chapters cover fields related to fractals such as harmonic analysis, multifractal analysis, geometric measure theory, ergodic theory and dynamical systems, probability theory, number theory, wavelets, potential theory, partial differential equations, fractal tilings, combinatorics, and signal and image processing. The book is aimed at pure and applied mathematicians in these areas, as well as other researchers interested in discovering the fractal domain.
