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Titolo	New Trends in Applied Harmonic Analysis : Sparse Representations, Compressed Sensing, and Multifractal Analysis // edited by Akram Aldroubi, Carlos Cabrelli, Stephane Jaffard, Ursula Molter
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Collana	Applied and Numerical Harmonic Analysis, , 2296-5009
Disciplina	515.2433
Soggetti	Fourier analysis Harmonic analysis Signal processing Image processing Speech processing systems Measure theory Computer science—Mathematics Computer mathematics Fourier Analysis Abstract Harmonic Analysis Signal, Image and Speech Processing Measure and Integration Mathematical Applications in Computer Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Multifractal Analysis of Cantor-like Measures -- Multifractal Analysis and Wavelets -- An Introduction to Mandelbrot Cascades -- Lebesgue-type Inequalities for Greedy Approximation -- Results on Non-linear Approximation for Wavelet Bases in Weighted Function Spaces -- Consequences of the Marcus/Spielman/Srivastava Solution of the Kadison-Singer Problem -- Model Sets and New Versions of Shannon Sampling Theorem -- Stylometry and Mathematical Study of Authorship -- Thoughts on Numerical and Conceptual Harmonic Analysis.

## Sommario/riassunto

This volume is a selection of written notes corresponding to courses taught at the CIMPA School: "New Trends in Applied Harmonic Analysis: Sparse Representations, Compressed Sensing and Multifractal Analysis". New interactions between harmonic analysis and signal and image processing have seen striking development in the last 10 years, and several technological deadlocks have been solved through the resolution of deep theoretical problems in harmonic analysis. New Trends in Applied Harmonic Analysis focuses on two particularly active areas that are representative of such advances: multifractal analysis, and sparse representation and compressed sensing. The contributions are written by leaders in these areas, and covers both theoretical aspects and applications. This work should prove useful not only to PhD students and postdocs in mathematics and signal and image processing, but also to researchers working in related topics.

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