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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Time-Frequency Analysis and Representations of the Discrete Heisenberg Group -- Fractional Differentiation: Leibniz Meets Hölder -- Wavelets and Graph C*-Algebras -- Precise State Tracking Using Three Dimensional Edge Detection -- Approaches for Characterizing Non-Linear Mixtures in Hyperspectral Imagery -- An Application of Spectral Regularization to Machine Learning and Cancer Classification -- Embedding-based Representation of Signal Geometry -- Distributed Noise-Shaping Quantization: II. Classical Frames -- Consistent Reconstruction: Error Moments and Sampling Distributions -- Frame

Theory for Signal Processing in Psychoacoustics -- A Flexible Scheme for Constructing (Quasi-)Invariant Signal Representations -- Use of Quillen-Suslin Theorem for Laurent Polynomials in Wavelet Filter Bank Design -- A Fast Fourier Transform for Fractal Approximations.

Sommario/riassunto

This volume consists of contributions spanning a wide spectrum of harmonic analysis and its applications written by speakers at the February Fourier Talks from 2002 – 2016. Containing cutting-edge results by an impressive array of mathematicians, engineers, and scientists in academia, industry and government, it will be an excellent reference for graduate students, researchers, and professionals in pure and applied mathematics, physics, and engineering. Topics covered include: Theoretical harmonic analysis Image and signal processing Quantization Algorithms and representations The February Fourier Talks are held annually at the Norbert Wiener Center for Harmonic Analysis and Applications. Located at the University of Maryland, College Park, the Norbert Wiener Center provides a state-of- the-art research venue for the broad emerging area of mathematical engineering.