Special Issue

Fractional Fourier Transform and Its Applications in Signal Analysis

Message from the Guest Editors

Fractional Fourier transform is highly favored by researchers in signal analysis such as signal separation, signal filtering, signal detection, and signal estimation. With the demand for big data and real-time signal processing, sparse fractional Fourier transform and expansions, as well as fast algorithms, have been developed and widely applied in radar signal processing, spectral sensing, image recognition and fusion, compressed sampling, and sparse representation. With the continuous emergence of large-scale and high-dimensional signals, two-dimensional fractional Fourier transform and its extensions, as well as graph fractional Fourier transform, have been developed. This has also been widely applied in many fields such as two-dimensional digital signal processing, image super-resolution reconstruction, image encryption and watermarking, medical imaging, image compression, image classification, semi supervised learning, and so on.

This Special Issue aims to continue the research on the theory of fractional Fourier transform and related extended theories, discrete and sparse fast algorithms, and their related applications.

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About the Journal

Message from the Editor-in-Chief

Fractal and Fractional (*Fractal Fract.*) is a scholarly online journal which provides a forum for discussion on new original models and methods in fractals and fractional calculus both from theory and applications. It is a peer-reviewed, open access journal that publishes high quality original research articles, review papers and short communications.

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