

## Special Issue

# Advances in Fractional Order Signal Processing: Theory and Methods

### Message from the Guest Editors

With the rapid development of information technology, the research object of signal processing gradually shifts from relatively simple and stable signals to more complex signals such as non-stationary, non-Gaussian, and time-varying. Traditional signal processing theories and methods can no longer meet practical needs.

Fractional Fourier transform uses a set of linear frequency-modulated orthogonal bases to decompose signals, making it suitable for processing non-stationary signals. The theory and methods of fractional order signal processing are favored by many researchers due to their unique characteristics. With the demand for big data and real-time signal processing, sparse fractional order transformations and extensions, as well as fast algorithms, have been developed and widely applied in spectral sensing, image recognition and fusion, compressed sampling, and sparse representation. With the continuous emergence of large-scale irregular high-dimensional signals, fractional order graph signal processing has been developed.

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## Fractal and Fractional

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### 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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### Editor-in-Chief

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