Special Issue

Fractional Equations and Calculation Methods in Exploration Seismology

Message from the Guest Editors

Exploration seismology is an interdisciplinary subject involving mathematics, physics, and computer science that aims to utilize the properties of seismic waves to detect the hydrocarbon and mineral resources of the Earth. Fractional equations have been extensively employed in exploration seismology, such as seismic wave simulation, imaging and inversion in viscoacoustic/viscoelastic media, quasi-P and S wave separation in anisotropic media and related applications, and one-way wave approximation to the full two-way wave equation. Accurately and efficiently calculating fractional wave equations can provide a power engine for seismic imaging and model parameter building in complex media, which are vital in exploration seismology.

The aim of this Special Issue is to present the state-of-the-art fractional equations and calculation methods in exploration seismology.

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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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