Fractional Functional Analysis and Applications

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Message from the Guest Editor

Fractional functional analysis can be seen as a link between wavelet analysis, fractional geometry and, more generally, between different fields of applied functional analysis. In particular, fractional functional analysis extends the concept of function spaces to function spaces of fractional dimensions, opening new developments in both functional analysis and fractional calculus.

In this Special Issue, we invite and welcome reviews, expository, and original papers dealing with recent advances in fractional calculus; and, from a more general point of view, all theoretical and practical studies in pure and applied mathematics focused on this topic.

The main topics of this Special Issue include (but are not limited to):

- Fractional differential equations.
- Fractional function spaces.
- Commutators of fractional integral operators.
- Fractional calculus via Mittag-Leffler functions.
- Leibniz algebras, fractional calculus, and function spaces of symmetric functions.
- Fractional differential and integral equations.
- Fractional calculus, function space, and approximation theory.
- Fractional models in applied science.

Special Issue

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Message from the Editor-in-Chief

Mathematics permeates all kinds of academic worlds and is a fountain flowing with innovative development. The journal *AppliedMath*, publishing high-quality refereed papers discussing various aspects of applied mathematics, is dedicated to promoting the integration of mathematics with applied disciplines to cultivate a profitable frontier of mathematics. The journal highlights articles devoted to the mathematical treatment of questions and phenomena arising in physics, chemistry, biology, medicine, pharmacy, engineering, information science, social sciences, and humanities. One of the missions of this journal is to serve scientists by quickly announcing the seeds of significant mathematical breakthroughs in science and technology.

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