Special Issue

Fractional Dynamics 2021

Message from the Guest Editors

In the recent years, modeling, numerical simulation, and applications of Fractional Calculus have increasingly become very popular, particularly impressive concerning applications. The basic ideas on fractional derivatives have achieved an incredibly valuable status, while the variety of applications in mathematics, physics, engineering, economics, biology, and medicine have opened new challenging research fields. Clearly, these applications call for the development of suitable mathematical tools to extract quantitative information from the models, newly reformulated in terms of fractional differential equations. This Special Issue will address timely subjects, such as a variety of dynamical systems governed by fractional differential equations, pertaining to:

- the description of epidemiological models (typically based on fractional in time and/or in space ordinary and partial differential equations) where several populations interact. All this, exploiting big data and possibly machine learning techniques;
- modeling viruses reproduction subject to genetic variations; interplay with a variety of vaccines;

Guest Editors

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Deadline for manuscript submissions

closed (15 April 2022)

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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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