## Fractional Calculus and Nonlinear Systems

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**closed (15 October 2022)**

### Message from the Guest Editor

Complex models may be nonlinear (and integer), may have fractional-order derivatives (and be linear), or may involve both nonlinearities and fractional calculus. This Special Issue is dedicated to the latter case, which has received increased attention in recent years, where fractional derivatives and nonlinearities interact.

Some of the related subjects that deserve to be studied and deepened are as follows:

Study of properties of fractional-order nonlinear systems
Identification techniques for fractional order nonlinear systems
Applications of fractional-order nonlinear systems in science and engineering
Fractional impulsive systems
Stochastic fractional order nonlinear systems
Approximations of nonlinearities using fractional derivatives
Approximations of fractional derivatives using nonlinearities
Design of fractional order controllers for nonlinear plants
Design of nonlinear controllers for fractional order plants
Fractional reset control
Fractional sliding mode control

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Special Issue

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## Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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