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# Advanced Methods in Computational Mathematical Physics

Guest Editors:

**Prof. Dr. Brenno Caetano Troca Cabella**
Institute for Theoretical Physics, São Paulo State University, São Paulo 01049-010, Brazil

**Prof. Dr. Carlo Cattani**
Engineering School (DEIM), University of Tuscia, Largo dell'Università, 01100 Viterbo, Italy

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**closed (28 February 2022)**

## Message from the Guest Editors

This Special Issue aims to focus on advanced computational methods for the solution of mathematical physics problems and those problems arising in all areas of science, engineering application, finance and natural science whose solution is inspired by mathematical physics methods.

Computational and mathematical modeling of biological, engineering, and physical systems are becoming more and more attractive and suitable for the solution of daily complex nonlinear problems.

These problems can be easily solved using methods of modern advanced calculus and original, recently discovered theories and algorithms.

Many mathematical physical problems follow patterns described by systems of ordinary or partial differential equations, either integer or fractional order derivatives, or described by some special functions. Some of those patterns are self-similar (fractal); at the same time, they follow the power law and have a fading memory. There are many physical problems in nature and engineering applications following such patterns, such as fluidodynamics, mechanics, elasticity, fracture mechanics, rheology, avionics, biology, relativity, geohydrology, and finance.

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## Editor-in-Chief


**Prof. Dr. Francisco Chiclana**
School of Computer Science and Informatics, De Montfort University, The Gateway, Leicester LE1 9BH, UK


## 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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*Mathematics* Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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