

Special Issue

Theory and Application of Dynamical Systems in Mechanics

Message from the Guest Editor

Dear Colleagues This Special Issue invites papers that focus on recent and novel developments in the theory of dynamical systems, their simulations, and their applications, especially on analytical, numerical, and experimental results showing non-linear phenomena with regular and irregular patterns focusing on mechanical systems. This Special Issue will accept high-quality papers containing original research results and survey articles of exceptional merit in the following fields:

- Mechanical systems modelling and simulations;
- Ordinary and partial differential equations theory and numerics;
- Autonomous, non-autonomous, and piecewise-smooth dynamical systems;
- Chaos, chaos control, and anticontrol;
- Stability, multi-stability, and hidden and self-excited attractors;
- Entropy, 0–1 test for chaos, Lyapunov exponent, forecasting, and predictability;
- Real-world dynamical systems application in mechanics.

Guest Editor

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Deadline for manuscript submissions

closed (15 February 2023)



Mathematics

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Impact Factor 2.2
CiteScore 4.6



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About the Journal

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.

Editor-in-Chief

Prof. Dr. Francisco Chiclana

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Author Benefits

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Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.3 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).