Special Issue

Advanced Control of Complex Dynamical Systems with Applications

Message from the Guest Editors

Complex dynamical systems, which consist of multiple subsystems with intricate interactions, are pervasive across various fields such as engineering, chemistry, biology, and physics. Firstly, it allows us to understand emergent behavior, where collective patterns arise from individual interactions. Secondly, it helps optimize system efficiency in fields like engineering. Additionally, it aids in managing and mitigating the challenges associated with system complexity. It also enables us to predict and prevent system failures and design resilient systems capable of adapting and maintaining functionality. We are pleased to announce a Special Issue that aims to explore and showcase cutting-edge developments in the analysis and control of complex dynamical systems and their applications. We are particularly interested in articles that enhance our understanding of the observed phenomena in these systems through comprehensive analytic advancements, numerical simulations, and experimental testing.

Guest Editors

Dr. Belem Saldivar Department of Automatic Control, CINVESTAV-IPN, Av. Instituto Politécnico Nacional 2508, Mexico City 07360, Mexico

Dr. Lizeth Torres Ortíz Instituto de Ingeniería, Universidad Nacional Autónoma de México, Ciudad de México 04510, Mexico

Deadline for manuscript submissions

10 September 2025



an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



mdpi.com/si/178058

Mathematics Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 mathematics@mdpi.com

mdpi.com/journal/ mathematics



Σ

Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



mathematics



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 School of Computer Science and Informatics, De Montfort University, The Gateway, Leicester LE1 9BH, UK

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

Journal Rank:

JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.4 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).