Special Issue

Control, Optimisation, and Applications of Stochastic Uncertain Systems

Message from the Guest Editors

Uncertainty is a ubiquitous feature of many real-world systems, and accounting for it is essential for designing effective control and optimization strategies. Stochastic control theory has emerged as a powerful tool for addressing the challenges posed by uncertainty, finding applications in diverse fields, such as engineering, economics, finance, and the physical and biological sciences. This Special Issue focuses on the latest advances in the control, optimization, and applications of stochastic uncertain systems. Topics of interest include the development of new mathematical models and algorithms for stochastic control, performance analysis of stochastic control systems, intelligent control and machine learning, and applications of stochastic control in domains such as robotics, energy systems, and finance. The contributions to this Special Issue highlight the importance of considering uncertainty in the design and implementation of control and optimization strategies, showcasing the versatility and effectiveness of stochastic control approaches.

Guest Editors

Dr. Randa Herzallah
Zeeman Mathematics Institute, University of Warwick, Coventry CV4 7AL, UK

Dr. Yuyang Zhou
School of Computing Engineering and Built Environment, Edinburgh Napier University, Edinburgh EH10 5DT, UK

Deadline for manuscript submissions

closed (10 June 2025)

Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.6

mdpi.com/si/167854

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

mdpi.com/journal/mathematics

Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6

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).