

Special Issue

Advances in Stochastic Differential Equations and Applications to Finance

Message from the Guest Editor

Stochastic differential equations (SDEs) are an active interdisciplinary area at the crossroads of stochastic analysis, partial differential equations, and scientific computing. Statistical physics, fluid dynamics, financial modeling, nonlinear filtering, superprocesses, and continuum physics are among the most interesting topics where SDEs can be applied. This Special Issue welcomes high-quality articles in fields strongly connected to SDEs, such as stochastic differential equations in infinite-dimensional state spaces or probabilistic approaches to solving deterministic partial differential equations (PDEs), numerical solution of SDEs, and applications to financial mathematics.

Guest Editor

Prof. Dr. Nikos Halidias
Department of Statistics and Actuarial-Financial Mathematics,
University of the Aegean, Samos, 83200 Karlovassi, Greece

Deadline for manuscript submissions

closed (31 August 2021)



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



mdpi.com/si/55037

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

[mdpi.com/journal/
mathematics](https://mdpi.com/journal/mathematics)





Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



[mdpi.com/journal/
mathematics](https://mdpi.com/journal/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 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).