

Special Issue

Applied Probability and Statistical Inference in Reliability Engineering

Message from the Guest Editors

Probability theory and statistics play a fundamental role in the research of various scientific fields, such as engineering, computer science, medicine, biology, or economics. Several statistical methods and probabilistic approaches, such as order statistics, Markov chain imbedding, computational statistics, generating functions approaches, or nonparametric statistics have attracted a considerable research interest during recent decades. The aim of this Special Issue is to provide some evidence which reflects the importance of statistical techniques and probabilistic modelling in applied scientific areas, related to reliability engineering. We welcome articles establishing theoretical methodologies in these fields, but papers providing interesting and innovative applications, including solutions of important practical problems and case studies, of probability and statistics shall also be considered. Thus, the Special Issue is expected to be a collective work by a number of leading researchers and practitioners in their respective fields of expertise and, in general, experts who have been working at the forefront of applied probability, statistics, and reliability theory.

Guest Editors

Dr. Ioannis S. Triantafyllou

Department of Statistics and Insurance Science, University of Piraeus,
185 34 Piraeus, Greece

Prof. Dr. Alex Karagrigoriou

Laboratory of Statistics and Data Analysis, Department of Statistics and Actuarial-Financial Mathematics, University of the Aegean, GR-83200 Karlovasi, Greece

Deadline for manuscript submissions

15 November 2025



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



mdpi.com/si/176777

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 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).