Special Issue

Advances in Robust and Nonparametric Statistical Techniques for Data Science

Message from the Guest Editor

Nonparametric statistical techniques are a set of strategies useful for data analysis in cases where the assumptions necessary to apply parametric methods are not met. These nonparametric methods help to model and analyze practical situations with high-dimensional data in different disciplines with greater versatility while maintaining rigor. Therefore, currently they have become the dominant strategies used in data science. This Special Issue of *Mathematics*, 'Advances in Robust and Nonparametric Statistical Techniques for Data Science', proposes to collect the recent contributions in theoretical and practical aspects of topics as the following:

- Goodness-of-fit tests;
- Nonparametric confidence intervals;
- Density estimation;
- Nonparametric regression;
- Robust statistical methods;
- Simulation and generation of synthetic data;
- Statistical methods based on ranks;
- Supervised and unsupervised classification;
- Survival and reliability analysis;
- Robust methods for risk estimation and portfolio selection;
- Functional data;
- Identification of outlier data.

Guest Editor

Prof. Dr. Henry Laniado

Department of Mathematics, University of Cauca, Popayan 500001, Colombia

Deadline for manuscript submissions

10 October 2025

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).