

Special Issue

Advances in Combinatorics, Discrete Mathematics and Graph Theory

Message from the Guest Editors

Combinatorics and graph theory are areas of mathematics that deal with the study of discrete objects and their combinatorial structures. In recent decades, there have been significant advances in these areas, driven by a combination of new theoretical approaches, advanced computational tools, and applications in various fields. Regarding graph theory, significant progress has been made in areas such as random graph theory, complex network theory, graph coloring theory, graph flow theory, and structural graph theory. For example, in random graph theory, profound results have been obtained on the asymptotic properties of random graphs, leading to a better understanding of random phenomena in complex real-world networks, such as social networks, communication networks, and biological networks. In addition to these theoretical advances, combinatorics and graph theory have also experienced a surge in their application in various interdisciplinary areas, such as computer science, computational biology, information theory, game theory, and data science.

Guest Editors

Dr. Jonnathan Rodriguez

Departamento de Matemáticas, Facultad de Ciencias Básicas,
Universidad de Antofagasta, Av Angamos 601, Antofagasta, Chile

Dr. Luis Medina

Departamento de Matemáticas, Facultad de Ciencias Básicas,
Universidad de Antofagasta, Av Angamos 601, Antofagasta, Chile

Deadline for manuscript submissions

31 December 2024



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.3
CiteScore 4.0



mdpi.com/si/201623

Mathematics
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 2.3
CiteScore 4.0



[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 17.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2024).