# Special Issue

# Graph Theory and Combinatorics: Theory and Applications

## Message from the Guest Editors

Graph theory and combinatorics study discrete structures and their properties. These fields provide essential tools for solving problems across diverse disciplines such as computer science, biology, and optimization by analyzing relationships and developing efficient algorithms. We invite submissions of original research articles, reviews, and innovative applications within these fields. Topics include but are not limited to:

- graph theory
- combinatorial optimization
- digraphs
- hypergraphs
- connectivity
- group connectivity
- strongly group connectivity
- strong arc connectivity
- extremal problems
- extremal digraphs
- graph coloring
- list coloring
- planar graphs
- edge coloring
- strong edge coloring

- nowhere-zero flows

- chromatic number
- decomposition
- eigenvalues
- supereulerian graphs
- domination number

## **Guest Editors**

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## Deadline for manuscript submissions

30 October 2025



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# **About the Journal**

## Message from the Editor-in-Chief

Axioms is dedicated to the foundations (structure and axiomatic basis, in particular) of mathematical theories, not only from a crisp or strictly classical sense, but also from a fuzzy and generalized sense. This includes the more innovative current scientific trends, devoted to discover and solve new challenging problems. The prime goal of Axioms is to publish first-class, original research articles under an open access policy with minimal fees for the authors. We would be pleased to welcome you as one of our authors.

#### Editor-in-Chief

#### Prof. Dr. Humberto Bustince

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