Special Issue

Recent Advances in Mathematical Optimization and Related Topics

Message from the Guest Editors

Mathematical optimization provides powerful computational methods that enable researchers and practitioners to develop intelligent solutions to complex challenges involving multiple constraints, competing objectives, and intricate interdependencies. By leveraging advanced algorithmic approaches such as stochastic optimization and metaheuristic techniques, researchers can model real-world scenarios. Papers with mathematical analysis and real-world application are particularly welcome. Topics of interest include, but are not limited to, the following:

- Hybrid evolutionary algorithms for machine learning;
- Hybrid machine learning optimization frameworks;
- Stochastic optimization in dynamic complex systems;
- Evolutionary computation approaches to global optimization;
- Advanced optimization techniques in machine learning training;
- High-performance computing and parallel optimization strategies;
- Interdisciplinary applications of optimization techniques;
- Interdisciplinary applications of machine learning.

Guest Editors

Dr. Alberto Luque-Chang

Department of Electro-Photonics Engineering, Universidad de Guadalajara, Guadalajara 44430, Mexico

Prof. Dr. Jorge Gálvez

Department of Innovation Based on Information and Knowledge, Universidad de Guadalajara, Guadalajara 44430, Mexico

Deadline for manuscript submissions

28 February 2026

Axioms

an Open Access Journal by MDPI

Impact Factor 1.6

mdpi.com/si/226836

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

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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
Department of Statistics, Computer Science and Mathematics, Public University of Navarra, 31006 Pamplona, Spain

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