Special Issue

Advances in Optimal Transport: Algorithms, Theory, and Intelligent System Applications

Message from the Guest Editors

Optimal transport (OT) theory has emerged as a transformative framework for modeling resource allocation, distribution networks, and decision-making under constraints. With rapid advances in computational methods and data-driven applications, novel algorithms are urgently needed to address high-dimensional, dynamic, and game-theoretic challenges in modern systems. This Special Issue seeks cutting-edge contributions that bridge theoretical innovations in OT with practical applications in intelligent transportation, emergency management, networked control, and complex systems.   We welcome submissions exploring both computational breakthroughs (e.g., entropy-regularized solvers, deep learning-based approximations, evolutionary metaheuristics) and domain-specific applications (e.g., crowd evacuation dynamics, multi-agent route optimization, spatially distributed resource allocation). Of particular interest are interdisciplinary studies integrating OT with evolutionary game theory for modeling competitive/cooperative behaviors, neural operators for high-dimensional OT mappings, or networked control strategies for large-scale infrastructure systems.

Guest Editors

Dr. Kun Li

School of Civil and Transportation Engineering, Hebei University of Technology, Tianjin 300401, China

Dr. Haibo Wang

School of Civil and Transportation Engineering, Guangdong University of Technology, Guangzhou 510006, China

Deadline for manuscript submissions

20 December 2025

MDPI

Σ

Mathematics

an Open Access Journal by MDPI

**Impact Factor 2.2
CiteScore 4.6**

MDPI

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).