Application of Mathematical Methods to Transportation: Modeling and Analysis

Guest Editors:

Prof. Dr. Gang Ren
School of Transportation, Southeast University, 2 Sipailou, Nanjing 210096, China

Dr. Qi Cao
School of Transportation, Southeast University, 2 Sipailou, Nanjing 210096, China

Message from the Guest Editors

During the last decade, there has been a remarkable surge in the utilization of mathematical methods to tackle multifaceted issues in transportation systems, ranging from traffic congestion to efficient resource allocation.

This Special Issue aims to consolidate and showcase the latest advancements and innovative applications of mathematical methods in transportation modeling and analysis. The topics of interest for publication include, but are not limited to:

Development and application of novel mathematical models for traffic flow prediction and control;
Use of optimization techniques for solving complex problems;
Stochastic modeling for analyzing uncertainty and risk in transportation systems;
Network analysis and graph theory applications for understanding and optimizing the structure and dynamics of transportation networks;
Data-driven modeling and statistical analyses for extracting valuable insights from large-scale transportation datasets;
Integration of mathematical models with decision support systems to enhance transportation planning and policy formulation at local, regional, and national levels.

Special Issue

Editor-in-Chief

Prof. Dr. Francisco Chiclana
School of Computer Science and Informatics, De Montfort University, The Gateway, Leicester LE1 9BH, UK

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.

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