Special Issue

Numerical Methods and Analysis for Partial Differential Equations

Message from the Guest Editor

This Special Issue focuses on advancing numerical methods used for in-depth studies of the behavior of partial differential equations. We place emphasis on both the introduction of new numerical methods and the theoretical study of their behavior and approximation errors. Mathematical research in this field either pertains to the construction of new methods and improving features within existing methods or the creation or combination of new methods to improve the agreement between modeling results and those obtained theoretically. Numerical methods can be used to discern the properties of equations from a continuum perspective, both in terms of existence and uniqueness or continuity with respect to initial conditions. Furthermore, given the rise in studies of economic models and samplers for Hamiltonian problems, we also seek papers that explore numerical methods applied to stochastic partial differential equations. Numerical methods that demonstrate the behavior of solutions to these equations are of particular interest.

Guest Editor

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Deadline for manuscript submissions

28 February 2026

Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.6

mdpi.com/si/241596

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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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