

# Special Issue

## Analysis and Applications of Numerical Methods for Wave-Propagation Problems

### Message from the Guest Editors

Wave-propagation problems are found in every field of science and engineering, including geophysics, oceanology, civil engineering, aerospace engineering, medicine, and many others. This Special Issue covers all areas of the analysis and application of numerical methods for wave-propagation problems, including acoustic, elastic, seismic, viscoelastic, poroelastic and electromagnetic waves. We encourage the submission of papers that consider pseudospectral, finite volume, finite difference, finite element, spectral element, discontinuous Galerkin, or enriched Galerkin methods. Papers dealing with other methods applicable to wave phenomena will also be considered.

- discontinuous Galerkin
- wave equation
- numerical analysis
- finite elements
- hyperbolic equations
- wave propagation
- finite difference method
- finite volume method
- spectral element method
- enriched Galerkin method
- mixed finite element method
- multiscale methods
- upscaling/homogeneization

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### Guest Editors

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### Deadline for manuscript submissions

31 July 2026



## Mathematics

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## 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.

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### Editor-in-Chief

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