

Special Issue

Advances in Computational Physics and Mathematical Physics

Message from the Guest Editors

Partial differential equations (PDEs) form the backbone of mathematical physics, offering a rigorous foundation for modeling physical phenomena and solving complex boundary value problems. This Special Issue seeks high-quality contributions that highlight **analytical and semi-analytical techniques**, including applications in:

- Fluid dynamics and magnetic fluids
- Scattering problems in wave physics
- Electromagnetic and elastic wave interactions
- Mathematical cosmology and plasma physics
- AI-assisted methods in modern mathematical physics

We especially welcome work that integrates **analytical insights** at key stages of **numerical procedures**. Topics may address theoretical development, computational methods, or interdisciplinary applications. Both **original research** and **in-depth review articles** are invited. This issue aims to showcase novel advances and foster deeper understanding in the application of PDEs to real-world physical systems.

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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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