

# Special Issue

## Differential Equations Applied in Fluid Dynamics

### Message from the Guest Editor

Dear Colleagues, We warmly invite you to submit your research to the Special Issue entitled “Differential Equations Applied in Fluid Dynamics”. These principles are particularly significant in fluid mechanics. This Special Issue seeks theoretical or numerical analyses of special solutions with symmetry assumptions for nonlinear partial (or ordinary) differential systems, such as those arising in fluid mechanics (e.g., the Navier–Stokes equations, Euler equations, Euler–Poisson equations, and their special cases). Additionally, contributions addressing solutions from general relativity (e.g., the Einstein field equations and their special cases) or other nontrivial nonlinear PDEs are welcome, provided they establish a clear connection to fluid dynamics. We encourage you to submit your paper to the journal *Mathematics* and select the Special Issue “Differential Equations Applied in Fluid Dynamics” via the MDPI submission system. Papers will be published on a rolling basis, and we look forward to receiving your submission at your earliest convenience.

### Guest Editor

Dr. Imre Ferenc Barna

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### Deadline for manuscript submissions

31 October 2025



## 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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indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

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#### 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).