Special Issue

Advances in Computational Fluid Dynamics

Message from the Guest Editor

In this Special Issue, we invite papers with significant advances in computational fluid dynamics. Additionally, computational theories, techniques, and applications are welcomed. The topics of this Special Issue include, but are not limited to:

- Numerical scheme (including time advancing, spatial scheme, high-order scheme, etc.);
- Turbulence simulation (including RANS, LES, DNS, hybrid method);
- Aerodynamic optimization (including optimization based on steady or unsteady CFD, evolutionary algorithm or adjoint method, etc.);
- Grid technique (including structured or unstructured grid technique, automatic grid generation, grid adaption, etc.);
- Computational aeroacoustics (including aeroacoustics of direct method, hybrid method, etc.);
- Artificial intelligence in CFD (artificial intelligence technique used for turbulence modeling, grid generation, flow control, etc.);
- Parallel computation (including parallel computation based on CPU/GPU, etc.);

Industrial application of CFD (including aerospace engineering, vehicle engineering, etc.).

Guest Editor

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Deadline for manuscript submissions

closed (15 April 2024)

MDPI

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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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).