Special Issue

New Advances in Analytical and Numerical Techniques in Fluid Mechanics

Message from the Guest Editors

This Special Issue is devoted to theoretical, experimental, and computational investigations of elementary features in transport phenomena of all aspects of the mechanics of fluids. This issue contains articles on the fundamental concepts of fluid mechanics and its widespread applications to other fields such as oceanography, meteorology, materials, hydraulics, biology, aeronautics, biomedicine, and mechanical, electrical, and chemical engineering. Topics include but are not limited to:

- Aerospace and aeronautical flows;
- Biological flows;
- Chemical flows;
- Computational fluid dynamics;
- Electrical and magnetic effects in fluid flows;
- Experiments in fluids;
- Flows in porous media;
- Flows with complex boundary conditions;
- Flow visualization;
- Fluid–structure interactions;
- Free surface flows;
- Geological flows;
- Mathematics of fluids;
- Multiphase flows;
- Nanofluid flows;
- Rarefied supersonic flows;
- Statistical mechanics of flows;
- Turbulent flows;
- Viscous and non-Newtonian flows.

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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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