Special Issue

Numerical and Analytical Study of Fluid Dynamics

Message from the Guest Editors

he Special Issue of *Mathematics* MDPI on "Numerical and Analytical Study of Fluid Dynamics" aims to attract theoretical (both numerical and analytical) research and review papers in a wide range of topics of mathematical and computational fluid mechanics, including free surface hydrodynamics, interfacial flows, and vortex and wave turbulence. Studies on fluid dynamics have traditionally stimulated the development of methods of mathematical physics; they largely conditioned the emergence of such a branch of physics as nonlinear dynamics. This Special Issue is focusing on the development and application of new effective methods for both numerical and analytical description of unsteady fluid flows under various conditions, including electrohydrodynamic and magnetohydrodynamic ones. Special attention will be paid to the problem of integrability of the equations of fluid motion and the related problem of flow collapse (finite-time singularities, wave breaking, formation of discontinuities in flows, etc.).

Guest Editors

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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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