

Special Issue

Theoretical Research and Computational Applications in Fluid Dynamics

Message from the Guest Editors

This Special Issue will include high-quality peer-reviewed papers on applied mathematics and fluid dynamics with a focus on numerical and analytical studies of fluid flows or on pure theoretical research in the field of theoretical hydrodynamics. In this Special Issue, we invite scientific articles on exact and approximate solutions of the Navier–Stokes equations, Euler equations, vortex hydrodynamics, tidal phenomena, computational fluid dynamics, convection, diffusion, thermal diffusion, MHD phenomena, physicochemical hydrodynamics, and plasma physics. Contributors are given the opportunity to publish research on the solution of new model boundary value problems for geophysical hydrodynamics or applying the ansatz of boundary layer theory, on fluid–body interactions and rigid body dynamics in a fluid, along with solving engineering problems in fluid mechanics, regarding glacier dynamics and the nonlinear hydrodynamics of Newtonian or non-Newtonian fluids, including polymers and other fluids with non-classical properties such as nanofluids and microfluidic phenomena.

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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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