Special Issue

Numerical Methods for Computational Fluid Dynamics

Message from the Guest Editors

This Special Issue is intended to provide the latest development of CFD methods towards numerical simulations of complex fluid mechanical problems. The CFD methods include mesh-based (FEM, FVM, LBM, etc) and meshfree (SPH, MPS, FPM, FVPM, etc) methods which are becoming more and more reliable for a wide range of fluid mechanics or fluid-structure interaction problems in engineering. The main topics of this Special Issue include, but are not limited to: CFD simulations of incompressible and compressible flows, free-surface flows, multiphase flows, bubbly flows, multi-physics and multi-scale flows, fluid-structure interactions, applications of CFD methods to engineering problems, etc.

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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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