Special Issue

Mathematical Methods in Computational Fluid Dynamics: Theory and Applications

Message from the Guest Editor

Computational fluid dynamics constitutes an active and rapidly evolving area that lies on the interface between applied mathematics and physics. The steady growth of this field is driven by the ever-increasing demands of both natural sciences and engineering practices in order to provide accurate and reliable approaches to mathematical models, which mainly involve boundary value problems, whose exact solutions are either too complicated to be embedded as subroutines in the source code of a software program to be determined or whose existence has not been rigorously proven. The intention of this Special Issue is to contribute to this interesting scientific field by providing a collection of papers that showcase cutting-edge research in Computational fluid dynamics, focusing on the spectral analysis of a three-dimensional homogeneous turbulence, the simulation of fluid flows in free surface channels and/or around mounted and rotated obstacles, etc.

Guest Editor

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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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