Special Issue

Symmetry in Computational Fluid Dynamics (CFD)

Message from the Guest Editors

Symmetry plays a fundamental role in many physical phenomena, offering a pathway to simplify complex systems, enhance computational efficiency, and deepen our understanding of fluid dynamics. Computational fluid dynamics (CFD), as a versatile tool for modeling fluid flow and related phenomena, has found widespread application in diverse fields such as aerospace, renewable energy, biomedical engineering, and environmental studies. Integrating symmetry principles into CFD not only aids in reducing computational complexity but also provides innovative approaches to model, analyze, and optimize real-world problems. This Special Issue will explore the latest advances in CFD techniques and applications where symmetry is a key factor. We invite contributions that highlight the use of symmetry in theoretical developments, algorithm design, and practical applications of CFD.

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About the Journal

Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

Editor-in-Chief

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