



Symmetry and Its Applications in Experimental Fluid Mechanics

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Message from the Guest Editors

Many flow patterns in nature and industry are fascinating due to their symmetry. These phenomena may be symmetrical about a line, a point, an axial or even time. In experiments related to fluid mechanics, there are many symmetrical or asymmetrical phenomena, e.g., laminar flow, vortex rings, vortexes in microdroplets, Kármán vortex streets, Marangoni flow in microgravity, multiphase flow, interface flow and so on. Obtaining an understanding of the background physics of these flow patterns is important.

We invite you to share your research into fascinating flow patterns with researchers worldwide in this Special Issue. These symmetrical or asymmetrical flow phenomena observed in experiments reflect complex scientific problems relating to fluid mechanics.

This Special Issue is intended to provide a series of papers focused on symmetry and its applications in experimental fluid mechanics, devoted to understanding the background physics of these flow patterns.





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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.

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