



*symmetry*



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## The Benefits That Physics Derives from the Concept of Symmetry

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### Message from the Guest Editors

Dear Colleagues,

In physics, symmetry is synonymous with conservation law. This term refers to one or more quantities that remain unchanged during the evolution of a system and is applied to every area of Physics to denote fixed points in a discovery. For this reason, the search for symmetries in Physics represents a crucial point in the understanding of established theories, and their breaking sometimes involves a clue to the search for new theories. Other times, what we want to measure is precisely the asymmetries as variations due to changes affecting physical systems. From micro to macro, in theory or experimentally, this intimate relationship between Physics and symmetry represents the very soul of nature, and in this Special Issue, we will treat it from different points of view.



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# Special Issue



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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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