



Symmetry in Mathematical Physics: History, Advances and Applications

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Message from the Guest Editors

Dear Colleagues,

Symmetry was always a key element in human intelligence and has been used through the ages to express the concept of “perfection” and divine initially in the field of metaphysics and in art and later, through Classical Geometry, in to mathematics. The applications in Physics came the second part of the 19th century and reached their apogee in Quantum Mechanics and field theory the beginning of 20th century. This special volume invites all physicists who apply symmetry in their work to contribute so that it will result in a basic reference for the generations to come. It is important that physicists from all branches of Physics shall contribute to this effort. Works describing the initial applications of symmetry in Relativity and Quantum Mechanics, together with recent works and advances in these fields as well as applications with practical value especially in everyday life are most welcome. We hope all of us will help to produce a first-class reference which will stay for long.

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Guest Editors





symmetry



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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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