



Nonlinear Symmetric Systems and Chaotic Systems in Engineering

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Message from the Guest Editors

Dear Colleagues,

Many physical, chemical, and even economic phenomena are modeled using nonlinear dynamics. Despite the great interest in the subject shown by scientists and engineers, much remains to be done in these areas. Nonlinear systems characterized by chaotic dynamics are of particular interest to the scientific community. Their analysis will allow us to understand and eliminate many undesirable and dangerous phenomena. On the other hand, chaotic systems are used in many engineering fields, and their use allows for the improvement or even construction of appropriate engineering systems.

This Special Issue focuses on the modelling of nonlinear symmetric processes, their analysis, and application areas. Authors of original papers on mathematical modelling of nonlinear processes using ordinary differential equations (ODEs) and partial differential equations (PDEs), methods of solving such models, and their analysis are invited to submit their papers. In addition, articles focusing on symmetry in nonlinear analysis, methods and numerical analysis, control theory, stability theory, and applications of nonlinear models in various engineering areas are also very welcome.





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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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