New Trends in Nonlinear Dynamics and Nonautonomous Solitons

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Message from the Guest Editors

Nonlinear dynamics is an ever-expanding field with a wide range of applications in applied mathematics, physics, biology, and engineering, collectively referred to as the nonlinear science.

The main purposes of this Special Issue are to provide an overview of recent ongoing progress and new trends in nonlinear dynamics and solitons and to stimulate novel studies in the field. This Special Issue welcomes contributions from a wide range of disciplines related to nonlinear waves in nature, including, but not limited to, the inverse scattering transform and AKNS methods, computational modeling and machine learning, novel higher-order nonlinear evolution equations, soliton control and eigenvalue communications, soliton self-compression and supercontinuum generation, modulation instability, nonautonomous and spatial solitons, new and stimulating analogies with nonlinear waves in BEC, ocean, biological, and molecular systems, solitons in DNA, and other nonlinear structures in nature.

All works, such as original articles, reviews, and stimulating proposals, in all areas of nonlinear waves dynamics are welcome to be submitted to this Special Issue.

Special Issue

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Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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