Special Issue

Advances in Chaos Theory and Applications

Message from the Guest Editors

This Special Issue of *Mathematics entitled "Advances in Chaos Theory and Applications"* is dedicated to recent developments in chaos theory and its wide range of applications. We invite contributions from mathematicians, physicists, computer scientists, and researchers in related fields who are advancing both the theoretical foundations and applied methodologies of chaos. Topics of interest include, but are not limited to, applications in fluid dynamics, climate modeling, neural networks, biological systems, secure communications, and robotics. We also welcome interdisciplinary research that leverages chaos theory in emerging domains, including applications in quantum computing and artificial intelligence. Of particular interest are studies—both experimental and theoretical—on walking droplets: macroscopic quantum analogs that demonstrate intricate links between chaos, wave–particle duality, and nonlinear behavior. By bringing together a wide array of perspectives, this Special Issue aims to highlight the enduring relevance of chaos theory and its ability to uncover deep insights across the natural and computational sciences.

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About the Journal

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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