

# Special Issue

## New Trends in Nonlinear Waves

### Message from the Guest Editor

The Special Issue of this scientific journal delves into the forefront of mathematical research, concentrating on nonlinear waves and evolution of partial differential equations. Embracing cutting-edge concepts, it specifically spotlights six critical aspects: well-posedness, blow-up phenomena, scattering phenomena, stability/instability, and variational and geometrical approaches to studying PDEs. Articles may analyze the long-time behavior phenomena, investigating how waves evolve and disperse over time. The Special Issue probes deep into the concepts of stability/instability and scattering, inspecting how solutions of nonlinear wave equations behave over extended periods and different geometric frameworks. Addressing the foundational aspect of well-posedness, the Special Issue explores new formulation and solution behaviors of nonlinear evolution PDEs. Furthermore, variational and geometric approaches to solving nonlinear PDEs have emerged as highly significant, and this Special Issue aims to showcase its efficacy in providing elegant solutions and exploring the behavior of nonlinear systems settled on general ambient spaces.

### Guest Editor

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### Deadline for manuscript submissions

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## Mathematics

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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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