

Special Issue

Partial Differential Equations in Applied Mathematics

Message from the Guest Editor

Partial differential equations are employed in mathematical formulations to help solve various physical and other issues, such as electrostatic propagation, elasticity, fluid flow, electrodynamics, heat, and sound. This Special Issue titled “Partial Differential Equations in Applied Mathematics” therefore facilitates the quick dissemination of original research in applied mathematics and the sciences through the use of partial differential equations and associated methods. Both analytical and numerical techniques are welcome for contributions. The topics discussed range from the Lie group method, inverse scattering transforms, Darboux and Bäcklund transformations, the Hirota bilinear method, and initial and boundary value problems to various other techniques such as the unified transform (Fokas method), Riemann–Hilbert problems, long-time asymptotes, Hamiltonian theory, and applied fluid mechanic problems. We also equally welcome papers that focus on the mathematical modeling and analysis of travelling waves, solitons, lumps, optical solitons and non-smooth solitons, rogue waves, and breathers.

Guest Editor

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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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