



Nonlinear Partial Differential Equations in Mathematical Fluid Dynamics

Guest Editor:

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Message from the Guest Editor

Most of the nonlinear problems in fluid dynamics are governed by the nonlinear partial differential equations such as Navier–Stokes equations, Boussinesq equations, MHD equations, etc. The analysis and application of those nonlinear partial differential equations have attracted more and more attention over the past half century. The understanding of those important nonlinear partial differential equations is fascinating and challenging.

As a Special Issue of the international journal *Mathematics*, we invite investigators to contribute good quality and original research articles as well as review articles that will stimulate the continuing efforts to understand the related nonlinear partial differential equations in fluid dynamics. Potential topics include, but are not limited to: Navier–Stokes equations and Euler equations; Magneto-hydrodynamic equations; Boussinesq equations; Kinetic equations in gas; Primitive equations and quasi-geostrophic equations in the ocean and atmosphere; and related nonlinear partial differential equations in applied sciences.





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Message from the Editor-in-Chief

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