Applications of Partial Differential Equations in Mathematical Physics, 1st Edition

Guest Editor:

Dr. Panayiotis Vafeas
Department of Chemical Engineering, University of Patras, University Campus, 26504 Patras, Greece

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Message from the Guest Editor

Partial differential equations in mathematical physics provide a suitable platform for the development of original research in the fields of applied mathematics and physical sciences for the solution of boundary value problems with the introduction of partial differential equations and related methodologies. The purpose of this Special Issue is to gather contributions from experts on analytical and semi-analytical techniques with application domains, including but not limited to fluid dynamics, creeping hydrodynamics and magnetic fluids, direct and inverse scattering problems in wave phenomena, electromagnetism and low-frequency scattering, electric and magnetic activity of the brain, scattering of elastic waves from isotropic and anisotropic materials, mathematical modelling of cancer tumour growth, interaction with cold atmospheric pressure plasma jet systems and actuators, etc. Contributions with a main emphasis on numerical methods for the application of partial differential equations in mathematical physics are also welcome, provided they exploit analytical means at certain stages of the procedures employed for the derivations of the solutions.

Special Issue

Editor-in-Chief

Prof. Dr. Francisco Chiclana
School of Computer Science and Informatics, De Montfort University, The Gateway, Leicester LE1 9BH, UK

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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