Advances in Mathematical Physics

Special Issue on
Recent Advances in Analytical Methods in Mathematical Physics

Call for Papers

This special issue is planned to focus on most recent advances in analytical techniques of particular use to researchers in the field of mathematical physics that covers a very wide area of topics and has a key role in interdisciplinary studies including mathematics, mechanics, and physics. In this issue, we are particularly interested in receiving novel contributions detailing analytical methods together with appropriate formulations applied to address problems in mathematical physics.

We aim to compile contributions across a variety of disciplines in mathematical physics and invite researchers to submit original research and/or domain reviews. Potential topics include, but are not limited to:

- Integrability and chaos in dynamical systems
- Nonlinear partial differential equations
- Lie group methods for differential equations
- Nonlinear problems in mechanics
- Control theory
- Geometrical methods
- Plasma physics
- Lie algebras and representation theory
- Statistical mechanics

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Manuscript Due	Friday, 13 January 2012
First Round of Reviews	Friday, 13 April 2012
Publication Date	Friday, 13 July 2012

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