Special Issue

Geometry and Symmetry in Mathematical Physics

Message from the Guest Editor

Many phenomena in physics are described in terms of differential equations. Imposing symmetry to such problems often leads to drastic simplifications. For example, when considering problems where the underlying space is a Lie group, many questions turn into linear algebra problems. In other situations. symmetry assumptions reduce complicated partial differential equations to ordinary differential equations. As a main consequence, it is often possible to provide explicit solutions. This Special Issue invites contributions that use symmetry techniques to address problems directly or indirectly related to problems arising in physics. Of particular interest are problems related to Riemannian and/or pseudo-Riemannian geometry as well as Lie theory. We welcome contributions that add new theoretical knowledge, provide particular insights into computational techniques, or add a new perspective to otherwise known results in the field.

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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