Special Issue

Variational Methods on Riemannian Manifolds: Theory and Applications

Message from the Guest Editors

From the point of view of applications, Riemannian geometry interlaces with many other branches of mathematics, namely, calculus of variations, geometric control and geometric mechanics, which have had a great impact on other sciences. Many problems of interest in engineering and physics are formulated on Riemannian manifolds, and mainly on Lie groups and homogeneous spaces. Applications such as trajectory generation for space and mobile robotics, navigation of autonomous vehicles and interpolation for 3D animation in computer graphics have been a motivation for developing variational methods and control techniques in the Riemannian setting. The scope of this Special Issue includes research or review papers on recent developments of variational methods, geometric control and mechanics on Riemannian manifolds. It also aims to provide a wide range of applications of Riemannian geometry to physics, engineering and other sciences.

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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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