



Variational Methods on Riemannian Manifolds: Theory and Applications

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Message from the Guest Editors

Dear Colleagues,

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

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