عنوان مقاله:

Rigidity of Weak Einstein-Randers Spaces

محل انتشار:

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خلاصه مقاله:

The Randers metrics are popular metrics similar to the Riemannian metrics, frequently used in physical and geometric studies. The weak Einstein-Finsler metrics are a natural generalization of the Einstein-Finsler metrics. Our proof shows that if (M,F) is a simply-connected and compact Randers manifold and F is a weak Einstein-Douglas metric, then every special projective vector field is Killing on (M,F). Furthermore, we demonstrate that if a connected and compact manifold M of dimension n \geq ۳ admits a weak Einstein-Randers metric with Zermelo navigation data (h,W), then either the S-curvature of .(M,F) vanishes, or (M,h) is isometric to a Euclidean sphere {\mathbb{S}^n}(\sqrt{k}), with a radius of ۱/\sqrt{k}, for some positive integer k

کلمات کلیدی:

Projective vector fields, Conformal vector fields, Randers metric, Weak Einstein, S-curvature, rigidity