عنوان مقاله:

IFP transformations on the cotangent bundle with the modified Riemannian extension

محل انتشار:

مجله هندسه فینسلر و کاربردهای آن, دوره 1, شماره 2 (سال: 1399)

تعداد صفحات اصل مقاله: 12

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خلاصه مقاله:

Let ∇ be a symmetric connection on an n-dimensional manifold M nand T ∗ M n its cotangent bundle. In this paper, firstly, we determine theinfinitesimal fiber-preserving projective(IFP) transformations on T ∗ M nwith respect to the Riemannian connection of the modified Riemannianextension ˜ g ∇,c where c is a symmetric (۰,۲)-tensor field on M n . Thenwe prove that, if (T ∗ M n , ˜ g ∇,c) admits a non-affine infinitesimal fiber-preserving projective transformation, then M n is locally flat, where ∇is the Levi-Civita connection of a Riemannian metric g on M n . Finally,the infinitesimal .complete lift, horizontal and vertical lift projective trans-formations on (T ∗ M n , ˜ g ∇,c) are studied

کلمات کلیدی:

Modified Riemannian extension, Infinitesimal fiber-preserving transformations, Infinitesimal projective transformations