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Lie algebras of H-projective motions of Kähler manifolds of constant holomorphic sectional curvature

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Abstract

In the paper, the Lie algebras of infinitesimal H-projective transformations with 2n-dimensional Kahler manifolds of constant holomorphic sectional curvature are considered. It is proved that these algebras are isomorphic to the realification of the complex Lie algebra sl(n, ℂ), and their local realization in the form of an algebra of vector fields on a manifold is described. ©1999 Kluwer Academic/Plenum Publishers.

Keywords

Almost geodesic mapping, H-projective transformation, Infinitesimal transformation, Kähler manifold, Lie algebra, Realification of a Lie algebra, Sectional curvature