

Banaru, Mihail B.

Special Hermitian manifolds and the 1-cosymplectic hypersurfaces axiom. (English)

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A special Hermitian manifold is a Hermitian manifold whose Kähler form F satisfies $\delta F = 0$, where δ is the codifferentiation operator. The main result of the paper is that if a special Hermitian manifold M satisfies the 1-cosymplectic hypersurfaces axiom (i.e., every point of M belongs to some cosymplectic hypersurface of type one), then M is a Kähler manifold.

Reviewer: Daniel Belțiță (București)

MSC:

53B35 Local differential geometry of Hermitian and Kählerian structures

53B21 Methods of local Riemannian geometry

Cited in **2** Documents

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cosymplectic structure; special Hermitian manifold; Kähler manifold

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