Ivashkovich, S. M.

Hartogs' phenomenon for holomorphically convex Kählerian manifolds. (English. Russian original) Zbl 0618.32011

Math. USSR, Izv. 29, 225-232 (1987); translation from Izv. Akad. Nauk SSSR, Ser. Mat. 50, No. 4, 866-873 (1986).

In the work the extention of holomorphic mappings into complex manifolds is studied. The main result for the case of Kähler manifolds is the following. Theorem. For any domain D over the Stein manifold each holomorphic mapping from D into convex holomorphic Kähler manifold Y can be extended to the holomorphic mapping of the hull of holomorphy $\hat{D}$ of the domain D into Y if and only if Y doesn't contain any images $\mathbb{CP}^1$ under nonconstant holomorphic mappings.

Reviewer: P.Z.Agranovich

MSC:

32D15 Continuation of analytic objects in several complex variables
32D05 Domains of holomorphy
53C55 Global differential geometry of Hermitian and Kählerian manifolds

Keywords:

extension of holomorphic mappings; Kähler manifolds; convex holomorphic Kähler manifold; hull of holomorphy

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