

Rigidity of CR morphisms between strongly pseudoconvex CR manifolds.

Stephen S T Yau
University of Illinois at Chicago

Abstract: Let X_1 and X_2 be two strongly pseudoconvex CR manifolds of dimension at least 5 in C^N . We prove that if the codimension of X_2 is small relative to the dimension of X_2 , then any non-constant CR morphism from X_1 to X_2 must be biholomorphic. If X is a strongly pseudoconvex CR manifold of dimension at least 3 which bounds a variety with non-quotient singularities, then any CR morphism from X to X is a biholomorphic map.