TITLE: A characterization of bounded symmetric domains of type IV by their group of holomorhic automorphisms.

Abstract: It was proved by A. Isaev that the unit ball B^n in $\mathbf{C}^n$ is characterized by its group of holomorphic automorphisms among Stein manifolds of the same dimension, i.e. an n-dimensional Stein manifold whose group of holomorphic automorphisms is isomorphic to $\mathrm{Aut}(B^n)$ is necessarily biholomorphic to B^n. This result was later extended to the n-dimensional polydisk by A. Kodama and S. Shimizu. We show that an analogous result holds for bounded symmetric domains of type IV and we discuss possible extensions to the general case.