

A GENERAL WOLFF THEOREM FOR ARBITRARY BANACH SPACES

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ABSTRACT

The Kobayashi distance is used to generalise the classical theorem of Wolff to compact holomorphic fixed-point-free mappings on the open unit ball of an arbitrary complex Banach space E and more generally on bounded convex domains in E , thereby extending results of Abate for \mathbf{C}^n . This is compared to earlier results on bounded symmetric domains. The boundary behaviour of the Kobayashi distance κ on bounded symmetric domains is also discussed, with estimates given for $\kappa(z, w)$ as one or both of z, w tend to the boundary.