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LOCAL ISOMETRIES ON SUBSPACES AND SUBALGEBRAS OF FUNCTION SPACES

ABDULLAH BIN ABU BAKER* AND RAHUL MAURYA

Abstract. Let $\mathbb{K}$ denotes the field of real or complex numbers. For a locally compact Hausdorff space X, we denote by $C_0(X)$ the space of all $\mathbb{K}$-valued continuous functions on X vanishing at infinity. Let E be a (real or complex) Banach space, K_E be a closed subset of E, and $C_u(K_E)$ be the algebra of all real or complex valued, uniformly continuous bounded functions defined on K_E. Endowed with the supremum norm, both $C_0(X)$ and $C_u(K_E)$ are Banach spaces. In this paper we study the structure of local isometries on subspaces of $C_0(X)$ and various subalgebras of $C_u(K_E)$.

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