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Title: Automorphisms on algebras of operator-valued Lipschitz maps

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Let $\text{Lip}(X, \mathcal{B}(\mathcal{H}))$ and $\text{lip}_\alpha(X, \mathcal{B}(\mathcal{H}))$ ($0 < \alpha < 1$) be the big and little Banach $*$ -algebras of $\mathcal{B}(\mathcal{H})$ -valued Lipschitz maps on X , respectively, where X is a compact metric space and $\mathcal{B}(\mathcal{H})$ is the C^* -algebra of all bounded linear operators on a complex infinite-dimensional Hilbert space \mathcal{H} . We prove that every linear bijective map that preserves zero products in both directions from $\text{Lip}(X, \mathcal{B}(\mathcal{H}))$ or $\text{lip}_\alpha(X, \mathcal{B}(\mathcal{H}))$ onto itself is biseparating. We give a Banach–Stone type description for the $*$ -automorphisms on such Lipschitz $*$ -algebras, and we show that the algebraic reflexivity of the $*$ -automorphism groups of $\text{Lip}(X, \mathcal{B}(\mathcal{H}))$ and $\text{lip}_\alpha(X, \mathcal{B}(\mathcal{H}))$ holds for \mathcal{H} separable.

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