LINEAR MAPS PRESERVING THE MINIMUM MODULUS

ABDELLATIF BOURHIM AND MARÍA BURGOS

Abstract. We characterize surjective linear maps that preserve the minimum modulus between unital semisimple Banach algebras, one of them is a unital $C^*$-algebra having either real rank zero or essential socle. We also describe surjective linear maps on $\mathcal{L}(H)$, with $H$ an infinite-dimensional Hilbert space, preserving the essential minimum modulus. Results concerning surjectivity and maximum modulus are also obtained.


Keywords and phrases: $C^*$-algebra, JB*-algebra, real rank zero, socle, minimum modulus, surjectivity modulus.

REFERENCES


