

A NOTE ON A SPECTRAL CONSTANT ASSOCIATED WITH AN ANNULUS

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Abstract. Fix $R > 1$ and let $A_R = \{1/R \leq |z| \leq R\}$ be an annulus. Also, let $K(R)$ denote the smallest constant such that A_R is a $K(R)$ -spectral set for the bounded linear operator $T \in \mathcal{B}(H)$ whenever $\|T\| \leq R$ and $\|T^{-1}\| \leq R$. We show that $K(R) \geq 2$, for all $R > 1$. This improves on previous results by Badea, Beckermann and Crouzeix.

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