

Year: 2008

Vol.: 72

Fasc.: 1-2

Title: A new characterization of the reduced minimum modulus of an operator on Banach spaces

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Let X, Y be Banach spaces and let $B(X, Y)$ (resp. $C(X, Y)$) denote the set of all bounded (resp. nonzero densely defined and closed) linear operators T from X (resp. (T)) to Y . We prove that the reduced minimum modulus (T) of $T \in C(X, Y)$ is $\inf\{\|A\| \mid T \not\subseteq (T + A), A \in B(X, Y)\}$. Using this result, we give various estimates of the upper bound of $|(T + A) - (T)|$ for any $T \in C(X, Y)$ and $A \in B(X, Y)$.

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