

SPECTRAL CONTINUITY : (p, k) - QUASIHYPONORMAL AND k - QUASI - PARANORMAL OPERATORS

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Abstract

An operator T is called k - quasi - paranormal if $\|T^{k+1}x\|^2 \leq \|T^{k+2}x\|\|T^kx\|$ for all $x \in \mathcal{H}$ where k is a natural number. A 1 - quasi - paranormal operator is quasi paranormal. In this paper, we prove that continuity of the set theoretic functions spectrum, Weyl spectrum, Browder spectrum and essential surjectivity spectrum on the classes consisting of (p, k) - quasihyponormal operators and k - quasi - paranormal operators.

Key Words : $*$ - *paranormal operators*, *Weyl's theorem*, *Single valued extension property*, *Continuity of spectrum*, *Fredholm*, *B - Fredholm*, $*$ - *class A operators*, k - *quasi - paranormal operators*, *generalized a - Weyl's theorem*, *B - Fredholm*, *B - Weyl*.

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