

## ON QUASI- $*$ - $n$ -PARANORMAL OPERATORS

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**Abstract.** For a positive integer  $n$ , an operator  $T \in B(H)$  is called quasi- $*$ - $n$ -paranormal if  $\| |T^{2+n}x| |^{\frac{1}{1+n}} \| |Tx| |^{\frac{n}{1+n}} \geq \| |T^*Tx| |$  for every  $x \in H$ , which is a further generalization of hyponormal and a subclass of normaloid. In this paper, we give necessary and sufficient conditions for  $T$  to be a quasi- $*$ - $n$ -paranormal operator. And prove that the spectrum is continuous on the class of all quasi- $*$ - $n$ -paranormal operators.

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