On the Equivalence of Weyl and Generalized Weyl Theorem

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摘要
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Abstract We know that an operator T acting on a Banach space satisfying generalized Weyl's theorem also satisfies Weyl's theorem. Conversely we show that if all isolated eigenvalues of T are poles of its resolvent and if T satisfies Weyl's theorem, then it also satisfies generalized Weyl's theorem. We give also a similar result for the equivalence of a-Weyl's theorem and generalized a-Weyl's theorem. Using these results, we study the case of polaroid operators, and in particular paranormal operators.

Key words B-Fredholm operator   Weyl's theorem   generalized Weyl's theorem a-Weyl's theorem   generalized a-Weyl's theorem   poles

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