Stability of Property (gm) under Perturbation and Spectral Properties Type Weyl Theorems

Authors : M. H. M. Rashid

Abstract : A Banach space operator T obeys property (gm) if the isolated points of the spectrum $\sigma(T)$ of T which are eigenvalues are exactly those points λ of the spectrum for which $T - \lambda I$ is a left Drazin invertible. In this article, we study the stability of property (gm), for a bounded operator acting on a Banach space, under perturbation by finite rank operators, by nilpotent operators, by quasi-nilpotent operators, or more generally by algebraic operators commuting with T.

Keywords : Weyl's Theorem, Weyl Spectrum, Polaroid operators, property (gm)
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