

Invariance of the Schechter Essential Spectrum under Polynomially Compact Operators Perturbation

BOULBEBA ABDELMOUMEN, AREF JERIBI, MAHER MNIF

Département de Mathématiques, Université de Sfax, Faculté des Sciences de Sfax,
Route de Soukra Km 3.5, B.P. 1171, 3000, Sfax, Tunisie

Boulbeba.Abdelmoumen@ipeis.rnu.tn, aref.jeribi@fss.rnu.tn, maher.mnif@ipeis.rnu.tn

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Abstract: In this work, we use the notion of the measure of noncompactness in order to establish some results concerning the class of semi-Fredholm and Fredholm operators. Further, we apply the results we obtained to prove the invariance of the Schechter essential spectrum on Banach spaces by means of polynomially compact perturbations.

Key words: Measures of noncompactness in Banach spaces, Fredholm operators, Schechter essential spectrum.

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