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ON A CHARACTERIZATION OF JERIBI, RAKOČEVIĆ, SCHECHTER, SCHMOEGER AND WOLF ESSENTIAL SPECTRA OF A 3×3 BLOCK OPERATOR MATRICES WITH NON DIAGONAL DOMAIN AND APPLICATION

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Abstract. In this paper, we investigate the stability of some essential spectra of a 3×3 block operator matrices with unbounded entries and with non diagonal domain by using the resolvent of this kind of matrix operator. Furthermore, we give an application from Three-Group transport theory to illustrate the validity of the main results in the Banach space $L_1([-a,a]\times[-1,1];dxdv)$, $a>0$.

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