

SPECTRAL PROPERTY OF OPERATOR MATRICES

SLAVIŠA V. DJORDJEVIĆ

*CIMAT, Calle Jalisco S/N, Mineral de la Valenciana
Apdo. Postal 402 C.P. 36240 Guanajuato, Gto. MEXICO
E-mail: slavdj@cimat.mx*

Let H and K be Banach spaces, let $B(H, K)$ denote the set of bounded linear operators from H to K , and abbreviate $B(H, H)$ to $B(H)$. For the operators $A \in B(H)$, $B \in B(K)$ and $C \in B(K, H)$, let M_C denote the operator matrices in $B(H \oplus K)$ defined with

$$M_C = \begin{pmatrix} A & C \\ 0 & B \end{pmatrix} : H \oplus K \rightarrow H \oplus K.$$

In this talk we will describe some of spectral properties of operator matrices M_C through the same properties of operators A and B like as: spectral continuity, single values extension property, (sub-)scalarity and etc.