

Title: Browder spectra of upper triangular matrix linear relations

Author(s): Yosra Chamkha and Maher Mnif

In this paper, we define a matrix linear relation and present some properties of this one. When $A \in \mathcal{BCR}(H)$ and $B \in \mathcal{BCR}(K)$ are given, we denote by M_C the matrix linear relation acting on the infinite dimensional separable Hilbert space $H \oplus K$, of the form $M_C = \begin{pmatrix} A & C \\ 0 & B \end{pmatrix}$. It is shown that M_C is Browder relation for some operator $C \in \mathcal{B}(K, H)$ if and only if A is upper semi Fredholm relation with finite ascent, B is lower semi Fredholm relation with finite descent and $n(A) + n(B) = d(A) + d(B)$.

Address:

Yosra Chamkha
Department of Mathematics
University of Sfax
Faculty of Sciences of Sfax
B.P.1171, 3000
Tunisia

Address:

Maher Mnif
Department of Mathematics
University of Sfax
Faculty of Sciences of Sfax
B.P.1171, 3000
Tunisia