A NOTE ON PRESERVERS OF PSEUDO SPECTRUM OF MATRIX PRODUCTS

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Abstract. Let $\mathcal{M}_2$ be the algebra of $2 \times 2$ complex matrices. For $\varepsilon > 0$, complete descriptions are given of the maps of $\mathcal{M}_2$ leaving invariant the $\varepsilon$-pseudo spectrum of $A \ast B$, where $A \ast B$ stands either for the Jordan semi-triple product $ABA$ or the skew product $AB^*$. 


Keywords and phrases: Operator, pseudo spectrum, pseudo spectral radius, nonlinear preservers.

REFERENCES

