IN Variance PROPERTIES OF AN OPERATOR PRODUCT INVOLVING GENERALIZED INVERSES

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Abstract. Given bounded linear operators $T_1$, $T_2$ and $T_3$, this paper investigates certain invariance properties of the operator product $T_1XT_3$ with respect to the choice of bounded linear operator $X$, where $X$ is a generalized inverse of $T_2$. Different types of generalized inverses are taken into account.

Key words. Bounded linear operators, Generalized inverse, Moore-Penrose inverse, Operator product, Invariance property.

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