

GENERAL PRESERVERS OF QUASI-COMMUTATIVITY ON HERMITIAN MATRICES*

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Abstract. Let H_n be the set of all $n \times n$ hermitian matrices over \mathbb{C} , $n \geq 3$. It is said that $A, B \in H_n$ quasi-commute if there exists a nonzero $\xi \in \mathbb{C}$ such that $AB = \xi BA$. Bijective not necessarily linear maps on hermitian matrices which preserve quasi-commutativity in both directions are classified.

Key words. General preserver, Hermitian matrices, Quasi-Commutativity.

AMS subject classifications. 15A04, 15A27, 15A57.

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