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SKEW SYMMETRY OF A CLASS OF OPERATORS

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ABSTRACT. An operator T on a complex Hilbert space \mathcal{H} is said to be skew symmetric if there exists a conjugate-linear, isometric involution $C : \mathcal{H} \rightarrow \mathcal{H}$ such that $CTC = -T^*$. In this paper, using an interpolation theorem related to conjugations, we give a geometric characterization for a class of operators to be skew symmetric. As an application, we get a description of skew symmetric partial isometries.

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