

PROPERTIES OF COMPLEX SYMMETRIC OPERATORS

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Abstract. An operator $T \in \mathcal{L}(\mathcal{H})$ is said to be complex symmetric if there exists a conjugation C on \mathcal{H} such that $T = CT^*C$. In this paper, we prove that every complex symmetric operator is biquasitriangular. Also, we show that if a complex symmetric operator T is weakly hypercyclic, then both T and T^* have the single-valued extension property and that if T is a complex symmetric operator which has the property (δ) , then Weyl's theorem holds for $f(T)$ and $f(T)^*$ where f is any analytic function in a neighborhood of $\sigma(T)$. Finally, we establish equivalence relations among Weyl type theorems for complex symmetric operators.

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