

MONOTONE TRANSFORMATIONS ON $B(H)$ WITH RESPECT TO THE LEFT-STAR AND THE RIGHT-STAR PARTIAL ORDER

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Abstract. Let H be an infinite dimensional complex Hilbert space, and let $B(H)$ be the set of all bounded linear operators on H . In the paper equivalent definitions for the left-star and the right-star partial orders on $B(H)$ are given and bijective additive maps on $B(H)$ which preserve the left-star or the right-star partial order in both directions are characterized.

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