

Peer Review

Review of: "Generalized Inverse Preservers of Hadamard Circulant Majorization"

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(1) Theorem 2.9 may be replaced by "Let $T: M_n \rightarrow M_n$ be linear. Then T preserves Hadamard circulant majorization if and only if $T^\wedge +$ preserves Hadamard circulant majorization. The authors have proved the necessity. The sufficiency follows from the fact that $(T^\wedge +)^\wedge + = T$."

(2) Let $\text{Ind } T = m$. If T preserves Hadamard circulant majorization, then $T^\wedge m$ and $T^\wedge(2m+1)$ also preserve Hadamard circulant majorization. Moreover, by Theorem 2.9, $[T^\wedge(2m+1)]^\wedge +$ preserves Hadamard circulant majorization, too. Hence, $T^\wedge D = T^\wedge m [T^\wedge(2m+1)]^\wedge + T^\wedge m$ preserves Hadamard circulant majorization, which gives a simple proof of Theorem 2.6.

(3) $T^\wedge k = T^\wedge \{k+1\}$ in Definition 1.7 should be $R(T^\wedge k) = R(T^\wedge \{k+1\})$.

Declarations

Potential competing interests: No potential competing interests to declare.