Disjoint dynamical properties of wedge operators

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Let H be a separable Hilbert space and $B_0(H)$ be the C^*-algebra of compact operators on H. Given an invertible bounded operator W and a unitary operator $\mathcal{U}$ on H, we let $T_{\mathcal{U},\mathcal{W}}$ be the operator on $B_0(H)$ given by $T_{\mathcal{U},W}(F) = WF\mathcal{U}$ for all $F \in B_0(H)$. Such operators are called wedge operators. In this talk, we characterize disjoint hypercyclic finite sequences of wedge operators. We provide also sufficient conditions for a finite sequence of the dual wedge operators to be disjoint topologically transitive. Finally, we give concrete examples and applications. The talk will be based on [1].

References

[1] Ivković, S., Tabatabaie, S.M. Disjoint Linear Dynamical Properties of Elementary Operators. Bull. Iran. Math. Soc. 49, 63 (2023). https://doi.org/10.1007/s41980-023-00808-1.