Chaotic behavior of linear operators and frequent hypercyclicity

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Abstract. We study hypercyclicity, Devaney chaos, topological mixing properties and strong mixing in the measure-theoretic sense for operators on topological vector spaces with invariant sets. More precisely, our purpose is to establish links between the fact of satisfying any of these properties on certain invariant sets, and the analog property on the closed span of the invariant set. We also give examples that illustrate these results.

References

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