

## CHAOTIC OPERATORS ON HYPERGROUPS

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*Abstract.* In this paper, we initiate a study of chaos, in the sense of Devaney, and topological transitivity on the  $L^p$  space of hypergroups, and give some sufficient and necessary conditions for weighted translation operators on hypergroups to be chaotic and transitive in terms of the Haar measure, weight functions and center elements of hypergroups. A characterization of topologically mixing weighted translations on hypergroups is also given.

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