Topological and measure-theoretical entropies of nonautonomous dynamical systems

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We study the nonautonomous discrete dynamical system (NADDS, for simplicity) given by a sequence $\{f_n\}_{n=1}^{\infty}$ of continuous self-maps of a compact metric space X. Different aspects of dynamics of NADDS (such as topological entropy, measure-theoretical entropy, minimality) were studied in [2], [5] [3] . We will describe a generalization of the notion of local measure entropy, introduced by Brin and Katok [1] for a single map, to NADDS.

Finally, we apply the theory of dimensional type characteristics of a dynamical system, elaborated by Pesin [4], to obtain a relationship between topological entropy of NADDS and its local measure entropies. We intend to present NADDS-homogeneous measures and recall some of their properties.

References

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