

Continuous Dependence of Attractors of Non-Autonomous Dynamical Systems (NDS) and Infinite Iterated Functions Systems (IIFS)*

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Abstract

The talk is dedicated to the study of the problem of continuous dependence of compact global attractors of non-autonomous dynamical systems and infinite iterated function systems. We prove that if a family of non-autonomous dynamical systems $\langle (X, \mathbb{T}_1, \pi_\lambda), (Y, \mathbb{T}_2, \sigma), h \rangle$ depending on parameter $\lambda \in \Lambda$ is uniformly contracting (in the generalized sense), then each system of this family admits a compact global attractor J_λ and the mapping $\lambda \rightarrow J_\lambda$ is continuous with respect to the Hausdorff metric. In quality of application we give a generalization of well known Theorem of Bransley of the continuous dependence of fractals on parameters.

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