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Strong sensitivity of systems satisfying the large deviations theorem. (English) Zbl 1332.54203
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Summary: Let f be a continuous map from a compact metric space X to itself. In this paper, We introduce two concepts of upper density one sensitivity and positive lower density sensitivity, and prove that (1) if f is a topologically strongly ergodic map, then it is upper density one sensitive; (2) if f is a sensitive map satisfying the large deviations theorem, then f is positive lower density sensitive.

MSC:

54H20 Topological dynamics (MSC2010)

Cited in **2** Documents

Keywords:

topologically strong ergodicity; sensitivity; upper density one sensitivity; positive lower density sensitivity; ergodic sensitivity; the large deviations theorem

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