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Statistically optimal almost-invariant sets. (English summary)

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Chaotic dynamical systems are often transitive. This transitivity is sometimes very weak. This paper presents fast, simple algorithms to divide the phase space into large regions, between which there is relatively little communication of trajectories. Based on earlier work by G. Froyland and M. Dellnitz [SIAM J. Sci. Comput. **24** (2003), no. 6, 1839–1863 (electronic); MR2005610 (2004e:37132)], focusing on a statistical description of transitivity, the new work takes advantage of theoretical results from the theory of reversible Markov chains.

Reviewed by *T. Y. Li*

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Note: This list reflects references listed in the original paper as accurately as possible with no attempt to correct errors.