On the definition of Strange Nonchaotic Attractor

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Abstract

We discuss the notion of Strange Nonchaotic Attractor widely considered in the literature, and formulate a precise definition of this notion that includes the well known models proposed by Grebogi *et al* [1] and Keller [2]; as well as a wide range of other similar examples proposed in the literature.

We will pay special attention to the properties of the Lyapunov exponents and to the validity of the different methods of checking the nonchaoticity condition.

References

- C. Grebogi, E. Ott, S. Pelikan, and J. A. Yorke. Strange attractors that are not chaotic. *Phys. D*, 13(1-2):261–268, 1984.
- [2] G. Keller. A note on strange nonchaotic attractors. Fund. Math., 151(2):139-148, 1996.