

A counter example to the periodic orbit conjecture

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Abstract

Let M be a closed manifold, let ϕ_t be a flow on M such that all of its orbits are periodic. A natural question is to ask whether or not the length of the orbits of ϕ is bounded (this is the periodic orbit conjecture). It turns out it isn't necessarily true when the dimension of M is greater than or equal to 4. I will explain one of the first counterexamples to this conjecture, given by Sullivan in dimension 5 in 1976.

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Location: B3.02

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