

Lyapunov exponents along periodic orbits for C^r generic dynamics.

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Abstract: Bochi and Bonatti recently characterized the vectors of Lyapunov exponents one may obtain by C^1 -perturbations along a periodic orbit, according to the lack of domination along those periodic orbit.

We prove a corresponding result in the C^r -topology and derive generic consequences. The "lack of domination" hypothesis however needs to be strengthened into a "lack of local domination" hypothesis.

This is one step towards the description of the generic dynamics that appear by C^r -perturbations of homoclinic tangencies.