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Title: “*A topological mechanism for diffusion in a priori chaotic dynamical systems, with application to the Neptune-Triton elliptic restricted three-body problem*”

Abstract. We present a topological mechanism of diffusion in a priori chaotic systems. The method leads to a proof of diffusion for an explicit range of perturbation parameters. The assumptions of our theorem can be verified using interval arithmetic numerics, leading to computer assisted proofs. As an example of application we prove diffusion in the Neptune-Triton planar elliptic restricted three body problem.

Joint work with Marian Gidea.