

On the bifurcation of hyperbolic invariant manifolds: From Numerics to Rigorous results, and then back to Numerics.

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First we will present some numerics showing different types of bifurcations of hyperbolic invariant manifolds in skew product systems (Figueras, Haro, "Different scenarios for hyperbolicity breakdown in quasiperiodic area preserving twist maps", Chaos 2015).

Then, we will present rigorous results proving the existence of these. Finally, we will come back and show some more Numerics inspired from the rigorous results.

This is a collection of works done with A. Haro, D. Strängberg and M. Canadell.