

**NONUNIFORMLY HYPERBOLIC STEP-SKEW PRODUCTS
WITH ZERO IN THE INTERIOR OF THE LYAPUNOV
SPECTRUM**

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I will present our results (joint with Katrin Gelfert and Lorenzo Diaz) on a class of skew products (base: Smale's horseshoe, fiber: circle homeomorphisms) which robustly have the interval of central Lyapunov exponents containing zero in its interior. That is the simplest class of systems that are nonuniformly hyperbolic, but not in a 'onesided' way (as, say, Manneville-Pomeau map) but in 'twosided' way. I will present a description of the space of invariant measures and of the (central) Lyapunov spectrum of the system.