

Skeletons for transitive fibered maps

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We study a family of skew product maps with circle fibers modeled over a shift. We require the maps to satisfy a set of axioms which equivalently characterize nonhyperbolic robustly transitive maps. We analyze the space of ergodic hyperbolic (with either expanding or contracting fiber exponent) and nonhyperbolic measures in the weak* topology and in entropy. Our methods include the explicit construction of hyperbolic sets based on an approximation using so-called skeletons, multi-variable-time horseshoes, and our set of axioms. This is joint work with L.J. Díaz and M. Rams.