Smooth models and the Anosov–Katok method

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One of the classic methods for constructing smooth mappings was developed almost half a century ago in a landmark paper by D. Anosov and A. Katok. Recently, in joint work with Matt Foreman we have used this method in order to show that the isomorphism relation when restricted to smooth mappings is not Borel and is in fact a complete analytic set. I will explain these concepts and our work which is based on a new symbolic representation of irrational rotations.

References

1. *Foreman M., Weiss B.* A symbolic representation for Anosov–Katok systems // J. Anal. Math. To appear.