
VIOREL NITICA, West Chester University

Transitivity of Heisenberg group extensions

We show that among C^r extensions ($r > 0$) of a uniformly hyperbolic dynamical system with fiber the standard real Heisenberg group H_n of dimension $2n + 1$, those that avoid an obvious obstruction to topological transitivity are generically topological transitive. Moreover, if one considers extensions with fiber a connected nilpotent Lie group with compact commutator subgroup (for example, H_n/Z), among those that avoid the obvious obstruction, topological transitivity is open and dense. This is joint work with I. Melbourne and A. Torok.