RIGIDITY AND ERGODICITY OF PARTIALLY HYPERBOLIC ENDOMORPHISMS ON 2-TORUS

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Time：Wed, Nov. 22nd, 15:30-16:00
Venue: Room 102, SCMS

Abstract:

We consider rigidity and ergodicity of two classes of non-invertible partially hyperbolic systems on 2-torus: endomorphisms derived from Anosov (DA) and skew products. We show that a topological semi-conjugacy between a DA endomorphism with its linearization leads to rigidity on Lyapunov exponents and ergodicity. For a class of skew products over circle expanding maps, we give a dichotomy on it: either stable ergodicity, or fiber rotation. Finally, we talk about some related questions.