

# Dynamics of Smooth Chaotic Surface Diffeomorphisms

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I will survey some of the recent developments obtained together with J. Buzzi and S. Crovisier on the dynamics of infinitely differentiable surface diffeomorphisms with positive topological entropy. Such diffeomorphisms admit finitely many ergodic measures of maximal entropy, and typical orbits for these measures behave like typical orbits of countable state Markov chains, with spectral gap.