

Enrique PUJALS, CUNY, USA

Title: Renormalization of dissipative diffeos of the disk

Abstract: In a joint work with S. Crovisier and C. Tresser we proved that any Henon map (with Jacobian smaller than $1/4$) lying on the boundary of diffeomorphisms with zero entropy is infinitely renormalizable. Aiming to tackle the converse problem, the talk will discuss how to develop a non-perturbative renormalization theory for Hénon-like maps developed jointly with S. Crovisier, M. Lyubich and Jonguk Yang which enables us to control the small-scale geometry of the dynamic and establish a priori bounds that are finite-time checkable.