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Title: Geometry of the strong foliations in partially hyperbolic attractors

Abstract: The study of invariant sets saturated by strong foliations appears naturally when searching for existence and finiteness results of attractors. I will explain a perturbation result in the C^1 -topology which allows to show that a partially hyperbolic compact invariant set saturated by the unstable foliation cannot admit joint integrability in no point for ϵ -generic diffeomorphisms. As a consequence one obtains that for a C^1 -open and dense subset of diffeomorphisms if such an invariant set has center dimension one, then it may have only finitely many minimal unstable saturated sets. In dimension 3, this allows to show that far from homoclinic tangencies an open and dense set of diffeomorphisms have only finitely many (quasi)-attractors.

This is joint work with S. Crovisier and M. Sambarino