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Title: Decompositions of surface diffeomorphisms

I will review recent progresses and questions about the dynamical decomposition of surface diffeomorphisms. For uniformly hyperbolic systems, Smale's spectral theorem splits the dynamics into its transitive basic sets, that may then be studied separately. This can be extended to general systems in different ways topological (filtrations, renormalization) or measurable (Borel homoclinic classes). In good cases, the dynamics inside each piece may be studied as for uniformly hyperbolic systems: most of their orbits equidistribute towards natural invariant measures (physical or maximizing the entropy), and their statistics are described by limit theorems.