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Codimension one basic sets of Axiom A flows

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Axiom A systems (in short, A-systems) were introduced in Dynamical Systems by Steve Smale as the systems whose non-wandering set is hyperbolic and the closure of periodic points. Well known that a non-wandering set of such system splits into so-called basic sets (invariant and transitive components). Basic sets of maximal dimension are codimension one ones.

We consider A-flows (dynamical systems with continuous time) with non-mixing codimension one basic sets on closed manifolds. One shows that such basic set is either an attractor or repeller. We describe a topological structure of special compactification of basin of attractors. Especially, we consider two-dimensional attractors on 3-manifolds.

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