



Math for the people, by the people.

homoclinic

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If X is a topological space and f is a flow on X or an homeomorphism mapping X to itself, we say that $x \in X$ is an homoclinic point (or homoclinic intersection) if it belongs to both the stable and unstable sets of some fixed or periodic point p ; i.e.

$$x \in W^s(f, p) \cap W^u(f, p).$$

The orbit of an homoclinic point is called an homoclinic orbit.