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attracting fixed point

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| Related topic | GloballyAttractingFixedPoint |
| Related topic | LiapunovStable |
| Related topic | StableFixedPoint |
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| Related topic | UnstableFixedPoint |

Let X be a vector field on a manifold M and let F_t be the flow of X . A fixed point x^* of X is called *attracting* if there exists a neighborhood U of x^* such that for every $x \in U$, $F_t(x) \rightarrow x^*$ as $t \rightarrow \infty$.

The stability of a fixed point can also be classified as stable, unstable, neutrally stable, and Liapunov stable.