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## locally maximal

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Entry type	Definition
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Synonym	basic set

Let  $f : M \rightarrow M$  be a diffeomorphism of a smooth manifold  $M$ , and let  $\Lambda$  be a hyperbolic set for  $f$ . We say that  $\Lambda$  is *locally maximal* or *basic* if there exists a neighborhood  $U$  of  $\Lambda$  such that

$$\Lambda = \bigcap_{n=-\infty}^{\infty} f^n(\overline{U}).$$