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semilocally simply connected

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Synonym locally relatively simply connected

Related topic Connected2

Related topic SimplyConnected
Related topic ConnectedSpace
Related topic LocallyConnected

A topological space X is *semilocally simply connected* if, for every point $x \in X$, there exists a neighborhood U of x such that the map of fundamental groups

$$\pi_1(U,x) \longrightarrow \pi_1(X,x)$$

induced by the inclusion map $U \hookrightarrow X$ is the trivial homomorphism.

A topological space X is connected, locally path connected, and semilocally simply connected if and only if it has a universal cover.