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pointed topological space

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Synonym based topological space

Related topic CategoryOfPointedTopologicalSpaces

Related topic PolishGSpace Related topic OmegaSpectrum **Definition** Suppose X is a non-empty topological space and x_0 is an element of X. Then the pair (X, x_0) is called a *pointed topological space*, or a based topological space.

The idea with pointed topological spaces is simply that one fixes a base point in the space. This is necessary, for instance, when defining the fundamental group of a topological space.