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Polish space

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A Polish space is a topological space that is homeomorphic to some complete separable metric space.

Equivalently, a topological space is a Polish space if it is separable and completely metrizable.

Examples of Polish spaces are the euclidean space \mathbb{R}^n (with the usual topology), the Cantor space, and the <http://planetmath.org/BaireSpace2Baire> space.