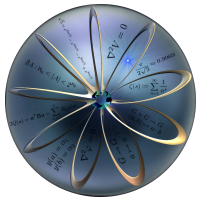

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extremally disconnected

Canonical name	ExtremallyDisconnected
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Classification	msc 54G05
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A topological space X is said to be *extremally disconnected* if every open set in X has an open closure.

It can be shown that X is extremally disconnected iff any two disjoint open sets in X have disjoint closures. Every extremally disconnected space is totally disconnected.

Notes Some authors like [**?**] and [**?**] use the above definition as is, while others (e.g. [**?**, **?**]) require that an extremally disconnected space should (in addition to the above condition) also be a Hausdorff space.

References

[1] S. Willard, *General Topology*, Addison-Wesley, Publishing Company, 1970.

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[4] N. Bourbaki, *General Topology, Part 1*, Addison-Wesley Publishing Company, 1966.