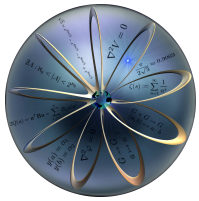

planetmath.org

Math for the people, by the people.

$T4$ space

Canonical name	T4Space
Date of creation	2013-03-22 14:42:15
Last modified on	2013-03-22 14:42:15
Owner	matte (1858)
Last modified by	matte (1858)
Numerical id	5
Author	matte (1858)
Entry type	Definition
Classification	msc 54D15
Related topic	SeparationAxioms
Related topic	HowIsNormalityAndT4DefinedInBooks

Definition 1. *[?] Suppose X is a topological space. Further, suppose that for any two disjoint closed sets $A, B \subseteq X$, there are two disjoint open sets U and V such that $A \subseteq U$ and $B \subseteq V$. Then we say that X is a* T_4 space.

Notes

It should be pointed out that there is no standard convention for separation axioms in topology. The above definition follows [**?**]. However, in some references (e.g. [**?**]) the meaning of T_4 and normal are exchanged.

References

[1] L.A. Steen, J.A.Seebach, Jr., *Counterexamples in topology*, Holt, Rinehart and Winston, Inc., 1970.

[2] J.L. Kelley, *General Topology*, D. van Nostrand Company, Inc., 1955.