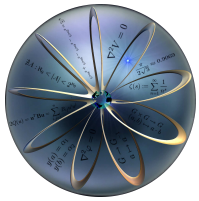

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development

Canonical name	Development
Date of creation	2013-03-22 14:49:49
Last modified on	2013-03-22 14:49:49
Owner	mathcam (2727)
Last modified by	mathcam (2727)
Numerical id	6
Author	mathcam (2727)
Entry type	Definition
Classification	msc 54D20
Defines	developable
Defines	nested development
Defines	Vickery's theorem

Let X be a topological space. A *development* for X is a countable collection $F_1, F_2, \ldots$ of open coverings of X such that for any closed subset C of X and any point p in the complement of C, there exists a cover F_j such that no element of F_j which contains p intersects C. A space with a development is called *developable*.

A development $F_1, F_2, \ldots$ such that $F_i \subset F_{i+1}$ for all i is called a *nested development*. A theorem from Vickery states that every developable space in fact has a nested development.

References

[1] Steen, Lynn Arthur and Seebach, J. Arthur, *Counterexamples in Topology*, Dover Books, 1995.