

Re: Compactness

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On Sun, 3 Dec 2006, Saurav wrote:

I heard that the defn of compactness by filter basis of closed sets, or the convergence of ultrafilters, is related to the following in some way, which I don't know:

Compactness of anything, not only of topological spaces, means " it is without holes", where holes are infinite process without end.

Kindly explain if there is at all such concepts, and if there is, explain it.

$[0,1] \cup [2,3]$ is compact and has a big hole, $(1,2)$.
 $(1,2)$ is an infinite process, ie $(1,2) = \bigcup_n (1+1/n, 1-1/n)$

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