

Re: Local Homeomorphisms

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On Apr 20, 5:48 am, William Elliot <ma...@xxxxxxxxxxxxxxxxxxxxxx> wrote:

On Fri, 18 Apr 2008, Jannick Asmus wrote:

On 18.04.2008 12:13, William Elliot wrote:

Continuous $f: X \rightarrow Y$ is a local homeomorphism when for all x , some open U neighborhood x with U homeomorphic $f(U)$ and $f(U)$ open.

Then clearly local homeomorphisms are open and when surjective are quotient maps.

Why is it that $f(U)$ needs to be open?

This is just a question of definition, hence convention. I do not argue about definitions.

What goes wrong if $f(U)$ isn't open?

Locally compact is another property of the domain space.

Apparently not needed.