

Re: Compact connected Hausdorff

Source: <http://sci.tech-archive.net/Archive/sci.math/2005-12/msg01161.html>

- *From:* Jannick Asmus <jannick.news@xxxxxx>
 - *Date:* Mon, 05 Dec 2005 08:55:44 +0100
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On 05.12.2005 00:17, quasi wrote:

> On Sun, 04 Dec 2005 23:59:04 +0100, Jannick Asmus

> <jannick.news@xxxxxx> wrote:

>

>

>>On 04.12.2005 20:11, quasi wrote:

>>

>>>

>>>The components of U must be open in U, hence open in X.

>>

>>Why that? Is that really true?

>>

>>J.

>

>

> A component of U must be open in U (a component of any space is both

> open and closed in that space).

First, let me say that in this context 'component' means 'connected component' to me. Just to avoid confusion.

Could you prove that a component is open **without** any additional assumption on U (e.g., U has only finitely many components or U is locally connected)?

>

> But since U was specified as open in X, it follows that the components

> of U are also open in X (a relatively open subset of an open set is

> open).

>

> What am I missing?

>

> quasi

J.

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Re: Compact connected Hausdorff

- *Follow-Ups:*

- ◆ *Re: Compact connected Hausdorff*
 - ◇ *From:* quasi
- ◆ *Re: Compact connected Hausdorff*
 - ◇ *From:* William Elliot

- *References:*

- ◆ *Compact connected Hausdorff*
 - ◇ *From:* William Elliot
- ◆ *Re: Compact connected Hausdorff*
 - ◇ *From:* quasi
- ◆ *Re: Compact connected Hausdorff*
 - ◇ *From:* Jannick Asmus
- ◆ *Re: Compact connected Hausdorff*
 - ◇ *From:* quasi

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