

Re: Cantor Confusion

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- *From:* mueckenh@xxxxxxxxxxxxxxxxxxxx
 - *Date:* 16 Mar 2007 07:07:44 -0700
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On 16 Mrz., 14:35, Carsten Schultz <cars...@xxxxxxxx> wrote:

mueck...@xxxxxxxxxxxxxxxxxxxx schrieb:

On 16 Mrz., 01:31, Virgil <vir...@xxxxxxxx> wrote:

In article
<1173954799.919385.61...@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx>,

For even binary trees (where even here means all paths are
of equal
length),

Only those are under discussion here.

the number of paths increases exponentially with number of
levels (lengths of a path). Adding 1 to the number of levels
doubles the
number of paths.

The tree is continuous because its nodes are
connected by paths.

That is a distinctly non-standard meaning for "continuous"
in
mathematics.

Re: Cantor Confusion

It shows, however, that the number of paths cannot jump from finite to uncountable.

Using a word does not constitute proof.

And indeed $\sup_{n < \aleph_0} 2^n = \aleph_0 < 2^{\aleph_0}$, so in this sense the function $\kappa \mapsto 2^\kappa$ is not continuous. If you can prove (not claim!) by using your tree that it is, then you will finally have succeeded in showing that ZF is inconsistent.

Have fun,

I had already quite a lot.

The function of all cross sections, $f: n \mapsto 2^n$, is "continuous" in the sense that never a jump by more than a factor 2 can occur because the nodes of the tree are connected by an untearable network. The domain is the same as the range, namely \mathbb{N} . That is fact, not by claim but by construction of the tree. That's why I constructed it.

Regards, WM

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