

# Re: Cantor Confusion

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*Source:* <http://sci.tech-archive.net/Archive/sci.math/2006-10/msg04988.html>

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- *From:* "William Hughes" <[wpihughes@xxxxxxxxxxxx](mailto:wpihughes@xxxxxxxxxxxx)>
  - *Date:* 18 Oct 2006 04:33:21 -0700
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mueckenh@xxxxxxxxxxxxxxxxxxxx wrote:

Dik T. Winter schrieb:

In article <1161008572.469763.93200@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx>  
mueckenh@xxxxxxxxxxxxxxxxxxxx writes:

> jpalecek@xxxxxx schrieb:

...

>> The fact that you cannot compute a list of all computable reals does  
>> not mean that there is no list of all computable numbers. There is one,  
>> and it is not computable.

>>

> The fact that you cannot compute a list of all reals does not mean that  
> there is no list of all reals. There is one, but it is not possible to  
> publish this list.

You are seriously wrong.

You should have noted that this was an ironic reply. But in order to  
avoid machines and undecidabilities:

The set of constructible numbers is countable.

[The terms "constructable" and "computable" do not mean  
the same thing. The word you want is "computable"]

With the definitions you use, the set of computable numbers  
is not countable.

– William Hughes

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