

Re: Cantor Confusion

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- *From:* Han de Bruijn <Han.deBruijn@xxxxxxxxxxxxxxxx>
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stephen@xxxxxxxxxxx wrote:

Han de Bruijn <Han.deBruijn@xxxxxxxxxxxxxxxx> wrote:

stephen@xxxxxxxxxxx wrote:

But everything can be modelled as a set.

Define "everything" and prove that claim.

By "everything", I meant everything mathematical. Of course that is not 100% precise. And no, I cannot prove it. But so far all the various objects of mathematics can be modelled using set theory. That is what is meant by set theory being a foundation for mathematics. If someone were to invent something "mathematical" (whatever that may mean exactly) that could not be described in terms of set theory, then set theory would no longer serve as a foundation. But given that the basics such as the real numbers, functions, limits, calculus, etc. all can be founded in set theory, it would have to be something strange indeed. Not that there is anything wrong with strange, but you probably would like it less than set theory.

Correction. By "everything" you probably mean "everything according to nowadays mainstream mathematics", which is, of course, "mathematics", according to your probably rather limited view. But since you can not really prove anything of the kind, I will rest my case.

Han de Bruijn

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