Re: Implementable Set Theory and Consistency of ZFC

Source: http://sci.tech−archive.net/Archive/sci.math/2007−11/msg00989.html

* *From*: "Jesse F. Hughes" <jesse@xxxxxxxxxxxxx>
* *Date*: Mon, 05 Nov 2007 09:06:42 −0500

Han de Bruijn <Han.deBruijn@xxxxxxxxxxxxxx> writes:

> Jesse F. Hughes wrote:
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>> Han de Bruijn <Han.deBruijn@xxxxxxxxxxxxxx> writes:
>>
>>> Marshall wrote:
>>>
>>>> 2) ZFC, without Infinity.
>>>> 3) ZFC, with the negation of Infinity.
>>>> Is it clear why 2) and 3) are different?
>>>
>>> Not to me. I don't know what Foo is and I don't know what ~Foo is.
>>
>> Weird. You have repeatedly said that there are no infinite sets. Now, evidently, you don't know what that means.
>
> You're mixing up my _intuitive_ notion of the infinite and your _formal_ "definition" of it. Yes. I know what I mean by "no infinite sets", but the whole problem is to communicate that meaning with you and your kind.

Are you saying that the (formal) axiom of infinity is hard to understand?

You know what (0 in X) means, right?

You know what (A y)(y in X −> y u {y} in X) means, right?

So you know what (0 in X) & (A y)(y in X −> y u {y} in X) means, yes?

Thus, you surely know what

(E X)((0 in X) & (A y)(y in X −> y u {y} in X))

means, yes?

So where is the problem exactly?

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"[I]n mathematics there are two types of integers: primes and composites. [...] It's like how in the world there are mostly two kinds of people: male and female [...] and lots of reasons for interest in the differences." −− JSH on math/biology
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