

Re: Implementable Set Theory and Consistency of ZFC

Source: <http://sci.tech-archive.net/Archive/sci.math/2007-10/msg04005.html>

- *From:* "Jesse F. Hughes" <jesse@xxxxxxxxxxxxxx>
 - *Date:* Mon, 22 Oct 2007 11:30:24 -0400
-

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

Jesse F. Hughes wrote:

But whatever it means, since a model of ZFC is also a model of ZFC – Infinity, you seem to be claiming that you can build an infinite set using only the first four axioms.

But the reverse is not true: a model of (ZFC – Infinity) is not a model of ZFC(Infinity included). So I'm building only (ZFC – Infinity), with those first four axioms: extensionality, empty set, pairing, union. All finite sets can be build with these 4 axioms (but there are infinitely many of these finite sets, like with the naturals).

In other words, you are **not** speaking about every model of ZFC – Infinity, despite what you claimed.

And just as I suggested.

—

Jesse F. Hughes

"Maybe I screwed up on one of my assumptions [...]. Otherwise, um, it's very easy to factor, and things are about to get really, really weird." — James S. Harris

.