Re: Separation,Power and Countability.

Source: http://sci.tech−archive.net/Archive/sci.math/2007−06/msg03825.html

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- *From*: MoeBlee <jazzmobe@xxxxxxxxxxx>
- *Date*: Wed, 20 Jun 2007 10:37:32 −0700

On Jun 20, 9:24 am, zuhair <zaljo...@xxxxxxxxx> wrote:

> On Jun 20, 12:54 am, MoeBlee <jazzm...@xxxxxxxxxxx> wrote:
>
> > > for example take PPw , and let d be a member of PPw
> > > that is not a member of Pw and let d be indefinable
> > > and uncountable.
> > > Now what is the proof that Ef(f:Pw −> d)
>
> what is that: the question is what is the proof that
> Ef(f:Pw −> d, f is injective).

Yes, you need to say "f is injective" if that is what you mean.

> > Anyway, without the continuum hypothesis, I don't know why all such d
> > are equinumerous with Pw. Maybe they are, but I don't know why one
> > would think that they are.
>
> well my question is of course without the continuum hypothesis. But
> let's assume the continuum hypothesis
> SHOW me an an injective function from Pw to d, Remember d is an
> uncountable and indefinable subset of Pw.

First, if d is not defined as a particular set, then, it is not clear
to me what we can show any PARTICULAR function that has d as a
superset of the range. Second, even WITH the generalized continuum
hypothesis (I meant 'generalized' in my first mention also), I don't
know that there is a proof that Pw dominates d. (With the generalized
continuum hypothesis, d is either equinumerous with Pw or with PPw.)
Third, just to note, now you've been explicit that f needs only to be
an injection (not necesarily a bijection).

More basically, I don't know what you think is at stake in showing
that d is dominated by Pw.

of course I am speaking in a set theory without choice.

Then you're not allowing the generalized continuum hypothesis.

MoeBlee

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