Re: The phrase 'dark matter'

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- *From*: The TimeLord <mathnphysics−not@xxxxxxxxxxxxx>
- *Date*: Tue, 25 Jul 2006 00:18:00 −0500

On Thu, 20 Jul 2006 22:46:12 −0700, "tomgee" <tyropress@xxxxxxxxx> wrote
in <1153460772.485123.73670@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx>:

> The TimeLord wrote:
>
> > On Mon, 17 Jul 2006 14:11:25 −0700, "tomgee" <tyropress@xxxxxxxxx>
> > wrote
> > in <1153170685.919021.109060@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>:
> >
> > > Randy Poe wrote:
> > >
> > > > socratus wrote:
> >
> > [...]
> >
> > > > Yes, they are. DM is not dark at all, so that term used to
> > > > describe
> > > > it or even define it is clearly a misnomer no matter how hard
> > > > you wish
> > > > upon a star that it isn't. In fact, DM can be more accurately
> > > > described as invisible matter because we can see right
> > > > through it,
> > > > obviously.
> > >
> > > Through it? How do you know? Generally stars don't resolve below the
> > > Raleigh limit anyway in a telescope. So how would you be able to tell
> > > that dark matter is transparent?
> >
> > Because we can see through it, just like we see through light, apparently.
>
> What's the evidence that we can see through it?

> We are talking about two states: visible and invisible. Those researching DM state today state that it is invisible and can only be detected by its observed effects.

Which is what I said.

> We can see "through" light, as explained in my model, because we only see

I'm not sure that seeing through light even makes any sense. Nevertheless, I don't know your model. Have you submitted a paper or have a URL you can share?

[...]

> It appears to us that space is empty between objects, so if DM exists,

The reason that space appears empty is because it is there are so few small particles (1 per cubic meter approx.) and even fewer larger objects in the space between galaxies. However, we can tell from the behavior of light if there are unseen objects/particles between us and stars/galaxies. An example of this is the North American Nebula in Cygnus or the Horsehead Nebula in Orion. The starlight behind the dust is dimmed and reddened by the dust. In some dust clouds there even seems to be evidence of polarization of the starlight that comes through it.

> we do not "see" it the same way we do not "see" light. They are two different things that appear to be transparent to our eyes, but for different reasons. Light is energy as we know it, but DM is not, since it seems to exist even where there is no light. Recent reports show that it is everywhere objects are not.

Which reports would that be? If there are no objects to reveal the dark matter, then how do we know it's there? Remember that the fundamental definition of dark matter is that it is not directly seen, but that it exerts a force on another *object*.

> > Physics is not all that precise in term−usage as you once imagined,
> > eh?

> That statement is moot.

Yes, it is. Sorry.

Name something where physics is imprecise.

> We assume it has gravitational mass, based on the observed effects,
> but that conclusion is only one among others that are possible;
> therefore,

> If dark matter is not interacting with the stars gravitationally, then what is the underlying force? It can't be electromagnetic, because that force would be evidenced in the spectra (Zeeman splitting and/or synchrotron radiation).

Yes, I agree that it would be evidenced in the spectra, but how do we know it is not? The Cherenkov radiation is evidence of the creation of

If we don't know that the evidence is there then how would we know that it is there? I know this question sounds a bit stupid, but it goes to the heart of why observable data is so important. If it's not observed, then it is not really important for practical application.

mass, and my model shows the creation of light in a very similar way,

No. Cherenkov radiation is the evidence that particles are going faster than the speed of light in a particular medium. Example is electrons in a nuclear reactor going faster than c/1.33. If you are lookin for mass creation, then the best bet is to look for absorbtion lines corresponding to that mass creation. An example would be the 511 keV line for electron−positron events.

If your model shows Cherenkov radiation for mass creation, then it is faulty, since it does not square with observation.

[...]

> > it is not a fact yet, as you assert. Also, to say it is call "dark"
> > because it does not radiate is another phony explanation,
> > since
> > blackbodies do not radiate either, they only absorb radiation.
> > For
> > such
>
> Blackbodies do radiate. Example = an incandescent light bulb (3000 degK
> black−body radiation). Another example = the sun (5600 degK black−body
> radiation).

Yes, of course blackbodies radiate. I was wrong about all that. It was
a bad day for me and I had a hard time concen− trating on what I was
doing. I do not know enough about blackbodies to have tried to use them
as an example, and I should have known better.

No problem.

[...]

> Bull. Blackbodies and black holes are completely different. Just look
> at their definitions in any basic astronomy book.

That does show how little I know about blackbodies. Sorry.

No problem.

> It's clear you don't know about this. You should be posting this to
> alt.sci.physics.new−theories, which is an NG devoted to crank ideas.

I am grateful you said no more than that. Others would not be so
lenient.
As I've said before, I am just as fallible as others, esp. when I try
to
respond to everyone in a single day. I am a skeptic, but I'm not a
pessimist, and tomorrow is another day!

[smile] No problem. I kind of view myself as an intellectual
adventurer too, even though I have degrees in physics and math.

−−
// The TimeLord says:

// Pogo 2.0 = We have met the aliens, and they are us!

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