

Re: Distribution & Redistribution

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"robert j. kolker" <nowhere@nowhere.net> writes:

> *jmhall@apex.home.net* wrote:

>

> > *But we have new physics that is well supported by the empirical
> > observations, some claim even better supported than existing
> > cosmology theories. So which particular laws of physics are being
> > ignored? Even the "Beam me over Scotty" suggestion is merely
> > an application of $e = mc^2$. We all know that space-time are curved
> > and can be distorted. We also know that the models of the universe
> > all require more dimensions than the 4 everyone is able to
> > physically experience and observe.*

>

> *Give a citation in any refereed physics journal that indicates a
> massive object can be transported at greater than light speed or that*

Again and again, why? So far you're that only person who keeps bring up the issue of FTL speeds. Who are you talking with?

> *information can be exchanged at greater than light speed. And spare me
> the double delayed experiments showing the violation of Bell's
> inequality. Abner Shimony has demonstrated that an instantaneous
> correlation cannot be used to transmit a message.*

> > *Finally, if we take the quantum physics at its word we really
> > only have a sample of 1, which is not really a great sample size
> > to base statistical inferences from when the state population
> > size is infinite.*

>

> *Quantum field theory (in its full glory it is the Standard Model)*
> has been around since 1928. It has correctly predicted effects in a
> wide variety of conditions and has never been falsified even
> once. Millions and millions of experiments support the theory and none
> refute it. The theory is about this universe and no other. Quantum
> theory is NOT supported by mere statistical arguments. It is supported
> by hard and highly accurate physical measurements.*

And so is the count of the number of blue marbles taking out of a bowl. In a fields where one of the fundamental concepts is indeterminacy or uncertainty of state (until that state is interrupted and so changed) you're faith in empiricism is rather quaint.

I suppose you'll simply tell me something about massive objects and c or again talk about a bunch of experiments (which support a number of existing cosmological theories concerning that actual nature and structure of the universe).

Oh, and as for that standard model:
just google standard model problems

It's odd that one of the problems is that the standard model cannot answer questions about why mass and you keep harping on the issue of mass and speed. Perhaps we'll find ways to control mass. There are so many things we don't know and so many people who reject the idea of pushing limits to learn.

> >
> >> *The conditions under which the speed of light could be exceeded by a*
> >> *massive body would have to be such that they are unlike anything ever*
> >> *met in a laboratory or observed in nature.*
> > *Other than you, who's been pushing the FTL speeds? Seems that*
> > *you're only arguing with yourself on that point.*
>
> *I have been arguing that a massive object –cannot– even achieve light*
> *speed. If we are going anywhere it will be slower than light*
> *speed. The reason why a massive object cannot be accelerated to a*
> *speed greater than light speed is because it cannot even go as fast as*
> *light in the first place.*

And who has been making any big deal with that constrain? You. Everyone else simply suggested that it was not a binding constraint on space travel—that is we can still seek to travel in space and just do it slowly—or that the distances might actually be a variable that we will learn to manipulate or that massive objects might not be required.

In short others appear to be accepting the problem and looking for ways around it rather than suggesting one overcome the constraint directly.

> *As to the other proposal of somehow transforming any matter into*
> *photons, that fails in a number of ways. Aside from information loss*
> *due to the Heisenberg Principle, high energy photons can only*
> *transform to pairs of oppositely charge particles which as soon as*
> *they materialize will annihilate each other. The principle of charge*

- > *conservation (which has never been falsified experimentally) weighs*
- > *heavily against matter→energy→matter transformations. The only thing*
- > *object at the receiving end, from a pool of material. But the*
- > *information for the reconstruction cannot be reliably read out, again*
- > *by Heisenberg.*

We have no idea what relevance Heisenberg has here because we have no idea what the real engineering tolerances have to be nor do we know if there's any self-ordering that might be inherent in any energy to matter transformation that would reduce the informational demands.

jmh