Re: Testing the oneway lightspeed constancy

Source: http://sci.tech−archive.net/Archive/sci.astro/2008−03/msg00187.html

- *From*: "N:dlzc D:aol T:com \(dlzc\)" <dlzc1@xxxxxxx>
- *Date*: Fri, 21 Mar 2008 15:43:35 −0700

Dear xray4abc:

"xray4abc" <lemhenyil@xxxxxxxx> wrote in message
news:3ff69dc1−b2d5−4aa8−a6a4−5d8ed3d23523@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
On Mar 21, 3:18 pm, "N:dlzc D:aol T:com \(dlzc\)" <dl...@xxxxxxx>
wrote:

> Dear xray4abc:
>
> "xray4abc" <lemhen...@xxxxxxxx> wrote in message
>
> news:abcf10f2−27f1−4a78−9909−3df143fc5aa4@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
> On Mar 20, 11:45 pm, dlzc <dl...@xxxxxxx> wrote:
> ...
>
>> OK. Now by your knowledge, which of those
>> experiments does not use 2−way propagation
>> or reflections of light ? (Reflections falsify the
>> speed of light measurements!)
>
> This is not correct. *Any* determination of
> speed *requires* two−way measurement. Note
> that any "standard distance" confers "two−way"
> to any measurement.
>
> Than should I conclude that there is no
> real, direct experimental, evidence validating
> the c=const. postulate?

If by your question you meant "one way", correct. You should also note that SR's second postulate is not required, since Maxwell requires a constant speed of light as a result (not a postulate), and Maxwell is covered in the first of special relativity's postulates.

> Do not forget, I am just interested in
> the subject of speed−constancy here and not
> the speed value itself! Note that, should the
> light have "any" speed with respect to the
> observer, this would not have any impact on
> the measured frequency ! As such, the
> speed of light is not an issue for me right now.

OK.

> (On the other hand I doubt that " any
> determination of speed requires 2−way
> measurement" as you state above.

It is fact.

> I sense a, kind of, "circus vicious" here.
> But let's forget about it ,as it is not the point
> here!)
> I am aiming to understand how c=const
> can happen.

Learn Maxwell. You will a "how", but not a "why".

> But then, I want to make sure that I am
> dealing with an experimental fact and not
> just a postulate meant to build a theory!

Postulate not required, as previously stated.

> The fact that this theory gives good results
> here and there does not impress me any
> more.

I am sorry.

> −(−1)=1 You know what I mean! (2 mistakes
> can cancel each other giving a correct result!)

All theories we have are wrong. They just happen to give useful results oever a certain domain. The domain for special relatiivty is fairly broad. Two mistakes cannot cancel themselves out over the whole domain.

....

> This increase of the mean lifetime is supposed to follow the increase in energy, so that the ratio of "disintegration" states to the number of "relatively stable states" is dropping .

> The muon "sees" no difference in its energy levels. How does it know how much energy others see it having?

> You think so?
> O/\/\/\/\/\O <−−−−−−−−F
> Then, if you push the system of 2 bodies, would they "know" how much energy they should get?

Do you know *anything* about muons, and how they are formed? They are formed in a single "impulse", there is no "acceleration history".

> Note that muons do not "live longer" if high speed protons are shot past them... except to the protons of course.

> My bottom line is : The muon behaviour probably will be explained by quantum mechanics without any SRT involved!

So you don't know any quantum mechanics either. *That* muons have a "halflife" is described by quantum mechanics. That is halflife is some proportion of some other unstable system's halflife is covered by quantum mechanics. That the halflife is so many microseconds in a rest frame... quantum mechanics can't go there. Relativity, being classical, does.

David A. Smith

.