

Re: Testing the oneway lightspeed constancy

that any "standard distance" confers "two-way"
to any measurement.

Than should I conclude that there is no
real, direct experimental, evidence validating
the $c=\text{const.}$ 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.

I am working right now with Maxwell's equations.
I'll let you know if I find something different.
Until now I took it as given the usual interpretation.
I have learnt from Jefimenko that things can be seen from
different angles and in different ways.
So, wish me luck! :-)

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 $c=\text{const}$
can happen.

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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!)

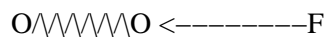
All theories we have are wrong. They just happen to give useful results over a certain domain. The domain for special relativity is fairly broad. Two mistakes cannot cancel themselves out over the whole domain.

...

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?



Then, if you push the system of 2 bodies, would they "know" how much energy they should get?

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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.

Probably not as much as you do!
But I understand it , and I feel it.
I have a great imagination at least, I have physics and mathematics in my blood if not at the tip of my pen.
That muons

have a "half-life" is described by quantum mechanics. That is half-life is some proportion of some other unstable system's half-life is covered by quantum mechanics. That the half-life is so many microseconds in a rest frame... quantum mechanics can't go there.

I would not be so sure!
Laws like the disintegration –law depend after all on the internal structures of the entities involved, not as form but as constants.
This is where some work could be done!
Did they find the half-life, based on a study of the structure of muons ?
I doubt that. You may be better informed!

>Relativity, being classical, does.

I feel that it could be done without any relativity involved.
But, then why the headache? If no questions...no headaches!
You must be a happy man! Or not?

David A. Smith– Hide quoted text –

– Show quoted text –

Regards, LL

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