Re: Does photons really travel?

Source: http://sci.tech−archive.net/Archive/sci.physics.relativity/2008−05/msg00788.html

- *From*: PCB <yoshioory@xxxxxxxxxx>
- *Date*: Sun, 11 May 2008 09:47:39 −0700 (PDT)

On May 11, 6:21 pm, The Ghost In The Machine
<ew...@xxxxxxxxxxxxxxxxxxxxxxx> wrote:

> In sci.physics.relativity, Smooth John
> <yoshio...@xxxxxxxxxx>
> wrote
> on Sun, 11 May 2008 05:03:42 −0700 (PDT)
> <6d32df3a−9197−417f−b765−34155279b...@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx>:
>
>> On May 9, 5:16 pm, The Ghost In The Machine
>> <ew...@xxxxxxxxxxxxxxxxxxxxxxx> wrote:
>>
>>> In sci.physics.relativity, Smooth John
>>> <yoshio...@xxxxxxxxxx>
>>> wrote
>>> on Tue, 6 May 2008 14:53:18 −0700 (PDT)
>>> <703f99c7−720b−42d5−b446−12edf9fca...@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx>:
>>>
>>>> On May 6, 6:19 am, The Ghost In The
>>>> Machine
>>>> <ew...@xxxxxxxxxxxxxxxxxxxxxxx>
>>>> wrote:
>>>>
>>>>> In sci.physics.relativity,
>>>>> Smooth John
>>>>> <yoshio...@xxxxxxxxxx>
>>>>> wrote
>>>>> on Mon, 5 May 2008
>>>>> 12:40:55 −0700 (PDT)
>>>>> <5d7b2167−a326−4860−abbc−c4a68a1d5...@xxxxxxxxxxxxxxxxxxxxxxxxx
>>>>>
>>>>>> From a

photon
point of
view, it
nevertravel.
For it, now
is all the
time.

Debatable. Let's assume that
a photon starts at (x,t) =
(0,0),
from the still observer's
point of view. Since we
can't quite use the
Lorentz we need to get
creative regarding limits,
but we do know
that

x' = (x−vt)/sqrt(1−v^2/c^2)

Why (x−vt) and not (x+vt), explain

(x,t) is world coordinates; (x',t') are coordinates in the
photon's
system. This isn't exactly accurate (as a photon is an
expanding
sphere) but if we assume a point particle moving along the
positive X
axis, at 1 second (x,t) = (c,1) and (x',t') = (0,?).

What is your location, the light departs from
you
or arrives to you?

I'm surfing the light wave, dude. ;−)

> But sir, this is not alowed in relativity.

Isn't it? One could call it "augmented SR", though that
has some risks. The main issue is gamma becomes unbounded.

> The only thing alowed to surf a wave is another wave.

Generally correct as it turns out; nothing can go lightspeed
if the mass is nonzero.

t' =
(t−vx/c^2)/sqrt(1−v^2/c^2)

similar here

for any massive particle.

Since for a photon x^2 =
c^2t^2, we can substitute:

x'^2 = (x−vt)^2 / (1 −
v^2/c^2)
= (x^2 − v^2t^2 − 2xvt) / (1
− v^2/c^2)
= (c^2t^2 − v^2t^2 − 2xvt) /
(1 − v^2/c^2)
t'^2 = (t−vx/c^2)^2 / (1 −
v^2/c^2)
= (t^2 − v^2x^2/c^4 −
2xv/c^2) / (1 − v^2/c^2)
= (t^2 − v^2t^2/c^2 −
2xv/c^2) / (1 − v^2/c^2)
= x'^2/c^2

Last time I checked

(x−vt)^2 was (x^2 + v^2t^2 − 2xvt)

Why you do mistakes?

Why do you? This one is indeed an error; the equations should be

I did not, you did.

But tell me, how can you be so confident in math, turning over in math symbols everything you have to say, when you do so kindergarten mistakes. What is your secret?

Well, OK, then, if you wish to disprove the result please do so.

Was not an offense, Anyone do mistakes, shaking their confidence. I suspect you
do a lot of math exercises everyday in order to be confident. Am i right?

x'^2 = (x−vt)^2 / (1 − v^2/c^2)
= (x^2 + v^2t^2 − 2xvt) / (1 − v^2/c^2)
= (c^2t^2 + v^2t^2 − 2xvt) / (1 − v^2/c^2)
t'^2 = (t−vx/c^2)^2 / (1 − v^2/c^2)
= (t^2 + v^2x^2/c^4 − 2xv/c^2) / (1 − v^2/c^2)
= (t^2 + v^2t^2/c^2 − 2xv/c^2) / (1 − v^2/c^2)
= x'^2/c^2

Turns out not to make any difference.

Yes, but why de moortel, Van and Dirk didn't saw that mistakes. How can I trust de moortel, Van and Dirk from now on, putting him in my preface for turning over in math symbols everything I will have to say in my papers?

I cant trust him anymore, can I?

You never could, of course. Trust no one.
It's not paranoia if you *know* they're out to get you, after all.

This is fine for any massive particle, but since the denominator becomes 0 at the limit, the best I can do there is note that the numerator must be 0 as well,
which basically means it will be created and destroyed
in an instant (since the photon is fixed at x'=0 in its coordinate−space).

So, in a way, you're right, it never travels. We'll never know anyway; we weigh too much, and even the best diets
won't help... ;−)

Paradoxically, when

forphotonsis
now all the
time, since
the
beginning
Big Bang, it
still takes
billions of
years for the
rest of us.

This is
likely to be
impossible.

I don't see a problem here.
Could you clarify?

I dont know if I can. If for light is "now" all the time,
implies that light never ages from own point of view.
Therefore the detected light and radiation from BigBang is
100% fresh.

However, the new light generated after the BigBang has same
age as the primordially BigBang light. Even when light comes
later also in the future into existence, from our point of view, light
has the same age. Therefore from lights point of view
light is the same light for ever

If you understand this, I dont in any case

The "tired light" hypothesis is occasionally trotted out here. It doesn't quite work.

I dont understand your words, what tired light, I didnt said that.

Tired light refers to light that slows down as it travels throughout the Universe, reddening it and lessening its energy per photon. It's a metaphor, of course.

I just realize that according to relativity photons does not travel.

Or do they?

If you surf them as you said, then you dont travel.

Your math symbols makes no sense, excuse my French

C'est la guerre.

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#191,
ewi...@xxxxxxxxxxxxx
Linux sucks efficiently, but
Windows just blows around
a lot of hot air and vapor.
** Posted
fromhttp://www.teranews.com**

--
#191, ewi...@xxxxxxxxxxxxx
Useless C/C++ Programming Idea #992381111:

while(bit&BITMASK) ;
** Posted from http://www.teranews.com**

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#191, ewi...@xxxxxxxxxxxxxx
Useless C++ Programming Idea #889123:
std::vector<...> v; for(int i = 0; i < v.size(); i++) v.erase(v.begin() + i);
** Posted from http://www.teranews.com**

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