Re: The real twin paradox.

Source: http://sci.tech−archive.net/Archive/sci.physics.relativity/2007−11/msg01435.html

- *From*: bz <bz+spr@xxxxxxxxxxxxxxxxxxx>
- *Date*: Thu, 22 Nov 2007 01:33:18 +0000 (UTC)

"Sue..." <suzysewnshow@xxxxxxxxxxxx> wrote in
news:75645b9d−5e0d−4d6d−8793−6a916df243dd@xxxxxxxxxxxxxxxxxxxxxxxxxxx:

> On Nov 21, 1:29 pm, bz <bz+...@xxxxxxxxxxxxxxxxxxx> wrote:
>
> > "Sue..." <suzysewns...@xxxxxxxxxxxx> wrote
> > innews:a99fa604−6121−47d8−96a8−90c3c19d2e8d@xxxxxxxxxxxxxxxxxxxxxxxxxx:
> >
> > > normal clocks that are not responsive to motion
> > > through a dielectric shouldn't change rate.
> >
> > I tried to buy a 'normal clock' at the clock store but they told me
> > they are no longer made. They used to be made in Newton's days, but now
> > EVERYTHING that is made of charged particles responds to motion through
> > space, which is a dielectric medium. Maxwell managed to change the laws
> > of physics with his equations.
>
> Did you try to buy a light−clock specifically designed to
> respond to motion through media?

No, I wanted a 'normal clock', one that ran at the same rate, no matter
what its speed was.

> If the clock store had one
> I think you would find most of the clocks you have are
> "normal" when you blow hydrogen gas at a significant fraction
> of c toward or past their cases.

But I am not blowing hydrogen past the case, the case is moving THROUGH the
hydrogen.
But it doesn't. In your case, the clock having hydrogen blown by it and my
clock are at rest wrt each other.

In the second case, the test clock moves through the hydrogen which is at rest wrt my clock.
In the second case, the test clock loses ticks (when it gets back from its trip it has accumulated less ticks than my stay at home clock).
It does this no matter HOW big or well made the case is. Electrostatic shielding and magnetic shielding doesn't make any difference.

> The gas moving between the light−clock's mirrors will cause it to slow however.

Not a light clock. Not a heavy clock. A special ultra stable quartz crystal clock, temperature stabilized.
It uses three crystals, each perpendicular to the others.
But it still isn't a 'Sue normal clock' because it loses ticks.

> And the neutronium clocks are too heavy to carry around.
>
> So, let me borrow your 'normal clock' pleeeeze. I will gladly return it just as soon as my twin brings it back from his trip to the Andromeda Galaxy.

> "normal" clocks are usually inertial mechanisms. Are you disputing this statement with your suggestion that a light−clock should behave the same way as an inertial clock ?

I am not talking about light clocks at all.
I still don't know about them. KS keeps telling me that the first photons miss the mirrors.
KS, HW and Sue keep telling me that "normal clocks" don't lose ticks, no matter how far and fast they go.
I don't know who to believe, KS, HW and Sue or the evidence.

Maybe the contradiction between the evidence and what KS and Sue say is only apparent.

I am talking about 'normal clocks' such as a quartz crystal clock.
Do you agree that that is an inertial clock?

> <<A Lorentz transformation or any other coordinate
> transformation will convert electric or magnetic
> fields into mixtures of electric and magnetic fields,
> but no transformation mixes them with the
> gravitational field. >>
> http://www.aip.org/pt/vol−58/iss−11/p31.html
>
> If you can, then you will be demonstrating that
> General Relativity is unnecessay and you'll have
> some evidence of an inertial ether to support your
> argument.

I would love to see data that falsifies GR, but I don't expect to see it soon or here.
But that is not my goal at the moment.
My goal is to find a "normal clock" that will be unaffected by traveling at relativistic velocities wrt a stay−at−home test clock.
Tell me where I can find one, pleeeese.

> And the neutronium clocks are too heavy to carry around.
>
> So, let me borrow your 'normal clock' pleeeeze. I will gladly return it
> just as soon as my twin brings it back from his trip to the Andromeda
> Galaxy.

> I'll trade you a normal clock for a light−clock.

Oh, light clocks are not difficult to build.
You can take a fiber optic transceiver and a mirror and a bit of electronics.

Do a little optical impedance matching to free space and set up your mirror at a convenient distance.
Set the electronics so that every time a tick is received, a new tick is launched.
Press the little 'starter' button.
You have a light clock.

Any high school kid can build one.

The real trick is to build a 'normal clock' that ACTS like sue says a 'normal clock' should act.

> You might get a good deal on this one but you'll
> have to supply your own launch vehicle and figure out

how to expose it to moving ism.

http://funphysics.jpl.nasa.gov/technical/grp/sumo.html

Show me the data. Did it run slow, as predicted by SR and GR or did it maintain a constant rate as per Sue, KS, HW???
It was supposed to launch in 2006. This is almost 2008. The web page was last updated in 2004.
Show me the data.

−−
bz

please pardon my infinite ignorance, the set−of−things−I−do−not−know is an infinite set.

bz+spr@xxxxxxxxxxxxxxxxxxxx remove ch100−5 to avoid spam trap
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