

Re: Light Clock Nonsense

Source: <http://sci.tech-archive.net/Archive/sci.physics.relativity/2004-12/3723.html>

From: jahn (susysewnshow_at_yahoo.com.au)

Date: 12/09/04

Date: Thu, 9 Dec 2004 06:08:35 -0500

"Paul B. Andersen" <paul.b.andersen@deletethishia.no> wrote in message
news:cp95g8\$hh3\$1@dolly.uninett.no...

> *jahn wrote:*

>> *Do the calculation again, but "Zeno style".*

>> *When the RM observer sees the "Elmo" has moved*

>> *one S distance on the the hypotenuse, ask yourself*

>> *(you should be good at this by now) ask your self*

>> *what the mechanism is causing Elmo to reverse directions*

>> *for the rail passenger but continue onward for the*

>> *embankment obsever.*

>

> *I won't bother to try to decipher this babble.*

> *If you have a point, state it in English, please.*

>

>> *That is surely how you mean these calculations interpreted:*

>> -----

>>

>>>> *Paul:*

>>>> *<<Since the speed of light in the observer's rest*

>>>> *frame according to the second postulate i c,*

>>>> *the light will use the time $d/\sqrt{c^2-v^2}$ between*

>>>> *the mirrors.*

>>>> *The moving light clock will thus run at the frequency*

>>>> *$f' = (c/2d)*\sqrt{1 - v^2/c^2} = f*\sqrt{1 - v^2/c^2}$*

>>>> *observed in the observer-frame.*

>>>> *The moving light clock runs slow. >>*

>

> *There is nothing wrong with this calculation.*

> *What is your problem?*

> *Is there any particular part you don't understand?*

>

>> -----

>> *Paul B. Andersen wrote:*

>>> *You know, the fact that the two observers in*

>>> *my scenario above had to point their telescopes*

>>> *in different directions doesn't affect the star.*

>>> *But since that is beyond you, you insisted*

> >> *that they had to point their telescopes in*
> >> *the same direction.*
> >
> >
> > *Check back through the thread. I think you'll*
> > *find that is YOUR statement.*
>
> *OK.*
>
> *Paul B. Andersen wrote:*
> | *I have a simple question for you.*
> | *Two observers are looking at the same star*
> | *through their respective telescopes.*
> | *The observers are moving at v relative to*
> | *each other along a line perpendicular*
> | *to the line of sight to the star.*
> | *At the time they are passing each other,*
> | *are their telescopes then parallel?*
> |
> | *You don't have to invoke SR to arrive*
> | *at the correct answer, which is "no".*
> | *(Which is why your confusion puzzles*
> | *me a little. You object to matters which*
> | *no sane person dispute, even if said person*
> | *don't "believe" in SR.)*
> |
> | *The angle between the telescopes is:*
> | *According to*
> | .. *the Galilean transform: $\arctan(v/c)$*
> | .. *the Lorentz transform: $\arcsin(v/c)$*
> |
> | *The difference is minute unless v is very high.*
>
> *Sue/Jahn responded:*
> | *Stars don't shoot bullets so your wasting your own time.*
> | *... not mine*
>
> *I interpret this as a disagreement.*
>
> *So I repeat:*
> *You insisted that they had to point their*
> *telescopes in the same direction.*

WHERE ? Google the archives or shut up.

>
> *If you think otherwise, you better explain*
> *how to interpret your remark above.*

Why? You already all about that.

But you don't know how the reflectors
at VLTI are aimed and ya don't know
how all four can catch the same bullet.

Sue...

>

> *Paul*