

Re: Fastest Time

Source: <http://sci.tech-archive.net/Archive/sci.physics.relativity/2005-03/6186.html>

From: PD (*pdraper_at_yahoo.com*)

Date: 03/28/05

Date: 28 Mar 2005 10:34:28 -0800

TomGee wrote:

> *PD wrote:*

> > *TomGee wrote:*

> > > *franklinhu@yahoo.com wrote:*

> > > > *PD wrote:*

> > > > >

> > > > > *What special relativity says instead is, not only is it not*

> > > > *possible*

> > > > *to*

> > > > > *identify an object as having zero velocity in space, it is also*

> > *not*

> > > > *possible to rank objects according to velocity, as that*

ranking

> > > > *depends*

> > > > > *solely on the choice of observer and has no independent*

> *reality.*

> > > > >

> > > >

> > > > *Can you expand upon this statement, since I have often wondered*

> > *about*

> > > > *this idea that you can stack rank objects according to speed by*

> > > > *measuring the rate at which time flows at each object.*

> > > >

> > > >

> > > *PD is full of it; I don't believe SR says such a thing about*

> *ranking*

> > *by*

> > > *velocity.*

> >

> > *You have no basis for judging what SR says and what it does not*

say.

> > *You only use Encarta and Scientific American for a reference, and*

so

> > *what you believe is at best lightly informed.*

> >

> >

> *What I read has no relevance to the fact you make up stuff and credit
> it to SR without citing where you "read" it. I accused you of making
> that up; all you had to do was cite a quote, but you didn't 'cause
you
> can't.*

I've given you plenty of references. You just won't read them. You want me to extract a 25-words-or-less epistle and type it in here in quotation marks. Not going to do it. You have to do some work. Understanding comes from study, not from newspaper clippings and sound-bites.

Here are some references for you.

Fishbane, Gasiorowicz, Thornton, Physics for Scientists and Engineers, 3rd edition, Prentice Hall, 2005; pgs 1073-1101.

Knight, Physics for Scientists and Engineers, 1st edition, Addison-Wesley, 2004; pgs 1151-1188.

Taylor, Wheeler, Spacetime Physics, Freeman, 1992; whole damn thing.

Mermin, Space and Time in Special Relativity, Waveland, 1991; whole damn thing.

Rindler, Special Theory of Relativity, Oxford University Press, 1991; Chps, 2-4,12.

Bohm, The Special Theory of Relativity, Routledge, 1996; Chps 4,5,10

Garder, Relativity Simply Explained, Dover, 1997, Chps 1-4.

Carrol, Spacetime and Geometry, Addison-Wesley, 2003; Chps 1-3.

>>

>>

>>> *SR claims as an independent reality that the astronaut twin
>>> has really aged less than his Earthbound twin at the end of the
> trip,*

>>> *and that reality is evident to all who compare the twins
visually.*

>>

>> *Yes, that's correct, and it's one of many, many predictions of SR,
> and*

>> *it's also irrelevant to SR's claim that ranking by absolute
velocity*

> *is*

>> *impossible.*

>>

>>

> *If so, cite a quote from SR where it say that, wydoncha?*

>>

>>

>> *Note that the twin paradox does NOT amount to ranking by
>> absolute velocity,*

>>

>>

> *But how can velocity be absolute if it is a vector?*

Huh?

>>
>>
>> *contrary to your opinion about that. (Your ranking*
>> *is done in one particular reference frame, not an absolute*
reference
>> *frame.)*
>>
>>
> *What's the difference?*

A bunch of difference. If I have one reference frame that says that velocity ordering gives $A < B < C < D < E < F$, and another that gives $D < E < B < C < F < A$, I think there's going to be a problem establishing which is absolutely right, don't you?

>>>>
>>>>
>>>> *Logically, if*
>>>> *you placed an atomic clock at points (or reference frames) A, B*
> *and*
>>> *C,*
>>>> *leave them there for some time and then bring them all back ot*
>> *point*
>>> *A,*
>>>> *you could tell the relative differences between the flow of*
time
>> *due*
>>> *to*
>>>> *the changed time shown and hence the relative speed (assuming*
> *there*
>>>> *aren't effects due to gravity slowing down the clock as well).*
>>>>
>>>>
>>> *There would be differences only if the points were not at*
constant
>>> *velocity wrt each other, according to my model.*
>>>>
>>>>
>>>> *I don't*
>>>> *think it matters where you start this measurement from point A*
or
>>> *point*
>>>> *C, you should then be able to do the same test with objects D,*
E,
> *F*
>>> *and*
>>>> *start to build up an absolute rank order of slowest to fastest.*
> *One*
>>> *of*

> > > > *these points will have the absolute slowest speed. This doesn't*
> > *mean*
> > > > *this position is necessarily at zero velocity, but I would*
think
> *it*
> > > > *would be possible to at least stack rank them.*
> > > >
> > > >
> > > *Yes, I agree. We could fire off rockets at different speeds with*
> > > *synchronized clocks in each and when recovered, the clocks will*
show
> > > *different times on them. Then we simply stack rank them from the*
> > > *slowest time to the fastest time, or vice-versa.*
> > > >
> > > >
> > > > *If it were possible to*
> > > > *find a frame of reference which was slower than any other*
frame,
> > *then*
> > > > *this might be a zero velocity frame – but you say this is*
> > *impossible,*
> > > > *why?*
> > > > *fhutime*
> > > >
> > > >
> > > *All objects or ref. frames can be at constant velocity within a*
> > *moving*
> > > *ref. frame and as such they can be considered to be at 0 velocity*
> *wrt*
> > > *to each other. However, since everything in the universe is in*
> > *motion,*
> >
> > *And you know this how??*
> >
> >
> *Because my model agrees with scientific research. How do you know*
the
> *universe is static?*

I didn't say that it was. A lot of objects (not everything, mind you) are in a state of *relative* motion — most galaxies included. This does NOT mean that everything is in a state of absolute motion, nor does current scientific research say that it is.

Current scientific research also does not say that wombats are the results of cross-breeding between badgers and housecats, but I'm sure not going to try to dig up a reference that says "Wombats are not the results of cross-breeding between badgers and housecats." If you think current scientific research says that everything is in a state of absolute motion, then you provide the reference, please, and I'll be happy to read it.

- > *For that, you have to overthrow Hubble and the*
- > *BBT, and even AE since he admitted he was wrong in using his math*
- > *constructs to prove the universe is not expanding.*

AE did not use his math constructs to prove the universe is not expanding. He showed that general relativity's mathematical laws are **consistent** with a universe that is not expanding. They are also consistent with a universe that is expanding. The value of a constant that goes into the equation is different for both those solutions.

- >
- > *TomGee*