# Re: Twin Paradox a blasphemy to Relativity

***Source:*** http://sci.tech−archive.net/Archive/sci.physics.relativity/2005−02/2172.html

---

***From:*** PD (*pdraper_at_yahoo.com*)
***Date:*** 02/09/05

Date: 9 Feb 2005 08:36:52 −0800

TomGee wrote:
*> PD wrote:*
*> > TomGee wrote:*
*> > > PD wrote:*
*> > > > TomGee wrote:*
*> > > > > Of course you can tell who is moving faster. In order for*
the
*> > ship*
*> > > > to*
*> > > > > leave Earth, it must move faster than the Earth is moving.*
In
*> > > order*
*> > > > > for the ship to catch up with the Earth on its return to it,*
*> the*
*> > > ship*
*> > > > > must go faster than the Earth.*
*> > > > > TomGee*
*> > > >*
*> > > > You're kidding, right?*
*> > > >*
*> > > > I throw an apple out of a moving car moving at 60 mph and it*
*> leaves*
*> > > the*
*> > > > car with a relative velocity of 5 mph.*
*> > > >*
*> > > >*
*> > > You can throw an apple out of a car at 5mph but you cannot escape*
*> the*
*> > > gravity of Earth at 5mph.*
*> >*
*> > You have no idea what you're talking about. The escape velocity*
from
*> > the Earth does not imply that a rocket has to be launched in the*
same
*> > direction as the Earth is moving.*
*> >*
*> >*

> Who said that it does?
> >
> >
> > If the Earth is moving at V with
> > respect to the rest of the solar system and the escape velocity of
> the
> > rocket is v, then if the rocket might have any velocity between V+v
> and
> > V−v with respect to the solar system and still escape the Earth's
> > gravity.
> >
> > > >
> You should tell that to NASA, if you haven't already. They could
save
> a ton of fuel on their space take−offs.
> >
> > > >
> > > > Now, on the basis of that information, you tell me whether I
> threw
> > it
> > > > forward (so it's going faster than the car) or backward (so
it's
> > going
> > > > slower than the car).
> > > >
> > > >
> > > Not the same at a rocketship having to go faster than the Earth
in
> > order to escape its gravity. Your car is moving faster than the
> > Earth
> > > even if it's only going 5mph. The 5mph is IN ADDition to the
speed
> > of
> > > the Earth since your car is moving at Earth speed when standing
> > still.
> >
> > And this is crap, too. The Earth rotates from west to east at 1000
> mph
> > at the equator. An airplane traveling with ground speed 500 mph
will
> be
> > going 1500 mph with respect to the sun if flying from west to east,
> and
> > 500 mph with respect to the sun if flying from east to west.
> >
> > >
> Crap? No, I don't think so. You seem to have airplanes confused
with
> cars, too.
> > > >
> > > >

*> > > > Timmy gets hit with the apple and so he picks up a rock and*
*> throws*
*> > it*
*> > > > at me in the moving car and it hits me in the nose with a*
*> relative*
*> > > > velocity of 80 mph.*
*> > > > Now, on the basis of that information, you tell me whether he*
*> threw*
*> > > it*
*> > > > forward (so it's going faster than the car) or backward (so*
it's
*> > > going*
*> > > > slower than the car).*
*> > > >*
*> > > He has to throw it faster than the car is moving in order for it*
to
*> > > catch up with the car. Whether Tim threw it forward or backward*
is
*> > not*
*> > > relevant in this experiment.*
*> >*
*> > And this is still further crap. If Timmy is in front of the car,*
and
*> he*
*> > throws it backward at 20 mph, it will hit me in the nose at 80 mph.*
*> If*
*> > Timmy is in back of the car, he will have to throw it 140 mph to*
have
*> > it hit me in the nose at 80 mph. Either way is possible and you*
can't
*> > distinguish them from the information given.*
*> >*
*> > Tom, you have little to no understanding of relative motion. I*
could
*> > give you some practice problems to try to correct that, if you*
*> like...*
*> >*
*> > >*
*> No, thanks, I'll pass on that. You seem to have the wrong notions*
*> about relative motions, I wonder where they came from. I hope that's*
*> not what is being taught in the schools today.*
*>*
*> TomGee*

Let's start from scratch.
What is the speed of the Earth?
You tell me.

PD