

# Re: Twin paradox revisited II

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- *From:* bill <cosmosco@xxxxxxxxxxxxxxxx>
  - *Date:* Thu, 19 Jul 2007 16:20:31 -0700
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On Jul 19, 6:42 pm, "Martin Hogbin" <goatREMOVETHIS...@xxxxxxxx> wrote:

"bill" <cosmo...@xxxxxxxxxxxxxxxx> wrote in  
message <news:1184810766.298641.95760@xx>

On Jul 18, 2:57 am, stevendary13...@xxxxxxxx (Daryl McCullough) wrote:

cosmo...@xxxxxxxxxxxxxxxx says...

So I take it that nobody openly supports the idea that the earth bound twin physically ages at a faster rate than the traveler and that this only occurs during acceleration following turn around?

Can we stick to the topic as to whether or not the stay at home physically ages at the faster rate during turn around rather than introduce mind games? Keep things as simple as possible.

A similar thing happens in the twin paradox. While the two twins are traveling inertially at constant velocity, each twin can consider himself to be "at rest"

Although the traveler considers himself to be 'at rest' he has experienced the force of acceleration as he blasted away from the planet and now sees the universe rushing past him so it is a purely solipsist, philosophical attitude on his behalf for him to consider himself to \*be\* at rest.

## Re: Twin paradox revisited II

When  
the two twins get back together, one twin will have aged more than the other. In Special Relativity, the twin that took the inertial (constant velocity) path ages the most.

So you apparently agree with the decade old posting that the stay at home twin physically ages at the faster rate ('ages the most') rather than it is the traveler who ages at the slower rate.

Could you explain what the difference is between those two scenarios? How could we tell?

The difference is that according to the original posting the stay at home physically ages at the faster rate and although as you correctly point out there is no way that we can tell which twin physically aged at the different rate – from the traveler's point of view the earth could be orbiting the sun at close to the speed of light then at the very instant that he takes his foot off the gas pedal that orbital velocity instantly changes from close to 300,000K–s to 30K–s.

In your opinion – does the traveler *\*really\** believe that this *\*physically\** takes place?

It has nothing whatsoever to do with what *\*we\**, as stay at home observers think but what is claimed the *\*traveler\** determines is reality.

What we can tell is that, when the two twins meet up, the travelling twin has aged less than the earthbound twin.

One could argue that inertial clocks run as quickly as possible and that the best way of describing what has happened is to say that the non–inertial (travelling) twin's clock has been slowed down.

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Martin Hogbin

Other than what one 'could argue' I fully agree with those comments but I cannot agree, as expressed above, that the stay at home *\*physically\** ages at the faster rate thus that the traveler could obliterate all life on earth by taking his foot off the gas pedal.

## Re: Twin paradox revisited II

The fact that the traveler finds on his return that everything is 'normal' back here – that life continues – should indicate to him that the earth had \*not\* been orbiting the sun at near light speed, that what he saw or determined was nothing more than a visual illusion generated by his rate of travel.

Bill

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