

Re: Contraction has been abolished by Special Relativity

# Re: Contraction has been abolished by Special Relativity

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*Source:* <http://sci.tech-archive.net/Archive/sci.physics.relativity/2008-10/msg00725.html>

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- *From:* rbwinn <rbwinn3@xxxxxxxx>
  - *Date:* Thu, 9 Oct 2008 19:08:22 -0700 (PDT)
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On Oct 9, 3:53pm, PD <TheDraperFam...@xxxxxxxx> wrote:

On Oct 9, 5:18pm, rbwinn <rbwi...@xxxxxxxx> wrote:

On Oct 9, 5:22 am, PD <TheDraperFam...@xxxxxxxx> wrote:

On Oct 8, 10:08 pm, rbwinn <rbwi...@xxxxxxxx> wrote:

On Oct 8, 5:34 pm, PD  
<TheDraperFam...@xxxxxxxx> wrote:

On Oct 8, 7:17 pm, rbwinn  
<rbwi...@xxxxxxxx> wrote:

Really? Who fed you when  
you were in the military?  
Who paid for your  
gear and your bunk? Who  
funded your treatment when  
you got home?

People  
who

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actually  
work have  
less time to  
spend at the  
library than  
scientists  
and other  
people who  
spend large  
amounts of  
time at the  
library.  
Secondly,  
small town  
libraries do  
not have  
much other  
than  
books for  
children and  
women.

You have not heard of  
interlibrary loan? How  
many excuses can you  
offer for not wanting to get  
out of the house and walk a  
half hour to  
look something up?

I don't need to look it up. If there was  
something to look up, you  
could put it here in [sci.physics.relativity](http://sci.physics.relativity).

No, I don't think that's an accurate statement, Bobby. You  
want  
everything spoon-fed to you here, and you can't think of any  
reason  
why people can't do that for you. There is a reason (several  
in fact)  
why it is in the library and not copied for your convenience  
in  
Usenet. It would be a copyright violation, for one thing; are  
you  
asking people to break the law just because you don't want to

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walk a  
half hour to the the library? Secondly, there are equations  
and  
figures that are important to the expression of the result that  
are  
difficult to render in ascii; to you want to shoehorn a  
presentation  
into an unsuitable medium just because you don't want to  
walk a half  
hour to the library? If you find it difficult to understand why  
the  
world is not laid at your feet without you having to remove  
your rear  
end from your chair, Bobby, I can understand why you are in  
such a  
state of mental torpor. I don't find people that are so lazy that  
they  
don't understand why things aren't delivered at their feet to  
be very  
worthy of sympathy, do you?

Since you cannot,  
obviously there is no need to go to the  
library.  
As far as what I did in the military, people in  
the military do not  
have a choice about what they do.

Did you accept the pay from taxpayers?

I did have a choice about what I  
did when they put me in the psychiatric ward  
of a V.A. hospital. I  
escaped.

Did you escape because you didn't want to cost the taxpayers  
any more  
of their money?

Did you escape along a paved road or a sidewalk that was  
paid for by

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taxpayers?

Are you on city water or did you dig your own well?

If you really don't want to accept any money or services from a corrupt government, Bobby, I can suggest a solution. It will require getting your rear end out of a chair, though.

PD- Hide quoted text -

- Show quoted text -

The farm where I live has its own well. The part of the farm that is now in tract houses supplies water to the city from the wells that are on that land. A couple of weeks ago I did some welding on the well casing for the farm well while they were changing the pump. Why is it that you think all people just sit and wait for government money the way you do?

Well, personally I don't anymore, just like you. I'm not funded by the government either, though I'm a scientist. You see, there are scientists who are not funded by the government, too, and they're doing good work. Perhaps you didn't know that.

I escaped from the V. A. hospital because they had no legal reason to hold me there. According to the paper work, I was free to leave any time, but the only way I found to leave was to escape. What is your reason for wanting to discuss these things in a newsgroup about relativity?

Well, Robert, we're getting around to how relativists are funded, which is appropriate for this group, I think. And since you really don't care one way or the other whether relativity is correct, it's more constructive to have a conversation about something that does matter to you --- how your taxes are spent.

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– Show quoted text –

Well, I would rather discuss relativity because I think I may have found a way to explain it to scientists using the Michelson–Morley apparatus.

Consider the arm of the Michelson–Morley apparatus. According to the experimenters, they were going to measure an ether wind, the frame of reference of the ether being  $S$ , the frame of reference at rest.

The interferometer was moving relative to  $S$ , so the frame of reference of the interferometer was  $S'$ .

Light was directed down the arm of the interferometer to a mirror at the end of the arm. The interferometer was moving with a velocity of  $v$  relative to  $S$ , the frame of reference of the imaginary ether. So if the light was emitted at  $x=0$ ,  $x'=0$ ,  $t=0$ , then the light would travel down the arm of the interferometer to the mirror where it would be reflected back the other way.

Since we already know that there was no ether,  $S$  is just a frame of reference at rest that the interferometer is moving with a velocity of  $v$  relative to. In  $S$ , the photon travels a distance of  $x$  to the mirror, is reflected, and travels back to the origin of  $S$ . If  $t$  is the time it takes a photon to travel a distance of  $x$ , then the total time for this to happen will be  $2t$ .

From  $S'$  if we consider the same events, a photon leaving the origin of

$S$ , traveling to the mirror, being reflected, and returning to the origin of  $S$ , the time will be the same.  $t'=t$ .

However, we are using a cesium clock in  $S'$  to measure the time of events. We know from experiment that a cesium clock in  $S'$  will show a slower time than an identical cesium clock in  $S$ . I will now explain why. A cesium clock in  $S'$  shows light to be traveling at  $c$  in  $S'$ .

The origin of  $S$  is irrelevant to measurement of time in  $S'$ . In  $S'$ , the light is emitted at the origin of  $S'$ , travels to the mirror at the end of the arm of the interferometer, is reflected, and returns to the origin of  $S'$ , all at a speed of  $c$  as measured by the cesium clock in  $S'$ . So it is the time that the light reaches the origin of  $S'$  that is relevant to the experiment, not the time it reaches the origin of  $S$ .

I will try to keep this explanation simple enough so that even scientists cannot misunderstand it. The Galilean transformation equations show that the distance from the origin of  $S$  to the mirror is greater than the origin of  $S'$  to the mirror when the light reaches the mirror because  $S'$  has traveled a distance of  $vt$  while the light was traveling from the origins to the mirror.  $x'=x-vt$ . If the light is traveling at  $c$  in both frames of reference, then less time has transpired in  $S'$  than in  $S$  when the light reaches the mirror. The light is reflected and its velocity becomes  $-c$  relative to the two frames of reference. When the light reaches the origin of  $S'$ , the time that has elapsed in  $S'$  since the light was first emitted is less

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than the time that has elapsed in S because if the light were to go all the way to the origin of S as seen from S', the times would be equal. But the light has not gone that far. It has only gone back to the origin of S', so the time in S' is less than the time in S at that moment in that place.

I hope I have explained this simply enough for scientists to understand. This does not require relativity of simultaneity. It does not require a length contraction. All it requires is two cesium clocks which are both showing light to be traveling at  $c=186,000$  miles per second.

Robert B. Winn

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