

Re: Another Rotating Cylinder Problem – explain from moving frame view

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- *From:* "Harry" <harald.vanlintel@xxxxxxx>
 - *Date:* Wed, 19 Apr 2006 18:15:43 +0200
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"David" <dseppala@xxxxxxxxxxxxxx> wrote in message
<news:alu54295av6mfu56squas3gfb22g2gl3lh@xxxxxxxxxxxx>

On Sat, 15 Apr 2006 11:02:17 +0100, "Martin Hogbin"
<goatREMOVETHIS123@xxxxxxxxxxxx> wrote:

"David" <dseppala@xxxxxxxxxxxxxx> wrote in message
<news:27814211vufjvsa14pmj5fjvk52d3mutdd@xxxxxxxxxxxx>

On Fri, 14 Apr 2006 18:29:50 +0100, "Martin Hogbin"
<goatREMOVETHIS123@xxxxxxxxxxxx> wrote:

"David" <dseppala@xxxxxxxxxxxxxx> wrote
in message
<news:5e5v32hhd167p57ikjfcvnm82o1thjecu@xxxxxxxxxxxx>

Can anyone explain this
rotating disk problem from
the point of view
of a moving observer?

Davis Seppala is one of the mysteries of this
group. Unlike
Spaceman, for example, he is smart enough
to dream up
endless SR puzzles, many of them involving
accelerating
reference frames, yet by his own admission
he has practically
no understanding of SR.

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Is he really an expert on the subject testing posters' understanding?

Is he a bunch of psychology students performing some kind of experiment on us all?

Is he just a troll who delights in stirring up discussion and argument?

Any suggestions?

He is none of the above. David's understanding of Einstein's notions so far is much like David's comprehension of E. M. Escher's drawings.

He gets to points in problems where there seems to be contradictory results as in his posting on 4/10/2006 where a moving rigid rod is always parallel to the x-axis and loops about the x-axis in a circular pattern at a 10 meter diameter circle yet no forces are applied to the rod to make it continue in this circular pattern. Or in this posting where as tension on a straight wire increases the center of the wire moves away from a straight line. This is opposite to typical experiences – wires form straight lines when stretched from two points with nothing in between them to interfere with the straight line. This does not make sense to David.

Then what David should do, as he has been told many times, is to make sure he fully understands basic SR _in inertial frames_ with only _inertial motion_ involved.

If he could demonstrate a sound understanding of Einstein's postulates,

I cannot demonstrate a clear "understanding" of Einstein's postulates. I know the two main hypotheses stated in relativity are that all physical laws are the same in any given inertial reference frame and that the speed of light is constant and independent of the motion of the emitting source.

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The you may be interested to read a paper by Ives, in which he actually *derived* the LT's from conservation of energy and momentum – and by which those "two main hypotheses" follow (I'll have to scan it, but will be happy to do so).

The translated text I read actually used the word "velocity" of light instead of speed. We all know the velocity of light (speed and direction) must vary with the motion of the light source but the speed can possibly be constant.

Just see the dictionary: "velocity" can also be synonym for "speed" – only in recent years it has increasingly been used as distinguished from speed. Language is full of such tricks...

Although stated as a definition and not as a hypothesis Einstein states that "time" at two points cannot be defined at all unless the "time" required to travel from A to B equals the "time" required to travel from B to A. I readily admit that this statement of time that Einstein characterizes as "true by definition" seems to me more like a hypothesis than something true by definition.

He simply adopted the then existing convention as published by Poincare, who apparently agreed with Lorentz that this convention is generally *untrue* in reality. There have been endless discussions about this as some people can't understand that a convention is not required to be "really true", and on top of that, Einstein's view of "reality" was very peculiar...

Harald

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