WHAT IS CONSTANT ABOUT LIGHT SPEED AND DR. EINSTEIN'S MONUMENTAL COMPOUND ERROR

www.k1man.com Institute@k1man.com 207 242 2143 Third draft 150114 9:21 A.M.,150330 9:32 A.M. c41

ABSTRACT

The second postulate in Dr. Einstein's 1905 paper is "…light (c) is always propagated in empty space with a definite velocity v which is independent of the state of motion of the source…" The current brief paper identifies the difference between actual light speed and two different kinds of RELATIVE light speed, a critical distinction that Dr. Einstein and most current scientists did (do) not seem to understand.

ARGUMENT

Since the distinction to be understood here is really geometric in nature, the author will use a "train open flat car" in deep space as a thought experiment setting:

ASSUMING AN AETHER

So, we assume an aether such that the speed of light in empty space with respect to the aether is C (which is c divided by an equivalent index of refraction for that aether).

Aether moving to right at V with respect to frame x >

{ * light source * light destination} (at time 0) [* observer in frame x]
{car moving at relative velocity v
to right with respect to frame x}

< distance (C + V) t in frame x >

At time 0 the car has not moved. At time 0 + dt the car has moved to the right slightly

{* light source * light destination} [* observer in frame x]

< v dt >

< distance (C + V) t – v dt in frame x >

< distance v dt + (C + V)t – v dt = (C + V)t in frame x >

As can be seen, the car velocity v only affects the distance in frame x traveled by the light and not its velocity C. Thus the speed of light is said to be constant and not affected by relative velocity v.

The real adjusted speed of light is C + V. Relative velocity v is not real because it it is canceled by v dt + (C + V)t – v dt = (C + V)t above . However, the relative velocity v DOES cause a blue shift because the distance traveled by the light keeps getting smaller as the car moves to the right and thus squashes the observed wave length.

The red or blue shifts observed at a destination have different observed frequencies and observed relative velocity such that wave length remains unchanged according to lambda = relative c'/(relative f).

Thus, by itself, the relative velocity C + v will cause a blue shift. f = C/lambda, so that observed f(2) = (C + v)/lambda and wave length remains unchanged according to lambda = relative c'/(relative f).

Also, by itself, the aether velocity V will cause another blue shift. f = C/lambda, so that observed f(2) = (C + V)/lambda and wave length remains unchanged according to lambda = (C + V)/f(2).

The "phantom" relative velocity of light C + v is just an observed blue shift phenomena that has nothing to do with the actual velocity of light C + V (above) relative to the observer. Dr. Einstein made the monumental compound error of neglecting V and using c = c + v = c', and then he directly and incorrectly derived all his Special Relativity formulas starting with time dilation and ending with E = mc^2. See www.k1man.com.c1

Pretty simple, really.

CLOSED TRAIN CAR

Assume the train car in the above thought experiment setting is closed, contains air, and is pressurized. Then the speed of light relative to the air would be "controlled" by the equivalent index of refraction of the air which would probably incorporate within it the index of refraction of the aether. Thus the movement of the aether by itself would not have a Fizeau "drag" effect on the light. The aether is "dragged" along with the air. This would be analogous to light in a piece of glass which itself is moving through air not being affected by the index of refraction of the air or the index of refraction of the aether.

Aether moving to right at V with respect to frame x >

{ * light source * light destination} (at time 0) [* observer in frame x]
{car moving at relative velocity v
to right with respect to frame x}

< distance (Cair + v) t in frame x >

At time 0 the car has not moved. At time 0 + dt the car has moved to the right slightly

{* light source * light destination} [* observer in frame x]

< v dt >

< distance (Cair + v) t – v dt in frame x >

< distance v dt + (Cair + v)t – v dt = (Cair + v)t in frame x >

In this case the relative velocity v not only creates a blue shift for the observer but also plays a real velocity role, where the relative speed of light with respect to the observer is not phantom as we saw before above with v.

So, when analyzing experimental data, one must correctly understand the differences between the speed of light and the relative speeds of light, both real and phantom.

Dr. Einstein and most physicists today did (do) not do this. Thus we are stuck with entrenched incorrect Special Relativity formulas including time dilation and E = mc^2 as being gospel.

"To kill an error is as good a service, and sometimes even better than, establishing a new truth or fact."

Charles Darwin

"Great causes are never tried on the merits; but the cause is reduced to particulars to suit the size of the partisans, and the contention is ever hottest on minor matters." - Ralph Waldo Emerson - From his essay "Nature" 1844

* Mr. Baxter has a degree in Industrial Engineering from the University of Rhode Island and is a Licensed Professional Engineer in Illinois and Maine. He is a graduate of Vermont Academy, which honored him in 1993 as a Distinguished Alumnus with the Dr. Florence R. Sabin Award. It was at Vermont Academy as a student where Mr. Baxter attended a talk and met the very popular relativity author James A.

Coleman[3]. Mr. Baxter has been doing research in relativity and physics ever since and is currently Executive Director of the Belgrade Lakes Institute for Advanced Research. His current interests include physics, philosophy, and theology.

Glenn A. Baxter, P.E., at his home in Belgrade Lakes, Maine U.S.A.

See www.k1man.com/g

Glenn A. Baxter, P.E., age 4, with his dad, Frank H. Baxter (Bachelor of Science Degree, Mechanical Engineering, 1914, Rhode Island State College), and President of Frank H. Baxter Associates, 370 Lexington Avenue, New York City. See www.k1man.com/fhb and also www.k1man.com/w10 and www.k1man.com/Loons