

The non-sequitur of Einstein

Roger J Anderton

R.J.Anderton@btinternet.com

Illustration is made of how the math of Einstein's Special Relativity might be interpreted from a Newtonian perspective.

Einstein made numerous math mistakes as has been highlighted in previous papers. The difficulty is then in trying to make sense of that mess. Construction of math with the Lorentz relativistic factor will be achieved from a Newtonian perspective.

We start from a simple math model of considering two inertial frames:

Consider 2 inertial frames A and B

such that rest frame of A observes B at velocity $+v$

A observes light as c in its frame

claims light emitted from B frame is $c+v$

this is what Newton physics claims

There is a great deal of difficulty with this math model, because of the confusion brought in by Einstein. Let us now consider some of that confusion:

1. No claim is being made from Newtonian perspective that $c = c+v$ except for the $v=0$ case. Those working from an Einstein perspective have messed up velocity addition with supposed relativistic velocity addition and would sometimes make such claim as c added to v is c for v non-zero.

2. Newtonian perspective is not claiming that A and B observe the same speed of light. In the A frame an observer at rest with respect to the A frame can claim speed of light in that frame as c , but looking at B frame would claim that light in that frame is not c but instead $c+v$.

3. I have done analyses in past, where observer at rest in A frame has claimed light in A frame is same as what it sees in B frame. So, there is a bit of difficulty here with does observer in A frame see c in both frames or see c in A frame and $c+v$ in B frame.

(scenario – light emitted from rest frame of source with speed c and if source moves at v then that gets added to give lightspeed as $c+v$.) We shall proceed with the math model as presented above for now and see where it leads.

So proceeding with the math model as:

Consider 2 inertial frames A and B

such that rest frame of A observes B at velocity $+v$

A observes light as c in its frame

claims light emitted from B frame is $c+v$

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Next Einstein perspective would have us consider light bouncing between mirrors (in the direction of travel).

Proceeding still from the Newtonian perspective for these mirrors:

In A frame light travels $+c$ then bounces back off mirror as $-c$

magnitude of lightspeed same in both directions, so treating as $+c$ in both directions

Frame A claims for B is that its $c+v$ in one direction and bounce back as $c-v$

$$(c+v)(c-v) = (c^2 - v^2)$$

Square root of this is: $\sqrt{c^2 - v^2}$

if time for A is t_A and time for B is t_B

then distances are $c t_A$ and $\sqrt{c^2 - v^2} t_B$

(light travels $c t_A$ in rest frame of A and from rest frame of A light travels distance $\sqrt{c^2 - v^2} t_B$)

and we write $c t_A = \sqrt{c^2 - v^2} t_B$ equation [1]

for Newton this is $t_A = t_B = t$

and write [1] as

$$ct = c't$$

$$c' = \sqrt{c^2 - v^2} \quad \text{CASE 1}$$

This is CASE 1 the Newtonian case.

Now Einstein's postulate of the constancy of light speed is very ambiguous.

Let us proceed that what Einstein really meant by this that: Einstein assumes $c = c$.

$$\sqrt{c^2 - v^2} t_B \text{ thus written } c \sqrt{c^2 - v^2} t_B$$

$$\text{thus } c t_A = c \sqrt{1 - v^2 / c^2} t_B \text{ equation [2]}$$

$$\text{gives } t_A = \sqrt{1 - v^2 / c^2} t_B$$

$$\text{divide through by } \sqrt{1 - v^2 / c^2}$$

$$t_B = t_A / \sqrt{1 - v^2 / c^2} \text{ time dilation CASE 2}$$

This CASE 2 is the Einstein case.

There is no reason to assume $t_B = t_A / \sqrt{1 - v^2 / c^2}$ instead of $c' = \sqrt{c^2 - v^2}$

Einstein writes his lightspeed postulate that seems to assume $c = c$
but really assumes $t_B = t_A / \sqrt{1 - v^2 / c^2}$

there is no reason for doing this!

existing set up is $c' = \sqrt{c^2 - v^2}$ for which $c = c$ still, so why the change?

(Existing setup being Newtonian physics.)

Einstein gives no reason for the change.

As per Silberstein GR (General Relativity) math is same as Newtonian physics math,
so no change needed there either!

Summary

Looking through the layers of mistakes that Einstein made in his construction of Special Relativity, we find that underneath it is just Newtonian physics with Einstein making a strange unjustified interpretation of the math.

Newtonian physics gives from this math model above the math:

$$c t_A = \sqrt{c^2 - v^2} t_B \text{ [1]}$$

Newtonian perspective interprets this as $t_A = t_B = t$ and $c' = \sqrt{c^2 - v^2}$.

Why the Einsteinian perspective would interpret this same equation [1] differently is not justified in Einstein's writings, and leads to all of the paradoxes of Twin paradox et al.

i.e. Einstein perspective just makes another mistake; this time an interpretation mistake of the math [1]. If we stick with Newtonian perspective then physics makes a great deal more sense than it has done since Einstein's changes.

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