

# Einstein Train Challenge

For believers in mainstream physics

Robert Bennett 4/25

Einstein intended to simplify public knowledge of Special Relativity by using his best example of simultaneity: the Train Thought experiment....see ref below  
In reality it's a logical train wreck.

A train is moving at  $v$  (left) when 2 lightning bolts simultaneously strike the tracks at A & B.  
Photons from rear and front meet at the middle,  $M'$  (right), taking time  $T_r$  and  $T_f$ .

Diagram is in the lab/track reference frame.

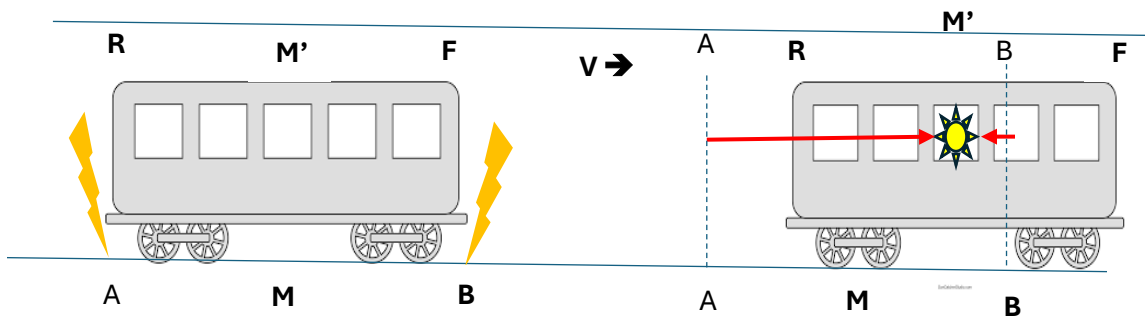
Equal times are NOT assumed.

Train: RF distance =  $L$ ;  $V > 0$

Photon speed =  $SoL$

time = 0

times =  $T_r, T_f$



## Photon motion analysis when beams meet:

Rear light beam:

$$AM' = AR + RM' \Rightarrow SoLr * Tr = v * Tr + L/2 \quad (1)$$

Solve for  $L/2$ :  $L/2 = (SoLr - v) * Tr$

Front light beam:

$$BM' = FM' - BF \Rightarrow SoLf * Tf = L/2 - v * Tf \quad (2)$$

Solve for  $L/2$ :  $L/2 = (SoLf + v) * Tf$

Equate each  $L/2$ :  $(SoLr - v) * Tr = (SoLf + v) * Tf$

$$Tr/Tf = (SoLf + v)/(SoLr - v) \quad (3)$$

Now apply the SR and simultaneity constraints

SR Postulate 2 =>  $SoLr = SoLf = c$ ....Always

Simultaneity =>  $Tr = Tf = t$  or  $Tr/Tf = 1$

From (3) =>  $1 = (c + v)/(c-v)$

This condition is satisfied only if ...  $v = 0$

**SR is then valid ONLY if nothing moves...if there's no relative motion of frames**

**Only in statics ....not in kinetics.**

Simultaneity is also possible with a **Galilean transform**:  $SoLr = c+v$   $SoLt = c-v$

From (3):  $Tr/Tf = (SoLf + v)/(SoLr - v) = (c-v + v)/(c+v - v) = c/c = 1$

The Gal Trans is supported by many overlooked experiments; see references below.

### **Summary:**

**Assuming  $SoL = c$  in the train test leads to a reduced scope of SR...to only applying to stationary objects!**

**Time dilation and length contraction do not apply to objects at rest.**

**This represents 120 years of scientific fraud.**

**When  $v = 0$  the Lorentz transform becomes the Galilean transform:**

**=>  $SoL = c +/- v$  =>  $SoLr = c + v$   $SoLf = c - v$**

**This result is consistent with the aether wind model ....as proven by Georges Sagnac 8 years after SR was published...**

### **The Challenge:**

**Refute the proof above, that Special Relativity is only valid if  $v$  always equals zero.**

## References

Einstein's Train Exp: [https://en.wikisource.org/wiki/Relativity\\_\(1931\)/Section\\_7=>9](https://en.wikisource.org/wiki/Relativity_(1931)/Section_7=>9)

Sagnac, D&P and Wang show that aether drag by matter explains their common result:

$SoL = c \pm v$   $v$  is the aether velocity as dragged by the mass in motion at  $v$

Demjanov's tests show that using a vacuum medium ( $n=1$ ) reduces the light wave amplitude to near zero, explaining why aether cannot be detected with vacuum interferometers or similar instruments.

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Sagnac 1 <https://www.gsjournal.net/Science-Journals/Historical%20Papers-Astrophysics/Download/2638>

Sagnac 2 <https://www.gsjournal.net/Science-Journals/Historical%20Papers/View/2639>

Generalized Sagnac Effect, R. Wang <https://arxiv.org/ftp/physics/papers/0609/0609235.pdf>

1 A. Dufour and F. Prunier [https://www.conspiracyoflight.com/pdf/Dufour\\_and\\_Prunier-On\\_the\\_Fringe\\_Movement\\_Registered\\_on\\_a\\_Platform\\_in\\_Uniform\\_Motion\\_%281942%29.pdf](https://www.conspiracyoflight.com/pdf/Dufour_and_Prunier-On_the_Fringe_Movement_Registered_on_a_Platform_in_Uniform_Motion_%281942%29.pdf)

2 A. Dufour and F. Prunier <https://www.gsjournal.net/Science-Journals/Historical%20PapersMechanics%20/%20Electrodynamics/Download/2468>

3 A. Dufour and F. Prunier <https://www.gsjournal.net/Science-Journals/Historical%20PapersMechanics%20/%20Electrodynamics/Download/2470>

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VV Demjanov <https://vixra.org/abs/1007.0038>

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