

**ADDITIONAL EXEMPLIFICATION OF DECEMBER 27, 2017 VIXRA SUBMISSION**  
**[HTTP://VIXRA.ORG/PDF/1712.0489V2.PDF](http://vixra.org/pdf/1712.0489v2.pdf) ENTITLED “REFUTATION OF SRT TIME DILATION”.**

**Our base parameter**

A photon is fired vertically from a stationary machine positioned at (x,y) co-ordinate (0,0), and travels to (0,4) in time t.

**Our scenario**

The same machine now moves at speed  $3c/4$  along the negative x axis towards the positive x axis, and at (x,y) co-ordinate (0,0) fires a photon with same intent of direction as it did when it was stationary.

The laws of motion tell us that no horizontal velocity will affect a vertical velocity, so the photon will be at  $y = 4$  at time t.

The laws of motion tell us that no vertical velocity will affect a horizontal velocity, so the photon will be at  $x = 3$  at time t.

And so given that we have moved the photon a (diagonal) length of 5 from (0,0) to (3,4) in time t, we have apparently at our disposal a machine which can move a photon faster than it can move on its own (on its own it could only move a length of 4). Something is wrong: our scenario has obeyed the laws of motion, but violated the constraint on the speed of light.

The Relativist’s ‘solution’

The Relativist ‘solves’ the problem by asserting that the time-scale on the vertical is different to the time-scale on the diagonal, thus jettisoning the laws of motion while making it look as though he is retaining them.

The Realist’s solution

Given that the laws of motion and the constraint on the speed of light are co-extant in reality, there must be an output co-ordinate which violates neither aspect.

Such co-ordinate will of necessity be produced by shrinking the diagonal to the length of the vertical (shrinking the diagonal to a length of 4), with the result that the diagonal in fact *becomes* the vertical and the horizontal length of 3 which the photon has supposedly traveled collapses to zero.

That is, the output co-ordinate which violates *neither* the laws of motion *nor* the constraint on the speed of light is (0,4).

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**DILATION” (CONT.)**

**Conclusion**

The photon’s path will not be diagonal, but vertical: it will not be influenced by the horizontal movement of the machine from which it is fired, but will behave as though it were fired from a stationary machine.

Ramifications

No diagonal means no triangle.  
No triangle means no variant time scales.  
No variant time scales means no time dilation.

**Postscript: epistemological constraint**

What we have done in this work is remove the misdirection Relativity Theory employs: we have removed the observer usually presented as being internal to the moving frame, thereby disallowing the juxtaposition of the moving frame with the stationary frame (our frame of observation) and instead treating the moving frame as a *subset* of the stationary frame: although all inertial frames equally obey the laws of physics, they are not equal with regard to the information they convey: we must analyse the matter only from the perspective of the frame which contains the most information and which therefore becomes the (effective) absolute frame for the purpose of the analysis.

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