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Einstein's Space-Time Doesn't Exist

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The Lorentz's equations are the basis of the relativity theory.

From them:

$$\begin{cases} x = \dfrac{x_0 + vt_0}{\sqrt{1 - v^2/c^2}} \\ t = \dfrac{t_0 + vx_0/c^2}{\sqrt{1 - v^2/c^2}} \end{cases} \Leftrightarrow$$

$$\Leftrightarrow \quad \begin{cases} v^2(c^2 {t_0}^2 + x^2) + 2c^2 v x_0 t_0 + c^2({x_0}^2 - x^2) = 0 \\ v^2({x_0}^2 + c^2 t^2) + 2c^2 v x_0 t_0 + c^4({t_0}^2 - t^2) = 0 \end{cases}$$

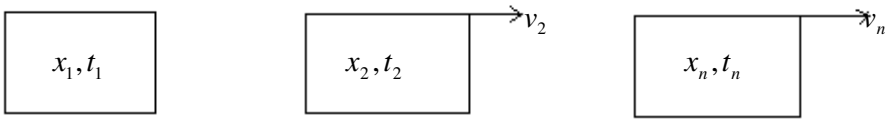
Equalling the coefficients we remove the variable v:

$$\frac{2c^2 x_0 t_0}{c^2 {t_0}^2 + x^2} = \frac{2c^2 x_0 t_0}{{x_0}^2 + c^2 t^2} \quad \Leftrightarrow \quad c^2 t^2 - x^2 = c^2 {t_0}^2 - {x_0}^2$$

$$\frac{c^2({x_0}^2 - x^2)}{c^2 {t_0}^2 + x^2} = \frac{c^4({t_0}^2 - t^2)}{{x_0}^2 + c^2 t^2} \quad \Leftrightarrow \quad \underline{c^2 t^2 - x^2 = c^2 {t_0}^2 - {x_0}^2}$$

This is the invariance equation.

For n relative frames with v_n relative speeds:



$$\begin{cases} x_2 = \dfrac{x_1 + v_2 t_1}{\sqrt{1 - {v_2}^2 / c^2}} \\ t_2 = \dfrac{t_1 + v_2 x_1 / c^2}{\sqrt{1 - {v_2}^2 / c^2}} \end{cases} \quad \Leftrightarrow \quad c^2 {t_2}^2 - {x_2}^2 = c^2 {t_1}^2 - {x_1}^2$$

$$\begin{cases} x_n = \dfrac{x_1 + v_n t_1}{\sqrt{1 - {v_n}^2 / c^2}} \\ t_n = \dfrac{t_1 + v_n x_1 / c^2}{\sqrt{1 - {v_n}^2 / c^2}} \end{cases} \quad \Leftrightarrow \quad c^2 {t_n}^2 - {x_n}^2 = c^2 {t_1}^2 - {x_1}^2$$

$v_x = c^2 \dfrac{v_n - v_2}{c^2 - v_n v_2}$ -- Relative speed between 2 and n according relativity theory.

But the value of the speed doesn't matter.

$$\begin{cases} x_n = \dfrac{x_2 + v_x t_2}{\sqrt{1 - {v_x}^2 / c^2}} \\ t_n = \dfrac{t_2 + v_x x_2 / c^2}{\sqrt{1 - {v_x}^2 / c^2}} \end{cases} \quad \Leftrightarrow \quad c^2 {t_n}^2 - {x_n}^2 = c^2 {t_2}^2 - {x_2}^2$$

So:

$$c^2 {t_1}^2 - {x_1}^2 = c^2 {t_2}^2 - {x_2}^2 = \cdots = c^2 {t_n}^2 - {x_n}^2 \quad \Leftrightarrow$$

$c^2 {t_n}^2 - {x_n}^2 = k$ (Constant)

According to the relativity theory k, the squared space-time interval, can be greater than zero, equal to zero, or less than zero. It value can change for each pair of frames. When we prove that k is a universal constant we prove that the space-time doesn't exist.

We have calculated the value of k:

$$k = 1.9 \times 10^{-34} m^2$$

A direct consequence is that the vacuum light speed is variable with the frequency:

$$w = \sqrt{c^2 - k f^2}$$

This simple and evident demonstration proves that Einstein's relativity theory is all wrong. We have made a new relativity theory without space-time that works very well and proves that space-time is not necessary for anything.