

## Relativity is the Daughter of Inertia. Why did not Einstein understand it?

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**Abstract - Physical Attention: Relativity is the Daughter of Inertia. The facts and phenomena in nature and laboratory experiments prove this. Why did not Einstein understand it?**

The speed of light is the limiting speed for everything in the Universe. When approaching the speed of light anything material loses its material consistency and acquires the waveform. This is the concept of the physics of the wave / particle duality  $e = m$  or  $m = e$ . This fact is proven in the collisions of the cosmic rays (protons of very high energy) with the atoms of the upper atmosphere of the Earth and also in accelerators of particles. After the collision, depending on the speed of the byproducts, something is wave or particle. The speed of light is the boundary between matter and wave. In particle accelerators, the electron when driven with great energies behaves approximately to these values of energy used and speed reached:

0,5 MEV... 260.000 km/s; 1,0 MEV... 280.000 km/s; 1,5 MEV... 290.000 km/s; 4,5 MEV almost 300.000 km/s (approximately c); 15 MEV almost 300.000 km/s (approximately c).

At the link below, courtesy of me, see this beautiful and proven experience:

[http://www.scientiamundi.com.br/site/index.php?option=com\\_content&view=article&id=28:a-velocidade-limite-pssc&catid=10:videos&Itemid=18](http://www.scientiamundi.com.br/site/index.php?option=com_content&view=article&id=28:a-velocidade-limite-pssc&catid=10:videos&Itemid=18)

Why does not the electron (or anything) allow itself to accelerate indefinitely and cease its movement as it approaches the speed of light even when immense energy is applied? Einstein explained:

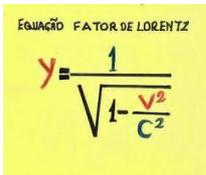
"IF A WORK IS APPLIED ON A BODY AND IT DOES NOT INCREASE THEIR SPEED, IT SHOULD HAVE INCREASED ITS INERTIA, JUST THE DIFFICULTY OF CHANGING ITS STATE OF MOVEMENT." See the details and formulas in topics 18 and 19 of the link

[http://www.educacional.com.br/especiais/fisica/flash/aberto/swf/eins01\\_7.swf](http://www.educacional.com.br/especiais/fisica/flash/aberto/swf/eins01_7.swf)

**So, according to Einstein, inertia does not allow a body to be accelerated indefinitely and the further increase in speed increases the difficulty of acceleration, no matter how much work is applied to the body. So, Relativity is the Daughter of Inertia. Why did not Einstein realize that?**

**BUT, WHY INCREASE INERCIA WHEN SPEED INCREASES?**

According to Einstein, inertia is also a property of energy, just as it is of matter. We know that mass does not increase with velocity, because mass is invariant, so if increasing the velocity of something will ONLY increase its kinetic energy and also increase its inertia; because "energy has inertia". THE RELATIVE PHENOMENON THAT OCCURS IN THE MOVEMENT IS THE INERTIA, WHICH IS RELATIVISTIC BECAUSE IT WILL DEPEND ON THE SPEED OF THE PARTICLE, THE REASON  $v^2 / c^2$  WHOSE RESULTS RANGE ( $\gamma$ ) WILL BE INDICATED BY THE EQUATION OF LORENTZ SHOWN BELOW:



The image shows a yellow rectangular box containing the Lorentz factor equation. At the top, it reads "EQUAÇÃO FATOR DE LORENTZ". Below this, the equation is written as  $\gamma = \frac{1}{\sqrt{1 - \frac{v^2}{c^2}}}$ . The Greek letter gamma ( $\gamma$ ) is in red, and the rest of the equation is in black.

**MY CONCLUSION: INERTIA CAUSES THE RELATIVITY OF WATCHES.**

Einstein never gave this explanation to the paradox of clocks. But we can deduce. For example, if a clock is flying at a speed of 99.9% of the speed of light, as long as it ticks 1 hour the clock on Earth will mark 22.36 hours. This is because the clock in flight is being delayed by the great inertia of its particles at that high speed. It will spin very slowly due to the relativistic inertia of its particles. You can calculate by the Lorentz equation, the gamma factor is 22.36.

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