the general science journal

Time dilation is just inertia.

Three scientific evidences for my theory

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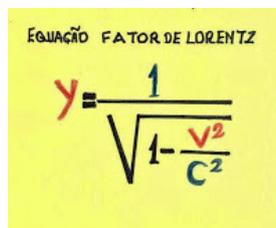
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English translation: – Vladimir J. Basus

Abstract

Time dilation - About time, Einstein corrects Newton, but according to my theory is Newton's first law which explains Einstein.

Einstein theorized that if you have two identical and synchronized clocks, and if one of them travels at high speeds, the one travelling at high speeds will be delayed (having run fewer clock cycles) than the other that has remained at rest. It is the so called "Clock paradox", or "time dilation", and can be calculated by use of the Lorentz factor given by the following equation:

$$y = \frac{1}{\sqrt{1 - \frac{v^2}{c^2}}}$$

EQUAÇÃO FATOR DE LORENTZ

V^2 is the square of the constant velocity from point A to point B traversed by the clock in flight, c^2 is the square of the speed of light.

y is the result of Lorentz's equation by which will be divided the time recorded by the clock at rest to find out how much is out of sync with the clock travelling at high speeds, or t/y. The result of that division will be the time registered by the clock that is in motion. Below you will find some results of calculated examples (rounded off). At the left, in this table, we have the velocity of motion of a clock as a percentage of the velocity of light.

In order to know how much slower the clock in motion is relative to the clock at rest on Earth, it is sufficient to divide the time of the observer's clock on Earth by the factor *y* that is shown on the column at right on the table, that is: t/*y*. It is easy to understand: while one in any unit of time is shown by the moving clock, the same is equivalent to the values found in by the equation, which are the numbers next to *y* at the right side of the table of examples:

90%c y = 2,29

99%c y = 7,08

99,9%c y = 22,36

99,99937%c y = 281,7

For example: if a clock is moving at 99,99937%c and registers 1 second, 1 minute, 1 hour, or 1 year, the clock at rest will register correspondingly 281.7 seconds, 281.7 minutes, 281.7 hours, 281.7 years on Earth.

The de-synchronization occurs and has been confirmed by experiments, so much so that is necessary to correct the time for GPS systems so that errors are not encountered on the directions of aircrafts, or ships, or satellites, or any other vehicles.

However, neither Einstein nor any other physicist has shown the **cause** or **motive** that produces this **de-synchronization of clocks when traveling at different speeds.**

I always searched for the cause because it needs to be explained. A few years ago I have a theory. I will prove it in this article in three proofs.
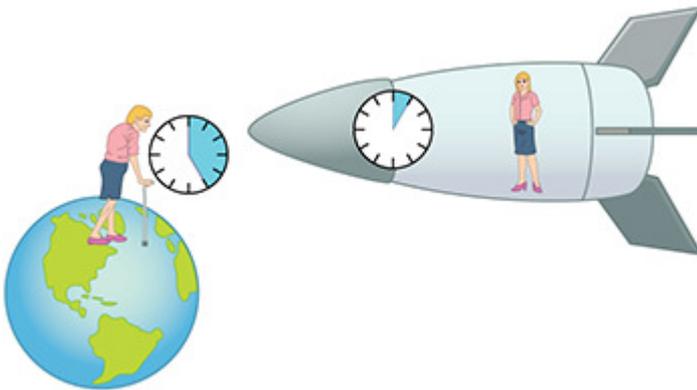
FIRST PROOF:

THIS IS WHAT I SHOW AS PROOF 1:

Actual experiments in a particle accelerator in Germany showed a comparison between an atomic clock at high speeds and another stationary.

In order to make the atomic clock moving at high speeds, scientists in Germany have accelerated ions of lithium at one-third the velocity of light, almost 100,000 km/s. They observed in the lithium ion electronic transitions from various energy levels. The frequency of these transitions served as the cycles of a clock moving at high speed. While this was going on, the transitions of a lithium ion at rest served as the stationary clock. The cycles of the fast moving clock were fewer than for the stationary clock. What made the clock cycles of the clock at high speeds be slower? The "relativist" said that it is the dilation of time. I understand that INERTIA, or the hampering caused by the HIGHER INERTIA is what hampered the cycles of the clock. **Below is the link to the experiments carried out by the German scientists and their illustrations:**

WHY I SAY INERTIA IS THE CAUSE?
You will understand when you thinking about the second and third proof.

Relativity is Right on Time, Again

Published 16 September 2014

An experiment with fast-moving ions verifies relativistic time dilation to a new level of precision, placing constraints on certain quantum gravity theories.

http://journals.aps.org/prl/abstract/10.1103/PhysRevLett.113.120405

http://www2.uol.com.br/sciam/noticias/experimento_confirma_dilatacao_temporal_de_einstein_com_precisao.html

SECOND PROOF:

THIS IS WHAT I SHOW AS PROOF 2:

<u>Understanding the speed limit, c</u>

Once I visited the site SCIENTIA MUNDI – CURSOS ON LINE by the Professor Émerson Cruz, I saw a video clip that demonstrated spectacularly in 1956, at the PSSC in Massachusetts, how to understand the speed limit, that is, c, the

speed of light. Changing my paradigm of understanding I realized that this video clip could give clues for the reason that one clock at higher speeds can run more slowly than the other.

It sufficed to imagine a clock attached to a beam of electrons, and imagine INERTIA making slow its gears. Reason with me: in the video clip, in 1956/60, a group from PSSC, Physical Science Study Committee, in Massachusetts, accelerated a beam of electrons. With an energy of 0.5 MEV, the speed was 2.6 (x 100,000 km/sec). The energy increased to 1.0 MEV, and the speed reached 2.8. With 1.5 MEV, the speed was 2.9, almost the speed of light, slighty under 3.0. With an energy of 4.5 MEV the speed did no go past 2.9, or almost the speed of light. The speed did not increase even with 15 MEV of energy! Watch the video clip:

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

(I thank the SCIENTIA MUNDI for the video clip.)

Did you see the video clip? Sorry for it is in Portuguese.

Did you see in the experiment that no matter how much the energy is increased even in millions of MEV, the speed of the beam of electrons DID NOT INCREASE ANY FURTHER? Why does it happen?

WHY I SAY INERTIA IS THE CAUSE?

THE THIRD PROOF IS CONCLUSIVE.

THIRD PROOF: THIRD EVIDENCE - CLOSING THE FINAL

THIS IS WHAT I SHOW AS PROOF 3:

Einstein's comment

Einstein one time commented about the inability of accelerating electrons, no matter how much energy is applied to them, Einstein said:

"If work is done on a mass and it does not increase its velocity, then it must have increased its INERTIA, just the difficulty in altering its velocity."

Yes, yes, yes! Here is the answer to the relativity and time dilation. Einstein did not notice, but your comment is a response to the great secret of relativity. It is the inertia. Inertia makes Relativity of time or paradox watches.

Einstein's comment you can see the link bellow threads 18, 19

http://www.educacional.com.br/especiais/fisica/flash/aberto/swf/eins01_7.swf

INERTIA is the name of the property of a body that makes it resist a change in velocity. - Newton's first law. - THEN IT IS DUE TO THE HIGH INERTIA THAT A CLOCK RUNS MORE SLOWLY AT HIGH SPEEDS.

My explanation with three proofs is the end of the mystery of time dilation and mystery of paradox of clocks. Inertia is the cause, inertia is the answer. No more mystery. There is?
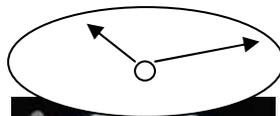
MORE ABOUT INERTIA

What is time?

Time is measure of movement of a referential. Any referential, for example Earth, atoms etc.

In any movement there is inertia. Fast motion causes greater inertia for example electrons accelerated in almost c. Slow motion has little inertia.

So if time is measure of the movement of the referential and any movement has inertia, TIME IS MEASURE OF INERTIA too. A CHANGE IN THE SPEED CHANGES INERTIA too. That CHANGE IN INERTIA IS TIME DILATION. THIS IS MY NEW THEORY.

Google Images

THE MOVING OF EARTH IN SPACE IS JUST COPIED, IMITATED, REPRODUCED BY CLOCK, so "TIME IS JUST MEASURE OF MOVEMENT OF A REFERENTIAL" (it can be Earth or atoms etc)

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