https://coshair.ru/cs/animal/opyt-maikelvona-morli-opyt-maikelsona-morli-opyt-maikelsona-kratko/

Michelson-Morley experiment, bulldog efforts

Is motion relative? After a moment of thought, you may be inclined to answer: "Yes, of course!" Imagine a train heading north at a speed of 60 km/h. A man on the train is traveling south at a speed of 3 km/h. In what direction is he moving and what is his speed? It is quite obvious that this question cannot be answered without specifying the frame of reference. In relation to the train, a man is moving south at a speed of 3 km/h. In relation to the Earth, he is moving north at a speed of 60 minus 3, or 57 km/h. Can we say that the speed of a man relative to the Earth (57 km/h) is his real, absolute speed? No, because there are other, even more extensive frames of reference. The Earth itself is moving. It rotates around its axis and at the same time moves around the Sun. The Sun, together with all its planets, moves inside the Galaxy. The Galaxy rotates and moves in relation to other galaxies. Galaxies, in turn, are clusters of galaxies that move with each other. No one knows how far this chain of motion can actually continue. There is no obvious way to determine the absolute motion of an object; in other words, there is no such fixed, finite frame of reference. It amazes me. I think that one /frame/ would be: **3+3D spacetime infinite, flat (without dimensional curvatures), without the passage of time and without the expansion of space, without matter and without the interactions of the 4 forces.** Why not??? This “frame of reference” is transferred to “our universe” after the big bang, from the state before the big bang as a network, a web, a grid in which “everything floats”. After the big bang, there was a sudden change in the curvature of the 3+3 dimensions, from zero curvature to extreme curvature, and in this soup = plasma the construction of matter takes place by “curving, packing dimensions”. This is how matter is built from dimensions http://www.hypothesis-of-universe.com/docs/c/c_455.jpg . Spacetime remains flat as a "grid" in which all states of matter, fields (gravity and the three other forces) "float" because they are also built from curved dimensions. For this simple vision, thinking about the movement (of matter and geometric points) of light does not lead to delusion, as we see below in this article. The "problem" with the speed of light why it is constant does not apply here. The symbolic notation will be → **Flat spacetime = 1/1 = c > v = 1/∞ = 0/1** . It must also apply $c^2 = x^2/t^2 = 1^2/1^2$, and also $c^3 = x^3/t^3 = 1^3/1^3$; http://www.hypothesis-of-universe.com/docs/c/c_486.jpg and…and that is regardless of whether we choose a unit interval ***for length and time arbitrarily large***. Photons are the only elementary particles with zero rest mass, all other particles have non-zero mass, “floating” (!) in a flat grid, web, network of dimensions with motion v < c = 1/1 ; $\boxed{\mathbf{m \cdot v = m_0 \cdot c}}$. Everything is carried not by the ether, but by a “flat 3+3D space-time”. Everything“floats” in a flat space-time, because everything is essentially “**a state of curved dimensions**” ; all matter is built from length and time dimensions. (!) Nowhere is it forbidden or proven that time cannot have more than one dimension. !!!!!!! It is also possible to correctly consider whether the expansion of the universe = space-time (the movement of its point) is identical to the speed of light c = 1/1. If so, this would mean that during the history of the universe the number = the magnitude of the speed of light changes, but it is still constant c = 1/1 with a different "unit". Now a few examples from 2000-2004 about LT and M-M ex. http://www.hypothesis-of-universe.com/docs/d/d_011.pdf Why do I say that I will demonstrate relativity from convention? Well, because the Lorentz transformation involves a rotation of the systems, so actually the Pythagorean theorem →

Předvedu ““relativitu““ opačně (vyjdu z konvence) :

$$\sqrt{2} \,.\, v \quad = \quad c \quad = \quad \sqrt{2}\ k\ w \quad = \quad 2\, k^2\ u$$

$$\Downarrow$$

$$c^2 = 2 \,.\, k^2\, w^2$$

$$c^2 = k^2 \,.\, w^2 + k^2 \,.\, w^2$$

$$m^2 \,.c^2 = m^2 \,.\, k^2 \,.\, w^2 + m^2 \,.\, k^2 \,.\, w^2$$

$$m^2 \,.c^2 = m^2 \,.\, k^2 \,.\, w^2 + m^2 \,.\, k^2 \,.\, \frac{x_v^2}{x_c^2} \,.\, \frac{x_c^2}{t_c^2}$$

$$m^2 \,.c^2 = m^2 \,.\, k^2 \,.\, w^2 + m^2 \,.\, k^2 \,.\, \frac{x_v^2}{x_c^2} \,.\, \frac{x_c^2}{t_c^2}$$

$$m^2 \,.c^2 = m^2 \,.\, k^2 \,.\, w^2 + m_0^2 \,.\, k^2 \,.\, \frac{x_c^2}{t_c^2}$$

$$m^2 \,.c^2 = m^2 \,.\, v^2 + m_0^2 \,.\, \mathbf{k^2} \,.\, c^2$$

$$m^2 \,.c^2 = m^2 \,.\, v^2 + m_0^2 \,.\, \frac{\mathbf{t_c^2}}{\mathbf{t_v^2}} \,.\, c^2$$

$$m^2 \,.c^2 = m^2 \,.\, v^2 + m_0^2 \,.\, c^2 \,.\, \frac{\mathbf{t_c^2}}{\mathbf{t_v^2}}$$

$$m^2 \,.c^2.c^2 = m^2 \,.\, v^2.c^2 + m_0^2 \,.\, c^2.c^2 \,.\, \frac{\mathbf{t_c^2}}{\mathbf{t_v^2}} \qquad 01*)$$

$$\mathbf{m^2 \,.\, c^4} = \mathbf{m^2 \,.\, v^2.c^2 + m_0^2 \,.\, c^4 \,.\, \Delta t^2 / t^2} \qquad 02*)$$

$$\mathbf{C^2} = \mathbf{A^2} + \mathbf{B^2}$$

Pythagoras' theorem on energy $\mathbf{E^2} = \mathbf{p^2 \ .c^2 + m_0^2 \ .\, c^4 \,.\ \ \Delta t^2 / t^2}$

$$\mathbf{m \ .\, v \,.\, x_c = m_0 \ .\, c^2 \,.\, t_c \ .\ \ t_c / t_v} \qquad 03*)$$

And since 02*) is an isosceles right triangle, then I can write here **A = B**, i.e. the shape 03*), which creates the >Heisenberg uncertainty principle<, =but already corrected= by the factor Δt / t of the gravitational redshift or violetshift.when a moving object changes its path oralmost unobservable, it is 8 orders of magnitude less "curvy". Objects also move due to the "expansion of space-time", then the question will be how to distinguish them? Einstein's special theory of relativity deals with the first method and the general theory of relativity with the second. O.K., but...Einstein's STR does not search for ""what and how"" a body in uniform motion with a speed of "v_7" changes that speed to "v_8", then to v_9", etc. In the LT equation, sections of non-uniform motion must be inserted!!!, which according to OTR is that either an external force acts on the body, or the body moves through a curved space-time. So what is the point of STR then? STR is only a "stop-state" for a specific speed, nothing more. STR is thousands, millions of stop-states in non-uniform accelerated motion, so it is basically just accelerated motion, into which "stop-states" are inserted, which will then be called "transformation" and "relativity", although this is unnecessary. The motion of an object in STR is still non-uniform from v = 0 to v → c and with this power the body performs a rotation of the system. The transformation is there only by comparing intervals on a curved path…and we compare by "scanning" into the plane of the Observer and then we call it "dilation and contraction", which are not on the object. In this and the next two chapters we will look at the first method that can serve as a key to understanding absolute motion, a method using the properties of light. In the nineteenth century, even before Einstein, physicists imagined space filled with a special motionless and invisible substance called ether. It was often called the "light" ether, meaning it was the carrier of light waves. The ether filled the entire universe.

It penetrated all material bodies. If all the air were sucked out from under a glass bell jar, the bell would be filled with ether. How else could light travel through a vacuum? Light is the motion of waves. Therefore, there must be something in which the oscillations occur. The ether itself, although it vibrates, rarely (if ever) moves in relation to material objects; rather, all objects move through it, like the movement of a sieve in water. The absolute motion of a star, planet, or any other object is simplified (of this the physicists of that time were sure) if the motion is considered in relation to such a motionless, invisible ethereal sea. But you ask, is the ether an immaterial substance that cannot be seen, heard, felt, smelled, or tasted. But how can we consider the motion of, for example, the Earth relative to it? The answer is simple. Measurements can be made by comparing the motion of the Earth with the motion of a light beam.

To understand this, let's go back for a moment to the nature of light. In fact, light is only a small part of the visible spectrum of electromagnetic radiation, which includes radio waves, ultrashort waves, infrared light, ultraviolet light, and gamma rays. In this book, we Thinking about such motion without thinking about the material ether at the same time seemed as absurd to physicists of the past as thinking about waves on water without thinking about water itself. That’s why it didn’t occur to them that the “carrying medium” could be (and is) 3+3D space-time itself…; everything but light “floats” in it. If you shoot from a moving jet plane in the direction of its motion, then the speed of the bullet relative to the Earth will be greater than the speed of a bullet fired from a gun on Earth. The speed of the projectile relative to the ground is obtained by summing the speed of the aircraft and the speed of the projectile. O.K.,

if the trajectory of movement is straight.

In the case of light, the speed of the beam does not depend on the speed of the object from which the light was emitted. This fact was convincingly demonstrated experimentally in the late nineteenth and early twentieth centuries and has been repeatedly confirmed since then. The last check was carried out by Soviet astronomers in 1955 using light from opposite sides of the rotating sun. One edge of our sun is constantly moving towards us and the other in the opposite direction. But here we must "take into account" the reality of the curvature of dimensions in a strong gravitational field, the movement is not in a straight

line It was found, how**in a vacuum** is always the same : In a vacuum at the stop-age of 13.8 billion years since the big bang, spacetime is almost flat, the change in curvature being on the order of 10^{-10}, maybe more … is a little less than 300,000 km/s. You see how this fact provides a scientist (let's call him an observer) with a way to calculate his absolute speed. If light propagates through a stationary, unchanging ether at a certain speed S, and if this speed does not depend on the speed of the source, then the speed of light can serve as a standard for determining the absolute motion of the observer. An observer moving in the same direction as the light beam would have to find that the beam passes by him at a speed less than S; an observer moving towards a beam of light would notice that the beam is approaching him at a speed greater than S... In other words, the results of the measurement of the speed of light would have to change depending on the observer's movement relative to the beam. These changes would reflect his (the observer's) actual, absolute motion through the ether. In describing this phenomenon, physicists often use the term "etheric wind." To understand the meaning of this term, consider again a moving train. We have seen that the speed of a person walking on a train at a speed of 3 km/h is always the same relative to the train, and does not depend on whether he is walking towards the locomotive or towards the end of the train. This will also be true for the speed of sound waves inside a closed carriage. Sound is a wave motion carried by air molecules. Since air is contained in the carriage, sound inside the carriage will propagate northward at the same speed (relative to the carriage) as it moves

southward.

The situation changes if we go from a closed passenger car to an open platform. The air is no longer isolated inside the carriage. If the train is moving at 60 km/h, then the wind is blowing in the opposite direction along the platform at 60 km/h. Because of this wind, the speed of sound in the direction from the end to the beginning of the carriage will be lower than normal. The speed of sound in the opposite direction will be faster than

normal.

Nineteenth-century physicists believed that the ether should behave like air blowing on a moving platform. How could it be otherwise? If the ether is stationary, then any object moving in it must encounter an etheric wind blowing in the opposite direction. Light is the movement of waves in the stationary ether. The etheric wind must, of course, affect the speed of light measured from a moving object. The Earth is hurtling through space in its orbit around the Sun at a speed of about 30 km/s. This motion, physicists supposed, should be caused by an etheric wind blowing toward the Earth at intervals between its atoms at a speed of 30 km/s. To measure the absolute motion of the Earth (its motion relative to the stationary ether), all one needs to do is measure the speed at which light travels a certain, definite distance back and forth across the Earth’s surface. Thanks to the etheric wind, light will move faster in one direction than in the other. By comparing the speeds of light emitted in different directions, the absolute direction and speed of the Earth at a given moment can be calculated. This experiment was first proposed in 1875, 4 years before Einstein was born, by the great

Scottish physicist James Clark Maxwell.

In 1881, Albert Abraham Michelson, then a young officer in the United States Navy, conducted just such an experiment. Michelson was born in Germany to Polish parents. His father moved to America when Michelson was two years old. After graduating from the Annapolis Naval Academy and serving two years at sea, Michelson began teaching physics and chemistry at the same academy. He took a long vacation and went to Europe to study. At the University of Berlin, in the laboratory of the famous German physicist **Hermann Helmholtz**, the young Michelson first tried to detect the ether wind. To his great surprise, in no compass direction did he find a difference in the speed at which light traveled back and forth. It was as if a fish had discovered that it could swim in any direction in the sea without noticing the movement of the water relative to its body; as if a pilot flying with an open cockpit had not noticed the wind blowing in his

face.

The outstanding Austrian + Czech physicist **Ernst Mach** (we will talk about him in Chapter 7) had already criticized the concept of absolute motion through the ether. After reading Michelson's published description of the experiment, he immediately came to the conclusion that the concept of the ether must be discarded. Well, every physicist can come to the "conclusion" that (?!)..., the concept must be proven, not just shouted out that it is wrong... Most physicists, however, rejected such a bold step. Michelson's device was crude, there were >enough reasons to think, proving and "thinking" are not the same thing... that an experiment with a more sensitive device would yield a positive result. Michelson himself thought so. He found no errors in his experiment and tried to repeat it. Michelson left the naval service and became a professor at the Keyes School of Applied Sciences (now Keyes University) in Cleveland, Ohio. Nearby, Edward William Morley taught chemistry at the University of the Western Territory. The two men became good friends. “On the surface,” writes Bernard Yaffe in his book “Michelson and the Speed of Light,” “the two scientists were a contrast in appearance... Michelson was handsome, intelligent, and always clean-shaven. Morley, to put it mildly, was slovenly in his dress and served as an example of an absent-minded professor... He let his hair grow until it curled over his shoulders, and he had a disheveled red stubble that reached almost to his ears.” In 1887, in the basement of Morley’s laboratory, the two scientists made a second, more precise attempt to find the elusive ether wind. Their experiment, known as the Michelson-Morley experiment, is one of the great turning points in modern physics. The device was installed on a square stone slab about one and a half meters long and more than 30 cm thick, which was floating in liquid mercury. This eliminated vibrations, kept the slab horizontal, and made it easier to rotate around its central axis. A system of mirrors directed a beam of light in a certain direction, the mirrors reflected the beam back and forth in one direction, so that it made eight passes. (This was done in order to lengthen the path as much as possible while maintaining the dimensions of the device, so that it could still rotate easily.) At the same time, another system of mirrors sent the beam on eight runs in a direction that formed a right angle with the first beam. It was assumed that if the slab was rotated so that one of the beams ran back and forth parallel to the etheric wind, the beam would make a flight in a longer time than the second beam would cover the same distance perpendicular to the wind. At first glance, it seems that the opposite should be true. Consider light traveling with and against the wind. Wouldn't the wind increase the speed on one path as much as it would on the other? If so, then the acceleration and deceleration would cancel each other out, and the time spent on the entire journey would be exactly the same as if there was no wind at all.

The wind will indeed increase the speed in one direction by exactly the same amount as it decreases in the other, but - and this is most important - the wind will reduce the speed for a longer period of time. Calculations show that it takes longer to cover the entire distance against the wind than in a calm wind. The wind will have a slowing effect on a ray propagating at right angles to it. This is also easy to see. It turns out that the slowing effect is less than in the case when the ray propagates parallel to the wind. If the Earth moves through a sea of motionless ether, an ether wind should appear, and the Michelson-Morley device should register it. Both scientists were truly convinced that they could not only detect such a wind, but also determine (by rotating the plate until they found the position in which the difference in the time of passage of light in both directions is maximum) at any given moment the exact direction of movement of t ; Michelson was once again amazed and disappointed. All physicists around the world were also surprised. Didn't any physicist think that Lorentz transformations are "pseudo-transformations" (?), because the object system rotates??... And didn't they think that if the M-M device - interferometer is very large, of "cosmological size", that the linear light will not return back to the mirrors on the plate, which no longer perform a rectilinear motion??? ! Despite the fact that Michelson and Morley rotated their device, they did not notice even a trace of the etheric wind!

Never before in the history of science has a negative result of an experiment been so destructive and so fruitful. Michelson decided again that his experiment had failed. He never thought that this "failure" would make his experience one of the most significant, revolutionary experiments in the history of science. Later, Michelson and Morley repeated their experiment with an even more sophisticated device. Other physicists did the same. The most precise experiments were carried out in 1960 by Charles Townes at Columbia University. His device, using a maser ("atomic clock" based on molecular vibrations), was so sensitive that it could detect the ether wind even when the Earth was moving at a speed of only one thousandth. But no trace of such a wind was found. Physicists were initially so astonished by the negative result of the Michelson-Morley experiment that they began to invent all sorts of explanations to save the ether wind theory. And no one thought that this was a matter of rotation of the systems? Of course, if this experiment had been performed a few centuries earlier, then, as HJ Whitrow notes in his book The Structure and Development of the Universe, everyone would have quickly come up with a very simple explanation for the immobility of the Earth. But this explanation for the experience seemed unlikely. The best explanation was the theory (much older than the Michelson-Morley experiment) that the ether is carried by the Earth, like air inside a closed carriage. Michelson thought so too. But other experiments, one of which Michelson himself performed, ruled out this explanation. The most unusual explanation was given by the Irish physicist George Francis Fitzgerald. Perhaps, he said, an ether wind is pushing on a moving object, causing it to contract in the direction of motion. To determine the length of a moving object, you need to multiply its length at rest by

the value given by the formula

where v^2 is the square of the speed of the moving body and from 2- ? the square of the speed of light. From this formula it can be seen that the rate of contraction is negligible at low speeds of the body, it increases with increasing speed and increases when the speed of the body approaches the speed of light. A spaceship in the shape of a long cigar thus takes on the shape of a short cigar when moving at high speed. The speed of light is an unattainable limit; for a body moving at this speed the formula would have the form (Unfortunately, the article lacks equations and images because I do not have a single friend who would help me convert the downloaded document in "PDF" to "Word", i.e. to "doc", where I would already see the formulas and be able to respond to them with a comment. I can't do it.)

and this expression is equal to zero. Multiplying the length of an object by zero would give us the answer of zero. In other words, if an object can reach the speed of light, then it will have no length in the direction of its motion! This is of course nonsense. The observer /in a frame of rest/ will scan (!) into his projection the rotated frame of the object (in motion), in which the coordinate – the "x" axis, originally perpendicular to the motion, will be rotated to the position of the "y" axis, and thus the scanned interval will be shortened in the projection. In a frame with time axes, it will be the other way around: the scanned interval will be stretched (in proportion to the unit standard in the observer's frame).

An elegant mathematical formulation of Fitzgerald's theory was given by the Dutch physicist Hendrik Lorenz, who independently arrived at the same explanation. (Lorenz later became one of Einstein's closest friends, but they did not know each other at the time.) This theory became known as the Lorentz-Fitzgerald (or Fitzgerald-Lorentz) contraction theory. It is easy to see how the contraction theory explained the failure of the Michelson-Morley experiment. **If the square plate and all the devices on it were** slightly reduced in size in the direction in which the ether wind was blowing, **then the light would** travel a shorter full path. Although the wind would generally have a slowing effect on the forward and backward motion of the beam, the shorter path would allow the beam to complete this journey in exactly the same time as it would have in the absence of the wind or the contraction. In other words, the contraction was just enough to keep the speed of light constant regardless of the direction in which the Michelson-Morley apparatus was rotated.

http://www.hypothesis-of-universe.com/docs/f/f_033.pdf ;

You may be wondering why it was not possible to simply measure the length of the instrument and see if the contraction actually occurred in the direction of the Earth's motion? But the line also shrinks in the same proportion. The measurement would give the same result as if there had been no contraction.

Everything on the moving Earth is contracting. The situation is the same as in the Poincaré thought experiment, in which the universe suddenly becomes a thousand times larger, but only in the **Lorentz-Fitzgerald theory** does the change occur in one direction. Since everything is subject to this change,

Many writers on the theory of relativity have considered the Lorentz-Fitzgerald contraction hypothesis to be an ad hoc hypothesis (Latin for "just in this case"), not verifiable by any other experiments. http://www.hypothesis-of-universe.com/docs/d/d_012.pdf **Adolf Grünbaum** thought this was not entirely fair. The reduction hypothesis was *ad hoc* only in the sense that there was no way to test it at the time. In principle, it is not ad hoc at all... And this was proven in 1932, when **Kennedy and Thorndike** experimentally disproved this hypothesis. Roy J. Kennedy and Edward M. Thorndike, two American physicists, repeated the Michelson-Morley experiment. But instead of trying to make the two arms as equal as possible, they tried to make their lengths as different as possible. In order to detect the difference in the time it takes light to travel in the two directions, the instrument was rotated. According to the theory of contraction, the time difference should change as it was rotated. This could be observed (as in Michelson's experiment) by a change in the interference pattern produced when the two beams mixed. But no such change was found. The simplest way to test the theory of contraction would be to measure the speed of light rays traveling in opposite directions: with and against the direction of Earth's motion. It is clear that the shortening of the path does not prevent the detection of an ether wind, if it exists. Until the recent discovery of the **Mössbauer** effect (which will be discussed in Chapter 8), gigantic technical difficulties prevented the performance of this experiment. In February 1962, at a meeting of the Royal Society in London, Professor **Christian Möller** of the University of Copenhagen spoke about how easy it was to perform this experiment using the Mösebauer effect. For this purpose, the source and absorber of electromagnetic oscillations are installed at opposite ends of a rotating table. Möller pointed out that such an experiment could refute the original theory of contractions. It is possible that such an experiment will be carried out while this book is being printed. Although experiments of this kind could not be carried out in Lorentz's time, he reckoned with their fundamental possibility and considered it quite reasonable to assume that such experiments,

like Michelson's experiment, will lead to a negative result. To explain this probable result, Lorenz made an important addition to the original theory of cancellation. He introduced the change of time. He said that the clock clocks do not! Well, if anything, then ***time slows down**, but the clock must never slow down, because that is the mechanism built for the standard intervals by which it is measured. (!) will be slowed down by the influence of the etheric wind, NOT so that the measured speed of light will always be 300,000 km/s.

Let's look at a specific example. Suppose we have a sufficiently accurate clock, time is variable, but the clock does not so that we can perform an experiment measuring the speed of light. We send light from point A to point B along a straight line in the direction of the Earth's motion. We synchronize two two clocks at point A and then move one one of them to point B. Note the time the light beam left point A and (according to other clocks) the moment it arrived at point B. Since light would be moving against the etheric wind, its speed would be slightly reduced and the travel time would be longer compared to the case of the Earth at rest. Did you notice any errors in this reasoning? The clock moving from point A to B was also moving against the etheric wind. This made the clock NOT at point B slow down, falling behind the clock at point A. time yes, clock no Thanks to this, the measured speed of light remains unchanged - 300,000 km/s.

The same thing happens (says Lorentz) if you measure the speed of light propagating in the opposite direction from point B to point A. Two two clocks are synchronized at point B and then one one of them is transferred transferred to point A. A ray of light propagating from point B to A moves along the etheric wind. The speed of the ray increases and, as a result, the transit time is somewhat shortened compared to the case of the Earth at rest. However, when you move the clock from point B to point A, you “blow the wind”. The reduction in the drift pressure of the ether allows the clock to increase its speed, and therefore, by the end of the experiment, the clock at point A will be running ahead compared to the clock at point B. It is a “beautiful model”, but unfortunately it is speculative. I believe that my vision with the rotation of the systems is more realistic.

And as a result, the speed of light is again 300,000 km/s.

Lorentz's new theory not only explained the negative result of the Michelson-Morley experiment; it also made it fundamentally impossible to experimentally determine the effect of the ether wind on the speed of light. His equations for the change of length and time work in such a way that any possible method of measuring the speed of light in any reference frame will give the same result. It is clear that physicists were dissatisfied with this theory. It was an ad hoc theory in the full sense of the word. Efforts to patch up the holes in the ether theory turned out to be doomed to failure. O.K., but I am still surprised that in 20 years no physicist has presented evidence (even argumentative) to refute my vision of the rotation of the systems. Nobody! Not a single physicist has commented on this. O is literally impossible…, possible as an original CASE… It is impossible to imagine ways to confirm or refute itt. It was hard for physicists to believe that after the creation of the ethereal wind, nature had arranged everything so that it was impossible to detect this wind. The English philosopher-mathematician Bartran Russell later very successfully quoted the song of the White Knight from the book Alice in Wonderland by Lewis Carroll. From the book Atomic Energy for

Military Purposes author **Smith Henry** Dewolf AUXILIARY EXPERIMENT OF DELAYED NEUTRON 6.23. We will not mention the many different auxiliary experiments carried out during this period. However, we will consider one such experiment, the study of neutron delay, because it From the book Hyperspace author **Kaku Michio - Decadality and the Experiment**.

In the excitement and confusion that accompanies the birth of any major theory, it is easy to forget that ultimately every theory must rest on a foundation of experiment. No matter how elegant and beautiful it may seem

ICE CAGE EXPERIMENT.

The work on static electricity and the insulating effect of Faraday's cage were confirmed by an experiment in 1843 using an ice cell. Diagram of the apparatus used by Faraday for the ice cell experiment. For insulation

Источник: https://coshair.ru/cs/animal/opyt-maikelvona-morli-opyt-maikelsona-morli-opyt-maikelsona-kratko/

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JN, 15.06.2024

Předvedu ""relativitu"" opačně (vyjdu z konvence) :

$$2\sqrt{v} = c = \sqrt{2}\, k\, w = 2\, k^2\, u$$

$$\Downarrow$$

$$c^2 = 2\, k^2\, w^2$$

$$c^2 = k^2 \cdot w^2 + k^2 \cdot w^2$$

$$m^2 c^2 = m^2 \cdot k^2 \cdot w^2 + m^2 \cdot k^2 \cdot w^2$$

$$m^2 c^2 = m^2 \cdot k^2 \cdot w^2 + m^2 \cdot k^2 \cdot \frac{x_v^2}{x_c^2} \cdot \frac{x_c^2}{t_c^2}$$

$$m^2 c^2 = m^2 \cdot k^2 \cdot w^2 + m^2 \cdot k^2 \cdot \frac{x_v^2}{x_c^2} \cdot \frac{x_c^2}{t_c^2}$$

$$m^2 c^2 = m^2 \cdot k^2 \cdot w^2 + m_0^2 \cdot k^2 \cdot \frac{x_c^2}{t_c^2}$$

$$m^2 c^2 = m^2 \cdot v^2 + m_0^2 \cdot k^2 \cdot c^2$$

$$m^2 c^2 = m^2 \cdot v^2 + m_0^2 \cdot \frac{t_c^2}{t_v^2} \cdot c^2$$

$$m^2 c^2 = m^2 \cdot v^2 + m_0^2 \cdot c^2 \cdot \frac{t_c^2}{t_v^2}$$

$$m^2 c^2 c^2 = m^2 \cdot v^2 . c^2 + m_0^2 \cdot c^2 . c^2 \cdot \frac{t_c^2}{t_v^2} \qquad 01^*)$$

$$m^2 c^4 = \mathbf{m^2 \cdot v^2 . c^2 + m_0^2 \cdot c^4 \cdot \Delta t^2 / t^2} \qquad 02^*)$$

$$C^2 = A^2 + B^2$$

Pythagorova věta o energii $\quad E^2 = p^2 \; . c^2 + m_0^2 \; . c^4 . \quad \Delta t^2 / t^2$

$$\mathbf{m \; . v \, . x_c = m_0 \, . c^2 \, . t_c \, . \; t_c / t_v} \qquad 03^*)$$

A protože 02*) je pravoúhlým trojúhelníkem **rovnoramenným**, pak zde můžu napsat A = B, tj. tvar 03*), čímž vznikne >Heisenbergův princip neurčitosti<, =ale už opravený= o činitele $\Delta t / t$ gravitačního rudého respektive fialového posuvu.