ON THEORY OF RELATIVITY

Vladislav Konovalov

Abstract

In the article is given of a critic of a special and general relativity theory

PRINCIPLE of ABSOLUTE MOTION and SPECIAL RELATIVITY THEORY OF EINSTEIN (SRT)

The parameters even and rectilinear motion of free bodies can not be determined from any reference system; therefore official physics professes relativity. New physics considers that all free bodies' moves on a screw line. This motion is absolute also their parameter easily to determine from any reference system, therefore principle of relativity is necessary for exchanging by a principle of absolute motion. Thus it is easy to receive all formulas received in frameworks SRT.

Earlier we came to a conclusion, that space is container of things and the proofs of its contortion cannot be recognized substantial. Time - is container of events and we have shown, that the attempts of explanation of some phenomena by change in course of time also are unfounded. Thus, both general, and special Einstein's relativity theory should be exchanged simpler and more adequate to the test data by neoclassical notions. "A theory of relativity, or the relativistic theory, was created by the Albert Einstein in 1905. The theory of relativity termed also as an private or special theory of relativity, includes the theory of space - time, mechanics of fast motions with velocities, close to speed of light, electrodynamics and optics of moving mediums. The general theory of relativity representing the theory of gravitation was created by the A. Einstein in 1916". N.I. Kariakin etc., Brief manual on physics, "Higher School", M., 1962, page 300.

Before to analyze SRT, it is necessary to be disassembled with a principle of relativity of the Galilean. "The experiment displays, that in all inertial moving reference systems all mechanical phenomena flow past equally. This position has a title principle of relativity of the Galilean, or relativity of a mechanics. It can be formulated differently: by any mechanical experiment it is impossible to determine, whether there is a system in inertial motion or rest. Both formulations are equivalent". Ibidem, page 300. From a point of view of new physics, considered in this book, the relativity of motions does not exist also it is necessary to exchange by a principle absolute of motion, though the official science considers it as greatest nonsense. "The mechanical motion of a body relatively, is a situation means, that about motion of a body, its movement in space it is possible to speak only in the event that is indicated, in relation to what body there is a motion, relatively what body there is a movement. The concept "absolute motion of a body" as motion of a body in relation to "absolute" to space of the Newton is empty". Ibidem, page 300.

As absolute rest does not exist, the talk is possible for a message only about moving bodies. All free bodies motion on a screw line, therefore has not value, whether we sit on an electron or on a space body and we attempt to determine its absolute speed (not in relation to something, as it is not paradoxical). It can be determined as on external reference points, determining radius of a screw trajectory, and sitting inside the chamber, isolated from an external world. In the latter case all parameters of a body, bound with its mass (density, acceleration under activity of particular force etc.) uniquely determinates by absolute speed of this body pursuant to the formula of relativistic increase of mass of a body, which one we have received outside of notions SRT. If we to this formula shall apply a relativity of moving speed, we shall come to a conclusion, that mass of a body will be simultaneous to have any values, i.e. will become uncertain, that contradicts both experiment and common sense. Other problem that at small absolute speed of motion

relativistic increase of mass is not enough, that it is very difficult for determining experimentally. The difficulty is aggravated also by that circumstance, that the growth of mass is identical to all bodies, ambient the experimenter and it is necessary to have near at hand precise "standard" values, for example, some force.

The transformation of coordinates of the Galilean are possible are to consider, as a coordinates definition of the same point of space absolutely fixed and moving with absolute speed by *v* reference systems. From these transformations is received, that the sizes of a moving body do not vary, the time is absolute also its course does not vary in any reference systems, therefore, and the interval between two events is invariant (is constant) concerning transformations of the Galilean. The equations of motion of the Newton also save the kind in any inertial system. On the ground that the Maxwell equations for an electromagnetic wave change the kind at transition from fixed to a moving reference system, official physics considers, that the optical and electrodynamics phenomena do not obey to a relativity of the Galilean. "As the Maxwell equations change the kind at transition from a fixed system to moving, it means, that the optical and electrodynamics phenomena in moving and fixed reference systems should flow past variously". N.I. Kariakin etc., Brief manual on physics, "Higher School", M., 1962, page 301. That these phenomena depend on absolute speed of motion is shown below in this chapter with all absolutism, but Maxwell equations here at all at what, since they describe wave process, and light are particles.

Thus, the special theory of relativity has appeared as result of conviction in validity of the theory of the Maxwell. Here it is necessary to pay attention to a large deficiency of a logic system of science as a whole. The building of science is under construction not so much widthway, how many in an altitude: the new theories occur on the basis of existing, on their basis the new theories are under construction etc. As a whole, the logic system of science represents a pyramid, standing on the sharp end. Naturally, that in a direction up probability of a truth of the theories sharply drops since is product of probability of all base theories, starting from the foundation. It is necessary to move any rock in the basis as all system of the theories based on this foundation, falls and it is necessary all to construct anew. The history of science serves convincing affirming it.

In connection with that to the supporters wave essence of light it was introduced by wave process, medium was necessary, in which one this process is implemented. So there was a hypothesis of the ether which has appeared very tenacious of life (and to this day), in spite of the fact that the physical characteristics of an ether should be guessed completely improbable from a point of view of sensible physical sense. And after was found out, that light represents transversal vibrations and at all it is necessary to consider an ether as a solid body, since only in it such oscillations are possible. "For explanation of the nature of light in XVII the hypothesis of mechanical ether was entered. An ether - everywhere penetrate world medium possessing in very small density ρ (that to not hinder to motion of bodies - V.K.) and largest resilience E (by very strong internal interaction - V.K.), so $\rho E = c^2 = 9 \cdot 10^{20}$ cm^2/sec^2. Light represents elastic vibrations in ether like sound oscillations in air". Ibidem, page 301. After creation by the Maxwell of the theory of light the mechanical ether was "is exchanged" electromagnetic and about today explicitly and clandestinely scientists attempt to squeeze out all from this idea instead of saying goodbye to it for ever. New physics makes concept of ether completely redundant. "Light represents transversal wave motion. It outflows from the theory of the Maxwell and from numerous experimental data, in particular from experiments with polarized light. From here follows, that the ether is a solid body. The question is that the transverse waves are connected to shift deformations and can arise only in solid bodies which are capable to resist shifting. Just for this reason of sound waves spread in air, are longitudinal. Moreover, the ether should be an elastic solid body. The rate of propagation of mechanical waves in different materials depends on their elastic constants. Last considerably it is more for steel, than for air. Very much high speed of light speaks that the ether should have a very large shear modulus. It is very difficult to imagine, that all space is completed by this elastic solid body and that all material subjects pass through it without any resistance". M.R. Wehr, J.A. Richards, Physics of the atom, Moscow, 1961, page 90-91.

Numerous attempts to reduce in one theory all optical phenomena have failed. "... To explain different optical phenomena from a unified point of view within the framework of classic physics it is impossible if not to attract a contraction hypothesis of the Lorentz" (reduction of the sizes of bodies in a direction of their motion - V.K.). N.I. Kariakin etc.,

Brief manual on physics, "Higher School", M., 1962, page 305. It concerns also SRT, that will be visible from further. At the same time, the principle absoluteness of motion of new physics is natural and is logical explains all without elimination optical phenomena, not resorting to concept of an ether of its any form.

The special Einstein's relativity theory, as is known, is founded on two postulates: **1. Any phenomena in all inertial moving reference systems flow past equally. 2. The speed of light in vacuum does not depend on velocity of a source, in all inertial systems is identical, i.e. the speed of light does not depend and on motion of the spectator.**

The conclusions SRT contradict its initial postulates about equality of all inertial reference systems and independence of speed of light of motion of a source and spectator. On the second postulate is received, that the speed of light is absolute and measurement it in miscellaneous inertial reference systems allows to determine absolute speed of a given system, since the flow of time in this system depends on velocity of its motion, therefore inertial reference systems are unequal. The more moving speed of a system, the slower flows in it time and that the high speed of light will be received by the experimenter in this system. As the longitudinal sizes of bodies till SRT are reduced, and transversal is not present, on their ratio it is possible to determine moving speed of a system. The indicating on that the effects of a theory of relativity are exhibited only at observation from a "fixed" system concerning "moving" does not correspond to Lorentz transformation laws, on which one decreasing of coordinate and deceleration of time in a moving system take place also comparatively fixed.

As is known, SRT are founded on transformation of coordinates of the Lorentz and results of a Michelson experiment. The Lorentz, as against the Einstein, considered the transformation of coordinates not having of physical sense, viewing them only as is clean the mathematical manipulation simplifying an equations. The main formal - mathematical idea of these transformations is, that the coordinates and time in a moving and "fixed" reference system, on the one hand, should leave rectilinear mechanical motion rectilinear, and with another - that the Maxwell equations of a pass of light did not change the kind at transition from one reference system in another. In transformations of the Galilean this equation changes the kind. It is clear, that as against transformations of the Galilean, the Lorentz transformation laws will give change in course of time in a moving reference system, resizing of moving bodies and all that are by "merit" SRT.

From a point of view of new physics, the theory of the Maxwell is not known to what concerns. Be for the Maxwell the modern data about corpuscular properties of light, is interquartile, he has doubted of applicability of the theory to propagation of light quantums. Nevertheless, SRT in the theory of the Maxwell and Lorentz transformation laws do not doubt.

The equation for energy of a particle $E=p^2/2m=mV^2/2$ does not save the form at Lorentz transformation laws, i.e. does not obey SRT. That concerns and to a Schrodinger equation, this ratio enters in which one. Therefore it is necessary to reject or Schrodinger equation, by discarding SRT and GRT or, by accepting on a faith SRT and GRT, to refuse a Schrodinger equation. The Dirac attempted to remove this inconsistency, but his equation has restricted applying and physical sense, i.e. as a matter of fact does not decide the indicated problem.

In connection with new notions about motion of free bodies, the first postulate is not represented any more so apparent. Any inertial system has only to it proper parameters of screw motion, and the problem of distinguishing of such systems passes from category principled in category only technical. On the other hand, is apparent (and is fixed establish), that elementary particles, for example, the pions, have a miscellaneous lifetime in velocity function of their motion. These example displays, that two inertial reference systems, bound with such pions are unequal also internal processes in them flow past variously, even from a point of view SRT. First the pion with smaller absolute speed of motion will decay, from what reference systems we it did not watch.

The statement about that measured speed of light does not depend on motion of the spectator contradicts experimentally established Doppler Effect in optics. Apparently, that being moves towards to a light ray to change its any parameters we can not, therefore, if the velocity of the spectator will sum up with speed of light, the Doppler effect will be, and if result of a velocity addition will be value, the equal speed of light - that Doppler effect will

miss. Besides if the measured speed of light does not depend on motion of the spectator, it as a matter of fact means, that light "knows" about movements of the spectator and changes velocity pursuant to it that is represented improbable. As to the first part of the second postulate, with it is necessary to agree, meaning not relative, and the absolute speed of light, that is confirmed by observations by binary stars and straight lines experiments.

"In astrophysics the binary stars are known. Two stars are gyrated around of their center of masses. If to accept "a ballistic hypothesis" of Ritz (speed of light sums up with velocity of a source - V.K.), light from stars 1 and 2 will go with miscellaneous velocities. When light will reach the Earth, we shall see stars in a position A and B. But to this moment of a star will take other position. When the star 1 will be in a position A', light from it will go to the Earth with the greater velocity and can reach earlier, than it will come from it, when it was in a position A. It means that we can simultaneously see that two, four stars any periodicity apparent motion of stars should not have. At the same time observation displays, that the apparent motion of binary stars has stringent periodicity and the "false" stars miss. It means that the ballistic hypothesis is untrue". N.I. Kariakin etc., Brief manual on physics, "Higher School", M., 1962, page 305.
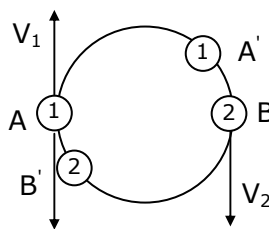
"In 1963 the check of this postulate in laboratory experiments with fast moving sources γ-radiation was carried out. Was shown, that in error limits of experiments (~10%) the rate of propagation γ-radiation does not depend on moving speed of its source". B.M. Javorsky, A.A. Detlaph, Course of physics, v.3, "Higher School", M., 1967, page 186. Unfortunately, even the ratty slice of matter cannot be speed up to velocities compared to speed of light, therefore in laboratory conditions it is impossible directly to confirm an inaccuracy of the second half of second postulate, though the stellar aberration confirms, that the measured speed of light depends on motion of the spectator.

The independence of speed of light in vacuum from motion of a source is to straight line a corollary of enunciated above notions about a gravidynamic field of particles. At the same time, the statement about independence of speed of light in vacuum from motion of a source and full mutual independence of speed of light and motion of the spectator, that expresses in vectorial addition of speed of light and spectator (the phenomenon of a stellar aberration) automatically means absolute speed of light. And also denying of a relativity of any phenomena (including mechanical and optical). As there is a difference, whether the light source is gone (radiates in all sides photons with velocity C, but with miscellaneous energy) or we concerning a source, this corollary that the relativity does not exist. It is known, that the validity $\Delta W = \Delta mC^2$, instead of $W = mC^2$ automatically displays, that an equation $W = mC^2 + K$ at anyone of $K \neq 0$ (we have shown, that it correctly) is not invariant concerning Lorentz transformation laws, i.e. does not obey to the first postulate of a theory of relativity. Therefore in any inertial isolated system there is a capability to determine a direction and absolute speed of its motion. As it to make, was already said and will be said still.

Ritz - the author of a ballistic hypothesis first has doubted of validity of the second postulate of the Einstein, since at its validity irrespective of selection of a reference system the light perturbation simultaneously which has arisen in a mobile and "fixed" system at concurrence of a beginning of their coordinates to the instant t should reach quite certain points of space, which one simultaneously are on two different orbs, that is dispossessed of physical sense. Here how orthodox physics "demonstrates" an inconsistency of transformations of the Galilean grounded on notion about absoluteness of time (N.I. Kariakin etc., Brief manual on physics, "Higher School", M., page 306):
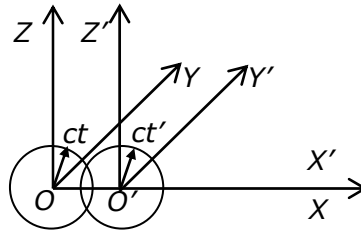
"Postulates of the Einstein and the transformations of the Galilean incompatible. Really, we shall consider in unison three situations:
    a) principle of relativity of the Einstein (first postulate);
    b) law of persistence of speed of light (second postulate);
    c) absoluteness of time $t'=t$.
Let's consider two reference systems: fixed (conditionally) $OXYZt$ and moving (conditionally) $O'X'Y'Z't'$ relatively fixed with velocity v. Direction of the relevant axes coincided. In that moment, when the beginnings of coordinates O and O' coincide, in a point O and O' there is a light flash. If this moment to accept for a beginning of timing, then on the one hand position of a wave surface in an instant t will be described by an equation of an orb of radius ct: $x^2+y^2+z^2=(ct)^2$ with center in a point O, on the other hand, wave surface will be described by an equation of an orb $x'^2+y'^2+z'^2=(ct')^2$ with center in a point O'. Thus, in the same instant $t=t'$ the wave surface reaches different points of space (see figure), that is dispossessed of any sense. Actually wave surface one. To leave from an inconsistency, it is necessary to discard one of three statements. But "a" and "b" are experimental facts, whereas "c" - statement grounded on observation of sluggish mechanical processes. The experience results in necessity to discard concept absolute, independent from motion, time". Despite of an apparent cogency it "proof", apparently, that it contradicts a postulate "b" about persistence of speed of light. The flash in O' pursuant to this postulate will not move together with a moving system, and remain in a system O, since the speed of light does not sums up with velocity of a light source. Therefore time does not depend on motion speed of a system and it absolutely. Reference "a" and "b" to the experimental facts, and "c" - to the "error" statement grounded on observation of sluggish processes without adducing any proof. With the same basis the statement "a" is possible to view, as result of insufficiency of our knowledge on the moment of becoming SRT. (Einstein, for example, could not know about relict radiation). The statement "b" is tested experimentally only concerning independence of speed of light of motion of a source, but not of the spectator (the Michelson experiment is easily explained by new physics from a classic addition velocity of light and spectator), and the statement "c" is affirmed by all course of development of science. The above-stated reasoning can be illustrated by such analogy: the object, moving in air, creates a sound wave spread uniformly in all sides with velocity, defined properties of medium and not dependent from velocity of the spectator and velocity of a source. Measured velocity of the spectator and sound sums up under the classic laws. The moving light source radiates in all sides photons, the velocity which one is determined not by properties of medium, and formula of relativistic increase of a gravitational charge, therefore can not exceed speed of light. Naturally, that the velocity of photons in such case nor depends neither on velocity of a source, nor from velocity of the spectator, though the measured velocity will be result of classic addition of speed of light and velocity of the spectator. In enunciated "proof" the authors yourself sums up speed of light with motion speed of a system O'.
    Here will pertinent result the refined proof of an inaccuracy of Lorentz transformation laws given A.I. Kostin in the collection of transactions of the members of club "International intellectual initiative", M., 1996, page 14-16: "the Lorentz viewed two inertial reference system (IRS) K and K'. IRS K - is immobile, and IRS K' - is gone rather first with velocity v in a direction of coordinate axes O-X and O'-X', which one lie on one straight line.
    At the moment of coincidence and other axes of rectangular coordinates IRS K and IRS K', from a common beginning of coordinates the light signal along axes O-X and O'-X' is sent, which one in both systems is gone up to a certain point lying on the axis O-X, i.e. in IRS K. On it the time in IRS K equal t, and in IRS K' equal t' is expended.
    Further Lorentz injects two equations linking calculating value of both systems:

$$x' = \beta\left(x - vt\right)$$

(1)

$$x = \beta\left(x' + vt'\right)$$
(2)

by demonstrating thus identity of a factor β in both equations.

With the purpose of definition of a factor β, the Lorentz decides a particular example, substituting in equations (1) and (2) values of their parameters relevant to the moment of incoming of a light signal in a given point on the axis *O-X*. In opinion of the Lorentz, the values of these parameters are peer: $x=ct$, $x'=ct'$, where *c* - speed of light in vacuum.

After substitution of these values in equations (1) and (2) and their joint solutions, the Lorentz has received following value:

$$\beta = \frac{1}{\sqrt{1 - v^2 / c^2}}$$
(3)

speaking about that at increase of relative velocity of motion of a body its size measured from another IRS, decreases.

Deciding then in unison equations (1), (2) and (3), the Lorentz has received the formula linking times in both systems:

$$t' = \beta\left(t - \frac{v}{c^2} \cdot x\right)$$
(4),

speaking about that in own IRS the time flows faster.

According to our opinion, with it is impossible to agree because in a given conclusion it be necessary to give in a system *K'* more precise definition of an abscissa of a given point in which one the trajectory of a light signal is finished. If in the initial moment the beginning of an abscissa coincided with point of origin of both systems, to the moment of coming of a light signal in final point, the beginning of an abscissa has moved in the side of this point on distance equal *vt'*, as the a result of which indicated abscissa has decreased on this value:

$$x' = ct' - vt'$$
(5).

If this value of an abscissa to substitute in an equation (1) and (2), as a result of their joint solution will appear, that:

$$\beta = 1$$
(6).

Therefore, any shortening of moving subjects does not happen.

In view of new value β the joint solution of equations (1) and (2) gives following result:

$$t' = t$$
(7).

Or else, any elongation of time in another's IRS does not happen".

CRITIC of a GENERAL RELATIVITY THEORY (GRT)

Huge merit of the A. Einstein is that he has offered version of the mechanism of a long-range action of a gravitational field (other serious versions of the mechanism of action of a gravitational field does not exist at all in science) as against of the Newton, for which one a long-range action of a gravitational field and its infinite rate of propagation did not call doubts, though he and did not uncover the mechanism of its action.

In the basis GRT the principle of equivalence lies, on which one it is impossible action of a gravitational field to distinguish from constant acceleration, with which one the spectator is gone.

Here there is a not superfluous quotation from the book: D.R. Merkin, Brief history of a classic mechanics, "Physical and Mathematical literature", M., 1994, page 133, where the author quotes work of the Einstein and supplies with her commenting. "...Therefore at state-of-the-art of our knowledge there are no basis to consider, that the reference systems Σ_1 and Σ_2 in any relation differ from each other, and in further we shall guess a full physical equivalence of a gravitational field and relevant acceleration of a reference system". In the further Einstein repeatedly returned to this problem, changed an enunciating and designations, but the entity of main thought remained former. Eventually, the words "a full physical equivalence" were exchanged by words "a principle of equivalence"; this principle together with others (we do not stop on them) lies in the basis of a general theory of relativity (GRT). Before to pass to further, we shall make two remarks.

a. The principle of equivalence concerns only to gravitational fields and the is not spread to other fields - circumstance, about which one forget some scientists.

b. In principle equivalence are considered uniform accelerations, homogeneous gravitational fields. It means that this principle has local character, fair for a rather small part of space and restricted time".

Apparently, that the limitation GRT by small area of space and short period brings to nothing its practical usage.

Let's consider two cases.

1. We moves with constant by acceleration g=9.8 m/sec^2 in the spacecraft at the expense of infinite generosity of the sponsors ensuring us by combustible, in spite of the fact that for maintenance of this constant acceleration it is necessary to burn a progressively increased fuel because of relativistic increase of mass of the spacecraft. It is uneasy to consider under the formula $t=V_t/g$, that speed of light we "shall reach" rather fast - in 33 days. In 2-3 weeks we already can in hundreds miscellaneous ways determine that mass of all ambient bodies is incremented.

2. We sit on a surface of the Earth approximately in a homogeneous gravitational field and we attempt to determine change of mass of surrounding objects. It is possible to wait though up to Second Advent - anything to find out it will be not possible. This example clean disclaims a principle of equivalence GRT. Nay: by uplifting on some meters some body, we by any ways can not commit change of mass of this body and at the same time easily we shall determine by modern instruments change of intensity of a gravitational field.

New neoclassical physics easily explains all experimental "affirming" GRT, such, as the abnormal rotation of a perihelion of a Mercury, bending of light beams at passage them near to massive bodies and red displacement in a radiation spectrum released by massive bodies, as a photon, as well as any other particle, has a gravitational charge.

"The measurements, executed recently with pin-point accuracy of the form of the Sun have shown, however, that the Sun slightly oblate for poles and have small convexity for equator. How to interpret results of these measurements, for the present it is not so clear; if they are correct, it is necessary to introduce to apparent value of precession rate of orbit of Mercury in one more correction component 4" for centuries. The introduction of such correction would baffle the consent between experiment and prediction of a general theory of relativity. If will be established, that this new correction really is valid, then the radical elaboration of the theory can be demanded". J.B. Marion, Physics and the physical Universe, "World", Moscow, 1975, page 377. Here it is necessary to note, that the full rotation of a perihelion of a Mercury makes 5599.74"±0.41", and calculated on the theory of the Newton 5557.18"±0.85", therefore additive in 43" under the theory of the Einstein can be stipulated by many reasons which are not having the relations to GRT.

"...The displacements of positions of several hundreds stars were measured, and on the average light deflection has appeared equal 2"; the general theory of relativity forecasts for it value 1.75". Unfortunately, the accuracy of these measurements makes only about 10 % and a series of results contradicts each other, so it is impossible to consider the indicated measurements as final affirming of the theory". J.B. Marion, Physics and the physical Universe, "World", Moscow, 1975, page 378.

"In a general theory of relativity is established, that the light quanta redden, when they are spread from area greater on an absolute value of a gravity potential to smaller, i.e. leave for a strong field of gravitation. For example, the photons which are going from the Sun or in the other case, going bottom-up in lab for a surface of the Earth. The photons moving in laboratory experiment from the top downward become violeter. Despite of a smallness of these effects, they are measured". I.D. Novikov, Evolution of universe, "Science", M., 1983, page 54. "These experiments do not represent check of a general theory of relativity, as the prediction of gravitational displacement can be made already on the basis of only one principle of equivalence (and it only one of postulates of the theory) both ratio between mass and energy $E=mc^2$". J.B. Marion, Physics and the physical Universe, "World", Moscow, 1975, page 379.

Let's count up value of gravitational red displacement on the basis of neoclassical notions. Mass of a photon radiated from a surface of some star:

$$m = \frac{h\nu_0}{C^2}$$

(8).

Energy which is expended a photon on overcoming of a gravitational attraction of a star:

$$E = \frac{GMm}{r_0} \qquad (9),$$

where M - mass of a star, r_0 - its radius, G - gravitational constant. Same energy will change the frequency photon from v_0 up to v:

$$E = h(v_0 - v) \qquad (10).$$

Substituting (8) in (9) and equating (10), we can find after some transformations expression for a relative frequency change of a spectral line $z = \frac{v_0 - v}{v}$. This expression is those:

$$z = \frac{1}{\dfrac{C^2 r_0}{GM} - 1} \qquad (11).$$

Substituting in (11) numerical data for the Sun, we shall discover, that the red displacement for it will make $2 \cdot 10^{-6}$. It is possible in (11) to express mass of a star through its volume and mean density:

$$z = \frac{4\pi G r_0^2 \gamma}{3C^2 - 4\pi G r_0^2 \gamma} \qquad (12),$$

where γ - density. In this case it is interesting to count up, what there should be "star" having nuclear density (10^{14} g/cm^3), that it could not radiate photons ($z=\infty$). Radius it is received equal 570 kms, and mass is about peer to 40 masses of the Sun. I address attention of the reader that in (11) there is absent a frequency of a photon, and the red displacement is determined only in parameters of a star. On this basis the alternate interpretation of the law Habble is possible (see (12)): the red displacement of radiation of remote objects of the Universe is stipulated by proportional increase of density or their sizes depending on distance up to these objects. This interpretation allows introducing in the essential correctives at operational use of the law Habble in calculations of motion of remote objects of the Universe.

If a relative frequency change to calculate under the formula $Z = \frac{v_0 - v}{v_0}$, from the formulas (25.1), (25.2) and (25.3) we shall receive:

$$Z = \frac{GM}{C^2 r_0} \qquad (13).$$

The formulas (11), (12) and (13) are approximate (since (9) is fair only at removal of a photon on indefinitely large distance). The formula (13) coincides with formula under the theory of the Einstein and is tested experimentally on red displacement on a limb of the Sun (see, for example, O. Struve etc. Elementary astronomy. M., 1967, page 427-428). Thus, the red displacement of radiation from massive objects has not the relation to GRT and SRT.

The precise calculation of a gravitational frequency change of a photon can be executed on the basis of the second Newton's laws for a photon: $F \cdot dS = h dv$, $dS = C dt$, whence:

$$F = \frac{h}{C} \cdot \frac{dv}{dt} \qquad (14),$$

where h - Planck constant, C - speed of light. An equation (14) - second Newton's laws for a photon, whence acceleration:

$$a = \frac{C}{v} \cdot \frac{dv}{dt} \qquad (15).$$

Equating (14) forces of a gravitational attraction, after some transformations, we shall receive a differential equation for a photon. The solution of this equation for a relative frequency change Z will be:

$$Z = \frac{v_0 - v}{v_0} = 1 - e^{-\frac{GM}{C^2}\left(\frac{1}{r_0} - \frac{1}{r}\right)} \qquad (16).$$

If $r\to\infty$, to resolved an exponent in a series and to limit by two first terms of decomposition, we shall receive (13).

New physics considers, that mass of bodies (gravitational charge) is already there is their relativistic inert mass (see theory of elementary particles), since it arises at circular move (from a point of view of orthodox physics - with constant by a centripetal acceleration) neutrino in elementary particles. Therefore inert and gravitational mass same and to speak about their "equivalence" it is needless. Thus, the separation of mass on inert and gravitational (experimentally is demonstrated, that they are peer with very large accuracy) is an only scholastic problem, since gravitational mass as a matter of fact is inert. In this connection, far-fetched is also principle of equivalence of these masses put by the A. Einstein in the basis of a general theory of relativity. The relevant price and most this theory (correct development of the theory which is coming from of a postulate, that $A=A$ should result: $A=A$ and no more that).

"Basically anywhere does not follow, that mass creating field of gravitation, determines also inertia that bodies. However experiment has shown, that inert and gravitational mass are peer each other. This fundamental law of the nature termed as a principle of equivalence, the A. Einstein has put in the basis of a general theory of relativity (theory of gravitation). It is experimentally a principle of equivalence is established with very large accuracy". Physics of a microcosm, "Soviet encyclopedia", M., 1980, page 244. From this quotation it is visible, that, deliberately whether or not, but there is a tangle between two "by principles of equivalence". New physics by two arms polls for a principle of equivalence of gravitational and inert mass, but categorically against "of a principle of equivalence" in sense of an indistinguishability of a gravitational field and motion of a body with acceleration. Last "principle" has received a title "of a strong principle of equivalence".

The Einstein, when speaks about equivalence of inert and gravitational mass means something another. That to legalize the principle of equivalence, he views the far-fetched problem: whether the masses in the second Newton's laws ($F=ma$) and in a law of gravitation are identical, i.e. whether are identical inertial and gravitational mass? If they are identical (and it really and is affirmed experimentally), the completely illegal operation follows: mass in the second Newton's laws the Einstein considers not as a constant of proportionality, and function, i.e. value dependent on acceleration of a body. Therefore, ostensibly, we can not distinguish, whether we are moves with acceleration or the intensity of a gravitational field has changed. Further - more. It is necessary to demonstrate, that all bodies moves with acceleration. For this purpose the Einstein attracts geometry of the Riemann of curved space. In such space of a body should be moves on geodetic lines, i.e. on curvilinear trajectories, so (on presentation of orthodox physics) with acceleration, though it is necessary specially to demonstrate it. And as they moves with acceleration is means that the force - universal gravitation, on an intention of the Einstein acts on them. Thus, the gravitational field is substituted by curved space which is "accounting for" a long-range action of a "gravitational" field. Thus that fact is missed from consideration, that the motion on geodetic lines in curved space is equivalent to rectilinear uniform motion in a Euclidean space, i.e. happens without acceleration. Otherwise motion in curved space generally is impossible, since it would contradict an energy conservation law.

"According to a general theory of relativity, free bodies, being in a time-space continuum of the Riemann, moves with the relevant accelerations along geodetic lines, i.e. along lines of the least curvature. Thus, the gravitation was reduced to property of a time-space continuum that has given the basis to some scientists to term GRT as the geometrical theory of gravitation. As already it was scored, the Newton could not explain transmission of gravity on space distances, could not it make and subsequent breeds of the scientists. The general theory of relativity has made searching this explanation unnecessary - gravitation not transmission of forces on distance, and property of a time-space continuum. The general theory of relativity has extended our notions about space and time, has introduced in large clearness to the theory of gravitation and has explained phenomena, which one were not stacked in the Newtonian theory. However at all its reachings it not shakes of carrying on value of a law of gravitation of the Newton. It is explained by that the general theory of relativity is complex, and to use it for daily calculations practically it is impossible". D.R. Merkin, Brief history of a classic mechanics, "Physical and Mathematical literature", M., 1994, page 134-135. As is spoken: to start on a merry note, but finish on a sad one. Really, GRT will not be utilized for practical calculations of motions of space bodies

and vehicles created by the man. In this area the theory of the Newton undividedly dominates, using which one reach any given accuracy and do not score any deviations and anomalies.
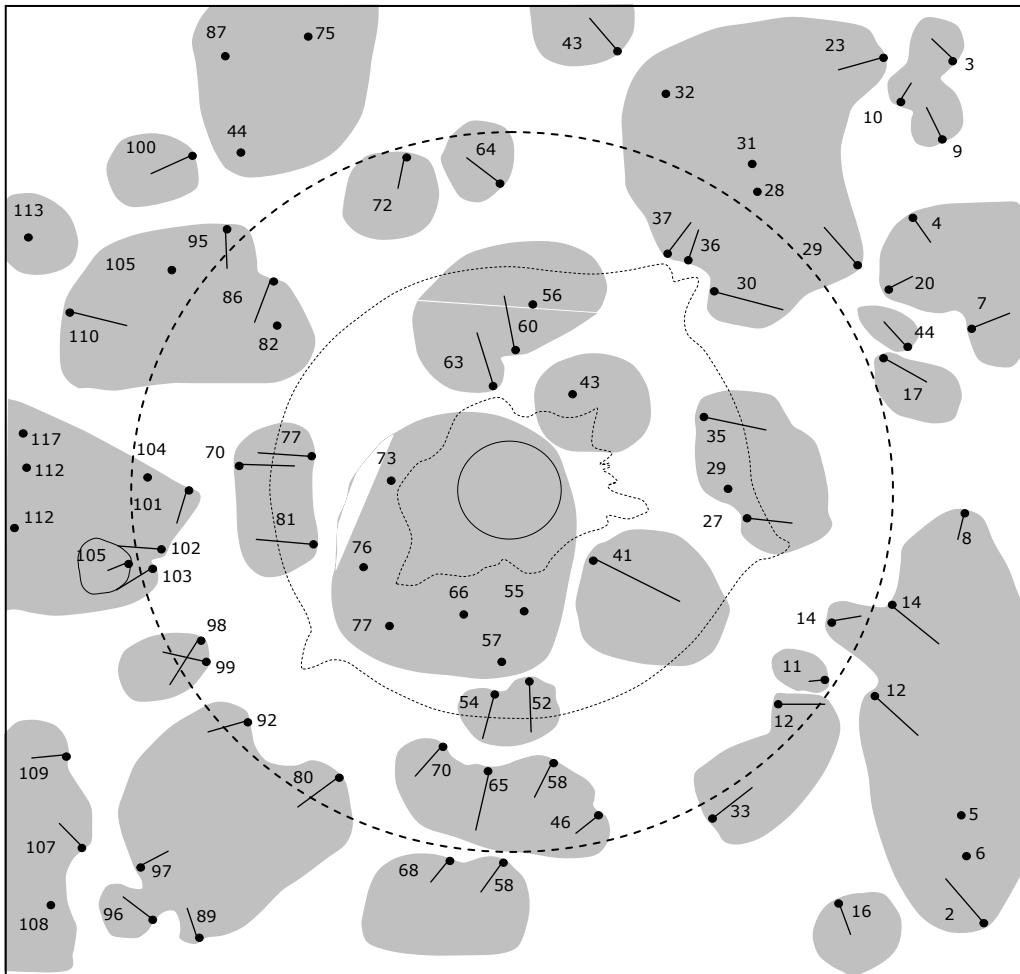

Fig 1

One of ways of check of conclusions GRT about contortion of space - time near to massive bodies is the study of deviation of a light ray passing near to the Sun. One photo of a sidereal palate make during solar eclipse, and another in half-year of the same segment of a sidereal palate. Then the photos mate and determine visible displacement of stars. On a figure 1 the data received in 1922 of the Campbell and Trumpler (a figure is borrowed from the book of the V.A. Acukovsky "Logical and experimental fundamentals of a relativity theory", M., 1990, page 46).

The explanations of rather grey areas of a figure will follow below.

Agrees GRT deviation of light rays near to the Sun makes:

$$\alpha = \frac{4GM}{Rc^2} = 1{,}75" \frac{r_c}{R} \qquad (17),$$

where α - angle of visible deflection of star, G - gravitational constant, M - mass of the Sun, r_s - radius of the Sun, R - distance from a light beam up to center of the Sun, c - speed of light. (Physics of space, M., 1976, page 211). The indicated authors have received on a limb of the Sun (at $r_s=R$) value 1."72±0.11. The good coincidence with the theory is stipulated by large desire of the authors to confirm GRT, since the described method of check GRT can not neither confirm this theory, nor to deny it for the following reasons (that concerns and to beam deflection of light under the theory of the Newton).

1. Because of large brightness of a corona of the Sun, the stars near to its limb are not visible and it is necessary to extrapolate the data on a limb of a hyperbolic curve. As the hyperbola has here steep branch which is going around in perpetuity, and the apparent displacement have a wide scatter of values, on a limb it is easy to receive any desirable displacement of a ray.

2. Both under the theory GRT and under the theory of the Newton of a line of visible displacement of stars should transit precisely through center of the Sun, however any of them through center does not pass. Nay, the distances from lines of visible displacement of stars *L* up to center of the Sun have the most miscellaneous value, down to values superior 12 radiuses of the Sun (of fig. 2).
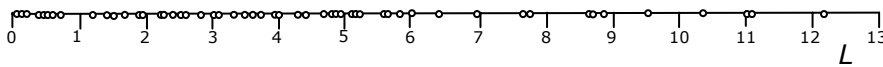

Fig. 2

3. From a figure 1 it is visible, that the part of the images of stars displaces "where it is necessary" - from the Sun, the part of the images displaces in the counter side, and the part generally does not displace anywhere, and the majority last is in immediate proximity from the Sun. It is impossible to explain this fact from stands GRT or the theories of the Newton, therefore gravitational displacement of light beams not only is masked, but also the apparent picture is predominantly determined by other effect.

The author agrees with an official astronomy, that the explanation of results figured on a figure by 1 refraction of light on clouds of plasma in a corona of the Sun (extending down to orbit of the Earth), is not convincing, since the refraction of a visible light in a corona is inappreciable.

"The phenomenon of refraction plays the relevant role in atmospheres of some planets, in particular of Jupiter. Strangely enough, but it practically is incidental for light waves in case of atmospheres of the Sun and stars. But for radio waves in range about 1 m index of refraction even of the external layers of the Sun, corona can appear very large. The radio waves of metric range passing through a corona, very strongly deviate the initial direction". O. Struve etc. Elementary astronomy. M., 1967, page 56.

Provisional arrangement and form of clouds of plasma are figured on a figure 25.1 by grey colors. It is possible to explain an apparent picture of visible deviation of a position of stars by full internal reflection of light in clouds of plasma. This effect completely greases a picture of a gravitational departure of light rays, and partially boosts visible deviation of stars, since on the average in a direction on the Sun the electron concentration in plasma is higher, than in other directions. The additive less than in 1" suffices to reject contortion of space near to the Sun. If the light beam from a star passes inside a cloud of plasma, deviations is not watched. If the light beam passes near to boundary of a cloud, where the density gradient of charged particles is boosted, the deviation of a visible position of a star in a direction of a perpendicular from a surface inside of a cloud is watched at the expense of full internal reflection. Therefore deviations in a visible position of stars in this case have the most miscellaneous directions.

"From (4) follows the phase velocity of radio waves in plasma vph>c - speed of light, that. As it is visible from the formula (4), electromagnetic waves with frequency, smaller Langmuir ($\omega < \omega_{0e}$), in plasma to be spread can not. On the other hand, the electromagnetic waves with the greater frequency, being spread in the side of increase of an electron concentration, test full internal reflection just as light from boundary with matter possessing smaller index of refraction. These features are relevant at research of radio-waves propagation in a solar corona, interstellar gas and ionosphere". Physics of space. M., 1976, page 426.

"The physical distinction of active and quiet areas in a solar corona is, that electronic density at all altitudes of coronal condensation approximately in 3 times is higher, than at the same altitudes of a unperturbed corona. The ionized gas is focused in different structural formations (tubes, arches etc.), which one form by magnetic fields of the Sun, leaving in a corona. The fact of existence powerful of coronal beams displays, that the influence of a field has an effect up to distances in tens radiuses of the Sun". Physics of space. M., 1976, page 548.

Thus, the check GRT on deviation of light rays of stars near to the Sun is not correct.

The more perspective method represents not measurement of an angle of a gravitational aberration of a light beam, and measurement of a relative frequency change of spectral lines of a ray passing near to a massive body. More in detail to consider this problem, we shall decide a problem about deviation of a trajectory of a photon under action of an external force, directional perpendicularly trajectories of a photon.

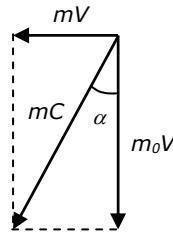On the second Newton's laws:

$$F = \frac{d(mV)}{dt}$$ (18).

Fig. 3

The computational scheme of impulses of a considered case is figured on a figure 3, where α - angle of deflection. The second Newton's laws for a photon:

$$F = \frac{h}{C} \cdot \frac{dv}{dt}$$ (19).

Let's equate (18) and (19):

$$mdV + Vdm = hdv/C$$ (20).

As $m = \dfrac{hv}{C^2}$, that $dm = \dfrac{hdv}{C^2}$. Let's substitute in (20) and we shall decide a received equation:

$$\frac{V}{C} = \frac{v - v_0}{v}$$ (21).

From a figure 3 it is visible, that $V/C = \sin\alpha$, at small angles $\sin\alpha \cong \alpha$, therefore:

$$\alpha = \frac{v - v_0}{v}$$ (22).

From (22) it is visible, that the external force increments frequency of a photon, since the additional impulse imparts to it. From a figure 3: $\cos\alpha = m0/m$, i.e. trajectory of a photon under action of perpendicular force to deploy on 90^0 it is impossible, and mass of a photon under action of such force grows.

The overseeing by a relative frequency change of light from a star at coating its by Sun is more usable to conduct from space, since in this case "eclipse" of the Sun can be organized on a long time. In process of approach of the solar disk the spectral lines of a star should displace in a short-wave portion of the spectrum pursuant to the theory of the Einstein:

$$\frac{v - v_0}{v_0} = \alpha = \frac{4MG}{C^2 R}$$ (23)

or with the theory of the Newton:

$$\frac{v - v_0}{v_0} = \alpha = \frac{2MG}{C^2 R}$$ (24),

where $(v - v_0)/v$ - relative increase of frequency of light, α - deviation angle of light ray, M - mass of the Sun, G - gravitational constant, R - distance from center of the Sun up to a ray. The similar experiment is much more exact, since is not subject to influence of clouds of plasma, the relative frequency change is measured with a split-hair accuracy and the processing of results is more comfortable, as the experimental points will formed an alone hyperbola.

For check of gravitational red displacement, which one for the Sun makes under the theory of the Einstein and Newton identical value:

$$\frac{v_0 - v}{v_0} = \frac{GM}{C^2 R_0}$$ (25),

where R_0 - radius of the Sun, by Sen-John from an observatory Mount Wilson the results, introduced on a figure 4 were received. The figure is borrowed from the book: O. Struve

Fig. 4
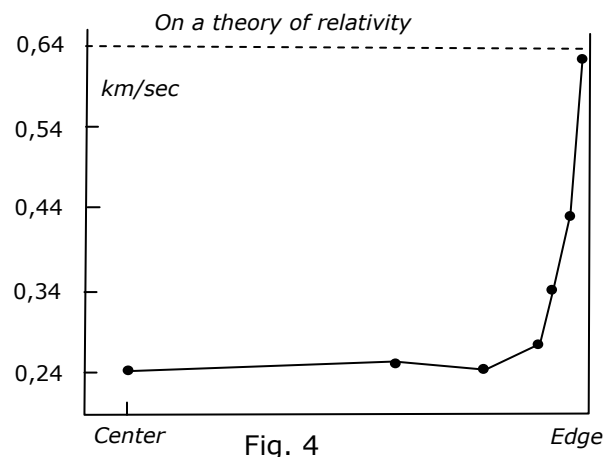
etc. Elementary astronomy. M., 1967, page 427.

The dotted straight line on a figure 4 corresponds to the formula (25). On an ordinate axis the red displacement of Fraunhofer lines in a spectrum of the Sun in recalculation on velocity on Doppler Effect is shown (it would be better to point directly relative frequency change). On an abscissa axis distance from center of the Sun up to its edge is put off.

On the greater part of the disk of the Sun of displacement of frequency are small and are explained by official physics by vertical flows of matter, which one compensates red displacement and only for a limb of the Sun the displacement of frequency corresponds to the theory, since for vertical flows in this case is not present Doppler component in a direction to the spectator. The reduced data, apparently, convincingly confirm the theory (only not clearly which - Einstein or Newton). Actually they reflect large problems for both theories, in particular, GRT. At the expense of contortion of space near to the Sun, the full deflection of a ray of a star apart of solar radius on GRT corresponds to the formula (23), and under the theory of the Newton the beam deflection should correspond to the formula (24). If the ray is emitted from a limb of the Sun, the relevant deviations will be twice less. On GRT: $2GM/C^2R_0 = 4.2379 \cdot 10^{-6}$, under the theory of the Newton: $GM/C^2R_0 = 2.1189 \cdot 10^{-6}$. And it is "cyan" frequency changes of photons. By the way, it "blue" also stipulates a fall on an experimental curve apart ¾ from center. In view of a gravitational aberration of a trajectory of a photon, the experiment should give accordingly curves 1 and 2, figured on a figure by 5 dashed line. To remove inconsistencies, the additional red displacement on a limb of the Sun at a rate of $4.2379 \cdot 10^{-6}$ for GRT and twice less for the theory of the Newton is necessary. It is possible to ensure it only with transversal effect of the Doppler for fast moving gas flows. For this purpose the velocity of flows should make 873 kms/sec for GRT and 618 kms/sec for the theory of the Newton. The indicated velocities do not contradict the literary data on which one velocity of gas streams is peer 100-1000 kms/sec (Physics of space. M., 1976, page 55, 550), but for GRT the value of demanded velocity is too close to limiting, that is unlikely. From a figure 4 it is visible, that the effect of gravitational red displacement is compensates in center of the Sun by a direct effect of the Doppler all on 400 m/sec. Therefore just on this value the velocity of up flows exceeds velocity descending. On a limb of the Sun the transversal Doppler Effect does not depend on a direction of gas streams. On a figure 5 dot lines figure a relative frequency change in view of transversal Doppler Effect for GRT (3) and theory of the Newton (4). As it is visible, the theory of the Newton corresponds to experimental data more.
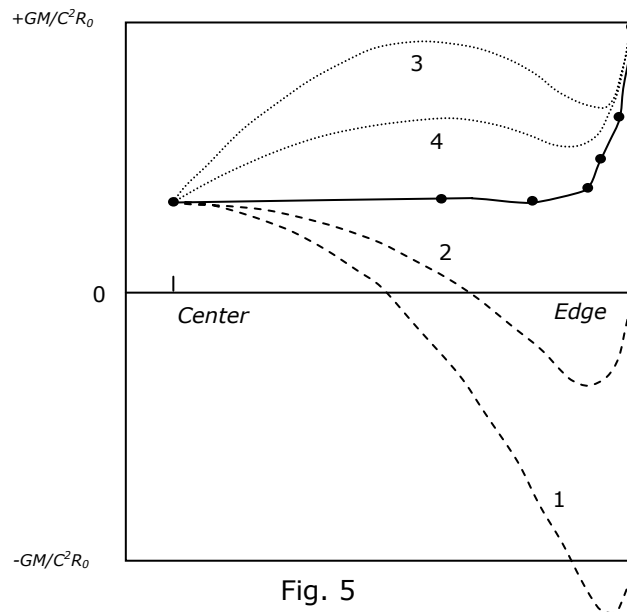
Fig. 5

The experimental affirming of an equivalence of gravitational and inertial mass is declared by official physics by the convincing proof of validity of views of the Einstein, though this fact has not the direct relation to conclusions GRT for two reasons: at first, it is not a corollary, and initial hypothesis GRT with the subsequent not correct gamble, secondly, this fact has not unambiguous connection with conclusions GRT, since can be explained in another way, for example, as it is made by new physics or how it was interpreted by the Newton, not making generally of any conclusions, on the strength from conspicuity of equality of these masses.

GRT contradicts both first and second Newton's laws, and energy conservation law. "Masses the creating fields of gravitation, bend a space-time. Bodies, which one moves in this curved space - time, and in this case moves on the same geodetic lines, irrespective of mass or structure of a body. The spectator perceives this motion as motion on curved trajectories in three-dimensional space with variable velocity. But from the very beginning in the theory of the Einstein is included, that a bending of trajectories, law of an alteration of speed are properties of space - time, properties geodetic in this space - time, so, the acceleration of any bodies should be identical, signifies, ponderable mass m_w should equal inert m_i so that the acceleration was identical all bodies". I.D. Novikov, Evolution universe, "Science", M., 1983, page 78-79.

On the Einstein all bodies moves in curved space, therefore, not rectilinearly, and with acceleration, therefore, under action of force. Is asked, whence they scoop energy for such motion - from curved space? The general theory of relativity allots space and time with physical characteristics (for example, the space-time is bent). But to speak about space there is a sense only then, when we have the bodies, arranged in it, and to speak about time it is be worth-while only then, when there are any changes. The special theory of relativity considers that absolute space is not present, and the general theory of relativity as a matter of fact accepts a concept of absolute curved space - time. Where of the logic? If a bending relatively, the masses of bodies calling this bending are relative also but it already full nonsense, since mass of a body is absolute also it easily to measure. "In a mechanics of the Newton there was a absolute space and in it the bodies were moves. The special theory of relativity has shown (? - V.K.), that absolute space is not present, there is no absolute motion and for definition of motion it is necessary to enter a reference system. Only after the indicating of a reference system it is be worth-while to speak, as in relation to it moves of a body". Ibidem, page 80.

In curved space - time the photons too should be moves on geodetic lines, i.e. for the spectator the Universe should be introduced not uniformly by filled matter, as it is visible directly, and from the majority of areas light will not reach at all Earth while from some areas it is capable only to the Earth and to be moves. Therefore spectator of the Universe of the Einstein should see a pair of light spots on a background of a remaining completely black palate. Indirectly it is possible to judge an inaccuracy GRT on the fact, that perennial

attempts of the Einstein to explain electrostatic interaction by space-time geometry (as all equations of this interaction are similar to a gravitational interaction) have suffered full failure. "By showing, that the gravitation can be viewed as geometrical property of space - time, bound with its curvature (in GRT and remained vague: where the hen, and where an egg - that is primary, curved space calling gravitation or mass calling a bending of space - V.K.), he attempted to find it other geometrical characteristic, which one could correspond to electric charge. Thus, in the searchings of way of unification of these two forces of the nature the Einstein was grounded on space-time geometry". Fundamental structure of a matter, "World", M., 1984, page 174-175.

The lag time of radio signal at radiolocation of Venus from time before and after the moment of a top conjunction (Venus behind the Sun) was measured with the purpose of check "deceleration of a course of time" in a gravitational field of the Sun. A solid curve under the theory of the Einstein. But till him the theories the speed of light is a stationary value, from what the reference systems it did not measure. Apparently, that this velocity can decrease only at a pass of light (in this case of radio waves) in some medium, what the clouds of plasma, ejecting Sun is. It is possible to explain observations if to admit a mean factor of a refractive of clouds of plasma from the Sun all of $n=1.000000125$. The lag corresponds to "increase" of distance at 30 kms. It is known, that the radio waves are refracted in clouds of plasma going from the Sun. From simple geometrical reasons follows, that the refractive of a radio beam on direct and return path to a surface of Venus urges radio signal to pass superfluous not 30 kms, and almost 8000 kms, if it are refracted on a limb of the Sun. If the refractive happens in a corona of the Sun or further away, that, "superfluous" distance decreases. In these conditions "coincidence" of experiment with the theory of the Einstein does not confirm, and disclaims it. It is better to keep track of by a frequency change of radio signal, which one under the theory of the Einstein should decrease in a gravitational field of the Sun because of "deceleration of a course of time" irrespective of, to Venus or back radio signal is gone. "Blue" it at motion to the Sun and "reddening" at motion to Venus is completely compensates on return path to the Earth.

The notions SRT concerning rate of propagation of a gravitational field are contradictory. On the one hand, with speed of light the changes of a gravitational field are spread (gravity waves, which one, despite all reasonable efforts only, and have not found out, assigning them very small energy, though the gravitational interaction in space scales is great). On the other hand, GRT considers the Universe indefinitely extended in time and space, and the gravitational field except for as indefinitely extended generally is difficult to itself for presenting. Therefore is received, that the gravitational field in GRT, as well as in the theory of the Newton, is spread with indefinitely by a high speed. "In the theory of the Einstein the change of a gravitational field (gravity waves) is spread with terminal velocity only. Itself a quasi-static gravitational field of masses (that field, which one in case of the Newton gives the law of back squares) in the theory of the Einstein exists from the very beginning, is not spread anywhere and extends unrestrictedly (as for the Newton)". I.D. Novikov, Evolution of the Universe, "Science", M., 1983, page 94. In formal - mathematical equations we are free to insert any starting conditions, but the common sense speaks that in the infinite Universe, that a field it took, the indefinitely high speed of its propagation is indispensable.

The Einstein in the general theory of relativity (GRT) all parameters of the second Newton's laws considers variable.

The logic GRT is those:

1. Space is curved.

2. The body in this space is moves on geodetic lines. As the body is gone not rectilinearly, signifies, it is gone with acceleration, i.e. the force of a gravitation acts on it.

3. The motion of a body with acceleration is equivalent to increase of intensity of a gravitational field.

4. To close this faulty logic circle, it is necessary to admit, that the reason of a bending of space is the presence in it of gravitational charges (masses).

If to accept on a faith these statements, we at once shall meet with a violation of law of preservation of energy because of a positive back coupling of listed points. Mass of all bodies owes in this case spontaneously and unrestrictedly be incremented or to decrease, since any body, bending space around of itself, will be moves accelerated at growing rate, that will cause to increase of its mass and even greater bending of space. It is necessary to

a body to decrease speed of the motion and here its acceleration will be diminished, that will cause at the end to decreasing a bending of space and mass.

Here it is necessary to point for one defect in the logic GRT. Reasoning about motion of bodies on geodetic lines in curve space, at which one they have a centripetal acceleration, since moves is curvilinear, we not advertise of that circumstance, that these reasoning concern to the spectator located in Euclidean ("direct") space. If we shall be in that space, as the moving body, for us it will be moves "rectilinearly" without a centripetal acceleration. And if from "curve" the spaces to watch motion of a body in a Eucledean space, we again shall come to an error conclusion, that it is gone curvilinearly and has a centripetal acceleration with all outflow conclusions GRT.

Thus, all conclusions SRT can be received from the opposite backgrounds: absence of inertial reference systems, absolute motion, the absolute speeds of light, i.e. that relativity, are termed as which one the special and general theory of the Einstein does not exist. The equivalence of inertial and gravitational mass is a not initial hypothesis (as in the theory of the Einstein), and corollary of a constitution of elementary particles of new physics. The experimental facts uniquely verifying the theory of a gravitation of the Einstein miss. Therefore in the present moment we can not confirm validity SRT and GRT.

GRT has arisen on the basis SRT, therefore refusal from SRT simultaneously is refusal and from GRT.

To not tire any more reader, on it we shall finish to a critic GRT, though it would be possible to write in this occasion the whole book. It is important to us now to understand, that this theory internally is contradictory. Instead of critic, it is much more convincing to give the constitutive alternate theory, which one explains all paradoxes, inconsistencies, experimental and observation facts. Such theory will be given in the chapter dedicated problems of a cosmology. There it is necessary still repeatedly to recall GRT.

About space and time

Space and time the not physical objects, therefore can not have any properties, including dimensional. Space are interspaces between bodies, and time - interspaces between events. Dimensional have only physical objects, for example string is one-dimensional, the plane is two-dimensional, and the orb is three-dimensional. The concept of space arises for a label of an interspace between objects and in absence those it is not make sense. The concept of time is similar arises for a label of an interspace between events and in absence of events too it is not make sense.

If the interspaces between bodies are reduced, it is equivalent to compression of a matter, and if are augmented, it uncompression of a matter. Naturally, that the term «compression» is not equivalent to the term «density». In itself it nor is physical object and has not any properties. As compression of a matter, and it uncompression can not be indefinitely large, though this and cannot assign a numerical characteristic. It is possible on another to formulate: space is a rest of a matter. If the interspaces between events are reduced, it is equivalent speed up of events, and if are augmented, it is equivalent to deboosting of events. Naturally, that the term «speed up» or «deboosting» is not equivalent to the terms «speed» or «acceleration». Naturally also, that speed up or deboosting of events can not be indefinitely large, though this cannot assign a numerical characteristic. It is possible on another to formulate: the time is a motion of a matter.

If to view properties, for example, concrete depending on numerous parameters at its manufacturing, it is possible to enter conditional mathematical multidimensional space of these parameters, in which one the strength of concrete will vary in all measurements of this space. But it is necessary to recognize, that the introduction of such space is an only mathematical method, in a reality it does not exist.

Point zero-dimensional, two points create one-dimensional space three points creates two-dimensional space. Four points generally create three-dimensional space. The further increase of number of points ad infinitum does not add dimensional. As any actual physical object can be presented consisting from infinite number of points, any physical object is always three-dimensional. Mathematical reflection of three-dimensional of physical objects is the Cartesian coordinates, where all three axes have identical dimensionality of distance. The time is one-dimensional and it is impossible to itself to present something in coordinate system, where all three axes or even two axes have identical dimensionality of time. In

essence differ from objects processes, which one is always many-dimensional, as the set of the factors influences their passing. Each of these factors can be presented as independent coordinate; therefore conditional mathematical "space" of any process is many-dimensional. Any contortion of geometrical space or space of process mathematically is equivalent to a bending of coordinate axes, which one on definition are rectilinear. On this basis consideration of multi-dimensional space and its contortion is nonsense both mockeries at physical and mathematical sense.

Let's suspect that the orthodox notions about a capability of contortion of space and time are correct. At any contortion there are local zones of stretching and squeezing. If some body is moves in a zone of squeezed time or squeezed space, it passes a particular section for more short time or for that the time passes lengthier way. It is equivalent to increase of velocity of a body or its kinetic energy, which one has arisen from anything. The similar reasoning for a segment of spread space or time result in a conclusion that the energy of a body without leaving a trace fades. Thus, the orthodox notions about properties of space and time do not correspond to a scientific level since contradict an energy conservation law.

References:

1 http://www.new-physics.narod.ru