

Basic Historical, Philosophical and Physical Reasons for Denial of the Main Physical Theories of the 20th Century

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This paper shows that the purpose of the physical theories by theoretical physicists produced in the 20th century (special and general relativity, quantum mechanics, force fields theories using force-mediating particles, the standard model of quark theory, the Big Bang and the Higgs boson theories) is to conceal the existence of physical fields as a real material media.

Force action of these media is replaced in these theories by the mathematics of kinematical quantities. In fact, these kinematical quantities describe the physical material world, which works on the principle of balance and changes of pressure of the densities of the material body and of the material force fields surrounding these bodies. Under the supervision of the power structures and the mass information media these physically deformed theories are an untouchable truth of the order of the universe, as was the case in the past, in the case of Ptolemy's geocentric mathematical description of the universe, an untouchable truth for 1500 years.

Special relativity has removed from the physics of the ether as a real physical media discovered by many generations of physicists at hundred year intervals exploring the phenomena of electricity and magnetism throughout the 19th century. General relativity eliminated the ether from physics as a real physical media of the gravitational field discovered by many generations of physicists around Newton. Big Bang theory removed the media from the Intergalactic Space (ether, dark energy) about which the Hubble (until the end of his life) assumed that it may be the main cause of the observed red shift in the spectra of galaxies. Quantum mechanics and the theory of Higgs boson removes the ether from physics, in quantum physics known initial medium at creation and annihilation of matter particles from and into the electromagnetic waves.

1. Introduction

Since the appearance of thinking man on Earth, he has tried to find an answer to the question of the meaning of the existence of his own life. The answer to this question is connected with the answer to the question of what is the meaning of life and of the universe, what is the image and order of the surrounding physical world and what is man's position in it.

The ruling power structures reduced the misery of man with the answer to this question and mainly brought him answers that ensured his loyalty. Physics and other sciences have always been the tools for gaining ascendancy and domination of one group of people over others. Physical knowledge of the physical picture of the world has always been a special tool used by the ruling power structures of nations and states to maintain control over their own nations.

Therefore, from ancient times up to today, the officially established order of the universe has been the single untouchable truth and opposition or questioning this truth is perceived as an attack on the establishment of governmental power structures. The veracity of this order of the universe is a minor issue for the ruling power structures and is also the case with those physical theories of the 20th century.

The purpose of these physical theories (by theoretical physicists) produced during the 20th century (special and general relativity, quantum mechanics, force fields theories using force-mediating particles, the standard model of quark theory, the Big Bang and the Higgs boson theories) was to conceal the existence of physical fields as a real material media. Force action of these

media is replaced in these theories by the mathematics of kinematical quantities.

In fact, the kinematical quantities describe the physical material world, which works on the principle of balance and changes of pressure of the densities of the material bodies and of the material force fields around these bodies. Without the recognition of the existence of physical fields as actual physical substance, all mathematical descriptions of physical reality are only the kinematical numbers of the ratios of the lengths and times on paper.

Even the easiest physical processes, such as the collision of two bodies, cannot be reasonably explained by the thinking person without the existence of the force fields associated with these bodies. Newton... *"without the Mediation of anything else, by and through which their Action and Force may be conveyed from one to another, is to me so great an Absurdity that I believe no Man who has in philosophical Matters a competent Faculty of thinking can ever fall into it"*. Maxwell... *"In fact, whenever energy is transmitted from one body to another, there must be a medium or substance in which the energy exists. ...all theories lead to the conception of a medium in which the propagation takes place"*.

Under the supervision of the ruling power structures and the mass information media these physically deformed theories of the 20th century are untouchable truths of the order of the universe, as was the case in the past, in Ptolemy's geocentric mathematical description of the universe – an untouchable truth for 1500 years.

Special relativity has removed from the physics of the ether as a real physical media discovered by many generations of physicists at hundred year intervals, exploring the phenomena of electricity and magnetism during the 19th century. General relativity

eliminated the ether from physics as a real physical media of the gravitational field discovered by many generations of physicists around Newton. Big Bang removed the media from the Intergalactic Space (ether, dark energy) about which Hubble (until the end of his life) assumed that it may be the main cause of the observed red shift in the spectra of galaxies. Quantum mechanics and the theory of Higgs boson removes the ether from the physics, in quantum physics known initial medium at creation and annihilation of matter particles from and into electromagnetic waves.

Although astronomers bring daily evidence concerning the births and deaths of stars and galaxies from and into interstellar gas and dark energy, the Big Bang theory is forced upon the public as the only possible explanation for the creation of the universe. Although the observed redshift of spectra of galaxies can be physically explained in at least five possible ways, only the one, as the sole and irrefutable evidence of the expansion of the universe is forced upon the public. Although from the measurements of observed redshift of spectra of a Galaxy we cannot from the kinematic point of view distinguish, if the Galaxy is moving in a straight line away from us or is moving in any various direction up to right angle from this straight line, this fact is fully ignored in the Big Bang theory.

Today we know that by annihilation of protons with antiprotons we produce electromagnetic radiation and vice versa, that by waving a magnet around a wire we produce electromagnetic waves that are able to produce protons. This experimental fact is the full evidence of the existence of the ether as a real physical substance. Yet current physics says that all matter was solely created from the Higgs boson.

2. Man's ability to perceive the physical reality of his surrounding world

Exploring the rest of the world by man over the course of the last two hundred years, shifts the world from what he can see with his own eyes, to the world of what cannot be seen with his own eyes. Man discovered that the functioning of the macro world of animate and inanimate nature, visible to him, is based on the functioning of an invisible micro world of cells, molecules, atoms, protons, electrons, and photons. Man discovered that outside the cosmos of stars and nebulas visible to him with his own eyes there exists a space of galaxies and other structures in the universe.

If a physicist today sees a steel sphere about 1 kg in weight lying on the table, he knows that inside, this ball is unimaginably "live". In this sphere of billions of movements and physical processes exist what physics is unable to grasp even at the level of atoms, or able to grasp only a small part of them.

Today we know that in this sphere there are a billion times billion the basic (roughly 10^{26}) construction elements of this sphere-atoms of iron. These atoms are vibrating in their equilibrium positions, emitting thermal infrared radiation, emitting electromagnetic fields. In its vicinity tremendous gravitational and magnetic force acts (if gravity and magnetic force are not identical powers). Even greater electric power is located in each interior of these atoms of iron, where 26 electrons as force fields swirl in all various directions in 26 shells around the nuclei of

these atoms. In each interior of these nuclei 26 protons and 26 neutrons swirl in all various directions in force field shells. In each interior of these 26 protons and 26 neutrons swirl force fields as unknown number alleged gluons and alleged 3 quarks.

Physicists till 1919 had not even the slightest appearance about this structure of atoms.

Also "live" is the vicinity of this steel ball. Today we know that in every surrounding cubic meter of space surrounding us (anywhere in the universe) there are more than a billion times a billion photons of electromagnetic radiation, at least a billion neutrinos, one hundred million photons of relict radiation and thousands of hard actual particles of matter – protons.

When looking at this steel ball from a distance of 1 meter, a physicist knows that (in line with his perspective) around 100 million atoms of air occur on this line. These atoms of air we don't see and we are not able to grab in our hands. When waving our hands in the air, we can sense the pressure of air resistance on our hands, evidencing the existence of fluid around us, in which we are plunged. This fluid air presses on the surface of our bodies with a force of around 15000 kg and we do not feel this pressure if we find ourselves at rest in the air.

Convincing the general public of the veracity of the existence of this huge pressure required considerable effort from physicists. We recall the famous experiment of German scientist Otto von Guericke's in 1654 in which, after pumping air from the space of two half-meter hemispheres of iron, freely attached to each other via a seal, 8 pair of horses drawing ropes fixed to each hemisphere (a total of 32 horses) were unable to pull apart these hemispheres.

If the part of the air around us in room is accidentally lit by rays of the Sun we'll see in the air around us a huge amount of dust. We only see dust particles larger than roughly the size of 1 micrometer, so these particles number more than one million times a million atoms. We can capture these aerosol particles by filters of nanometer size.

From the total amount of the entire electromagnetic spectrum of photons (wavelengths in range of more than 15 orders of magnitude from $100m$ to $10^{-15}m$) which occurs around us we can see only a tiny portion of less than one thirtieth of the whole spectrum (wavelengths in range less than one order of magnitude from 0.2 to 0.7 micrometers).

Taking into account that by our eye we are only able to catch perceive 1/16 of a second (e.g. minimum sequence of pictures in a movie) than for creation of the optic perception in the eye the continuous stream of photons must last at least 1/16 of a second. As the action of one photon with wavelength around 0.5 micrometers lasts $10^{-15}s$ so we do not see streams of photons of less than a million times a million.

If at a distance of 1 meter a 1 cm thick perfectly transparent glass sheet is placed before this steel ball, nearly 100 million atoms of glass will stand between, the existence of which our eyes provide no information. The existence of this sheet we learn only by its feel when we move our hand against it. Similarly, we hardly see living beings, such as transparent jellyfish, in the sea or stranded on the beach.

From the photons around us we see almost nothing or, we see just the photons we need for our life.

3. Historical facts in the development of the view of a man about his surrounding physical world

Philosophers and astronomers of the culminant era (around 500-300 BC) of the development of Greek philosophy of the nature (Pythagoras, Democritus, and many others) were convinced [1, p. 511] that the Sun is in the center of the known universe to them, that under the stars drifting in the sky through the ether on a rotating spheres the planet's orbit around the Sun, that the Earth also as one of the planets orbits around the Sun in an annual cycle and that the Earth daily rotates around its own axis. They had numbered five comets and were convinced that comets circulate like planets around the Sun on a very eccentric orbit. They were convinced that the Milky Way is made up of individual stars, and had named the center of the Milky Way Nebula. They were convinced that the matter is composed of the smallest indivisible particles of atoms. (N.B. For Greek atom today would be called our today's further indivisible proton).

From the beginning of the exploration of the surrounding physical world, in addition to the physical motion of objects originating in their mutual mechanical action (which man could see with their own eyes) a man meets also with the existence of phenomena electricity and magnetism (which are his own eyes invisible) that by fields operate by motion on physical objects in its vicinity. Of the 6th century BC there are written records of ancient Greeks (Thales of Miletus-loadstone attracts iron because it has a soul) that mention the magnetic properties of loadstone and electrical properties of amber (called an electron).

In Greek mythology ether represented pure substance which breathe the gods. Aristotle claimed that only the natural motion of the ether as the fifth element (quintessence), which is located in the area of the sky, is its circulation in the circle, and therefore stars also circulate along their celestial orbits. (Perhaps the right way to explain currently observed compact rotation of galaxies).

New power-political structure after accession in the first centuries of the new era claimed the Ptolemy (Claudius Ptolemy 90-168 AD, Alexandria) geocentric image of universe as the official and the only tolerable image of the universe (1600, burn to death Giordano Bruno who lectures at Oxford, claimed that the stars are remote Suns surrounded also by exoplanets and that the universe is infinite, the condemnation of Galileo 1633 to life imprisonment). This image of the Universe persisted until several decades after Kepler (1609 *Astronomia nova*). The reason for the provisions of the Ptolemy geocentric image of universe as the official and the only tolerable image of the universe (though there existed the heliocentric view of the ancient Greeks), was its consistency with the idea of the principle of creation. The main proof of the correctness of the Ptolemy geocentric image of universe was found in the mathematics (the complex geometry of the cycloids) of the calculation of the motion of other planets around the Earth. Complex and complicated math of cycloids, for which no one could give reasons from the physical point of view, was declared the finding of the order of the universe and the confirmation of the accuracy of the physical condition, that the Earth is the center of the universe. Ptolemy's mathematical description of the motion of the planets, even though based on an incorrect physical assumption, calculated the position of the

planets on their orbits even with better precision than physical roughly right Copernicus (*De Revolutionibus* 1533) heliocentric model of planetary motion along the circular orbits around the Sun, what was one of the reason why the Copernicus model was not accepted.

Kepler after ten years of hard work finding the mystical mathematical formulas to explain the data of the movement of the planets from the Tycho Brahe precise astronomical observation finally came to the simple mathematical rule of three that describes the movement of the planets along the elliptic orbits around the Sun.

Based on the heliocentric model Kepler did describe the kinematics of movement of the planets by a simple mathematics and with better accuracy than Ptolemy, but had not discovered the physical cause I mean physical order, by which is governed the movement of the planets in the solar system. Kepler's simplification of the mathematical description of the motion of the planets to the mathematically trivial relationships allowed Newton to discover the physical cause and order, which is governed by the mathematics of kinematic description of the orbital system of the solar system. Newton discovered, that the physical cause determining the order of movement of celestial bodies is the existence of a gravitational field as a real physical substances existing in the surroundings of each mass body. This gravitational field around the mass body is inseparable from any mass body and Newton came to the general validity of the law of mutual gravitational interaction of all matter. Newton explains the circulation of the planets around the Sun so, that any two celestial bodies through their own gravitational fields attract each other (just as a falling apple from the tree attracts also the Earth though by negligible power). The attractive forces of gravitational fields are for a stable system of celestial constellations well-balanced by centrifugal inertial forces on their mutual orbits and thus always circulate around a common center of gravity. In the case of negligible mass of the planet to the mass of the Sun, this center of gravity is located inside the Sun, as a result of what the movement seems like only the planet circulates around the Sun along the elliptical orbit. The planet so actually orbits around the Sun, though not exactly around its center.

Newton attributed the gravitational attraction, without any doubt so as many of his contemporaries, to the existence of a force field as a real physical substance in the surrounding of each body.

"Gravity so that one body may act upon another at a distance thro' a Vacuum, without the Mediation of anything else, by and through which their Action and Force may be conveyed from one to another, is to me so great an Absurdity that I believe no Man who has in philosophical Matters a competent Faculty of thinking can ever fall into it. Gravity must be caused by an Agent acting constantly according to certain laws" [2]. This Newton belief is formulated in his main work where it states that gravity is "as a certain power or energy diffused from the center to all places around to move the bodies that are in them" [1, p. 76]. Newton to the already known the existence of invisible phenomena of electricity and magnetism, which through force fields cause motion of other bodies adds the phenomenon of gravitational forces, which is a much weaker phenomenon compared to electricity and magnetism in regards of the bigness of their source. At the

same time with the discovery of the gravitational field around any mass body, Newton (together with Galileo and other physicist) discovered the existence of the inertial forces also inseparable from any mass body.

Contemporary Physics one hundred years since the inception of relativity, countless times publicly repeats false claims about the Newton notion of mutual gravitational forces as the force between two mass bodies acting immediately and remotely through the void space of vacuum with infinite speed of the action. Newton, however, holds gravitational forces as the power through the medium and apparently assumes the final speed of gravitational forces in this medium, what may be the reason why Newton interested himself and calculated the speed of the sound in the air. General relativity on the basis of plagiarism claims about the Newton's idea of gravitational force as the forces acting at a distance through vacuum, then brings finally to the civilization the understanding of gravity as the curvature of non-material quantities of space and time and as the greatest achievement of all history of the human spirit.

Most of the physicists involved from 1800 to 1900 in intensive exploration of electric and magnetic phenomena (Coulomb, Volta, Ampere, Orsted, Faraday, Ohm, Maxwell, Hertz, Edison, Weber, Tesla) came to full belief in the existence of the electric and magnetic force fields as real physical substance, called ether, and they confirmed this substance in the experiments. This substance can spread the curl of this substance caused by oscillations of the sources of these fields, which may even be spread independently of these sources and transmit with this sources inserted power (energy) into this substance. Let us recall for all these physicists statement of Maxwell who in very last clause of his Treatise [8] (1873) declare "In fact, whenever energy is transmitted from one body to another, there must be a medium or substance in which the energy exists. . . . all theories lead to the conception of a medium in which the propagation takes place. . . and this has been my constant aim in this treatise".

The conviction of physicists to the end of the 19th-century of the full existence of ether can be best seen in the search work of H.A. Lorentz - Aether theories and ether models (1901-1902), examining the work of many distinguished physicists of 19th-century on ether (Stokes, Planck, Fresnel, Maxwell, Kelvin, Neumann).

In 1925, Edwin Hubble brings his evidence confirming that the bright fog formations in the night sky in the meantime called nebulas are separate groupings of stars, galaxies, and all the other stars that we observe in the night sky free with our own eyes belong to our Galaxy, the Milky Way.

For proof of the theory of the Big Bang, the current physics considers increasing the red shift with the distance of galaxies, measured in the spectra of galaxies firstly by Hubble (1929). The Hubble himself, even when he was pressured (mainly by Lemaitre at the IAU meeting, 1928), however, disapproved with this unilateral interpretations until the end of his life. Nobel Prize for astronomy till the 1950s was not granted, and so Hubble did not have to succumb to this pressure. (Unlike Millikan, Nobel Prize 1923, which, with all respect to the greatness of his experimental physical skills, succumbed to the pressure and agreed to

the validity of the relationship $h\nu=mv^2/2$ of energy of a photon. This agreement of the Millikan was a condition of the Nobel Committee for the award of Nobel prize to Einstein, 1921 photoelectric effect). Hubble for the more likely explanation, than explaining the red shift spectra by mutual recede of galaxies, considered the explanation of this shift by loss of light energy passing through medium in interstellar space.

We can cite from the work of Hubble [3, p. 1] (1937) The observational approach to cosmology.

"The features, however, include the phenomena of red-shifts whose significance is still uncertain. Alternative interpretations are possible, and, while they introduce only minor differences in the picture of the observable region, they lead to totally different conceptions of the universe itself".

"The cautious observer naturally examines other possibilities before accepting the proposition even as a working hypothesis. He (Hubble) recalls the alternative formulation of the law of red-shifts - light loses energy 'in proportion to the distance it travels through space. The law, in this form, sounds quite plausible. In inter nebular space, we believe, cannot be entirely empty.

Also cite from A. K. T. Assis et al. [4] -Hubble's Cosmology: From a Finite Expanding Universe to a Static Endless Universe-

"We show, by quoting his works, that Hubble remained cautiously against the big bang until the end of his life, contrary to the statements of many modern authors".

Even today, the non-fiction documentary films of the most respected television or most respected Web sources of information dedicated to the description of the evolution of opinion of mankind on the physical image of the universe state that the Hubble's observations are evidence of the expanding universe. See Wikipedia, Big bang (https://en.wikipedia.org/wiki/Big_Bang) "In 1929, from analysis of galactic redshifts, Edwin Hubble concluded that galaxies are drifting apart, important observational evidence consistent with the hypothesis of an expanding universe".

Physics, in 1932 Anderson and in 1955 Laboratories in Berkeley, with the discovery of the production of pairs of particles and antiparticles of electrons and protons from electromagnetic (etherial) radiation, brought a full proof of the existence of the ether. With mechanical waving of the magnet nearby copper wire we produce electromagnetic radiation with a frequency equal to the frequency of the waving magnet. At sufficient frequencies we produce from electromagnetic radiation really grasp mass of pairs of electrons or protons. This waving with magnet we can do for an arbitrarily long time and produce any amount of electrons or protons, but from the magnet or wire not even a piece mass wane. (This physical fact in no way can be explained by force fields theories using force-mediating particles.) On the contrary, with annihilation of these particle antiparticle pairs arise two photons of electromagnetic radiation, which in subsequent scattering on atoms, e.g. steel ball in void space, shall transfer to this ball its energy and completely dissipated into nothingness. This steel ball after a short warm up from the photons cool down again on the temperature of the universe around -270°C . I mean we have under the current physics right before our eyes an experiment about the invalidity of the law conservation of mass and energy.

Energy of the electromagnetic field, and subsequently mass of the electron or the proton we have under the current physics created from nothing (waving a magnet around the wire) and this matter by annihilation into electromagnetic radiation energy of which in scattering disappeared before our eyes into nothingness.

Creation of pairs of particles and antiparticles is not a limited phenomenon of physicists in laboratories but it is a common well examined phenomenon of the interaction of electromagnetic radiation with matter. Electromagnetic radiation up to energy of 1.02 MeV interacts with substance in photoelectric effect or scattering processes (Compton, Rayleigh scattering), for interaction over 1.02 MeV up to 1.9GeV electron positron pair creation predominates and over 1.9GeV outweighs the creation of proton antiproton pairs. In the universe and nature all around us on the Earth this phenomenon is continuously going on in a great quantity from the gamma radiation of radionuclides present in greater or lesser extent in every substance on the ground (up to 20 MeV), from storm of lightning (100MeV) and from the high energy gamma radiation (80GeV to 10TeV) incidents on our Earth in great quantity from the universe.

So, experimentally was confirmed the annihilation of protons and antiprotons, which is the conversion of mass into electromagnetic curl of the ether and vice versa, experimentally was confirmed the creation of pairs of protons and antiprotons from the electromagnetic curl of the ether. But the current physics claims in theory of the Higgs field that the Higgs boson is the only way how all particles of matter in the universe acquired its mass.

Perhaps the current physics do not wants to claim us that in creation of the proton from the electromagnetic radiation at energy 1.9GeV or vice versa in the process of conversion of a proton into the 0.94GeV electromagnetic radiation between the proton (0.94 GeV) and electromagnetic radiation stands energetically more than a hundred times greater Higgs boson 125GeV.

4. An overview of the opposition of the physicists for past hundred years against the physical image of the world forced by power structures to the public

After the Edington's British expedition on Principe Island for the purpose of observation a light bend of stars near the Sun at the Eclipse of the Sun in 1919, the greater part of mainstream physicists by the intervention tried to prevent of publishing Edington's articles with bombastic subtitles upcoming in most mass journals mainly in the UK and Germany. After an unsuccessful intervention, in 1920 the most respected physics of world w. Vien, p. Lenard, Sommerfeld, Nernst, Weyland, Debye, Rubens based Union of German Natural Scientists and organized at the Conference Nauhaim putsch in congress in 1920 (Sommerfeld, President of the German physical society 1919-1920 and from 1917 to death 1951 each year proposed for Nobel prize, Lenard-Nobel prize 1905). The content of the putsch was "Einstein as plagiarist; Anyone who supports the relativity theory is a propagandist; the theory itself as the Dadaist (this word was actually uttered!)" Einstein's relativity principle could achieve general

validity only by "dreaming up suitable fields," Lenard retorted at one point [5, p. 239].

As it was always in the past history of mankind, the physical picture of the world, mainly in the period from 1905 until the end of the Second World War, and subsequently to the present once again became the subject of the struggle of international power structures at the highest political level. Mainly from 1920, after the Congress in Bad Neuheim to the 1925 German physicists disagreeing with establishing relativity as a single description of the physical world are isolated and persecuted. After the change of political power in Germany in 1933, the role of persecuted and persecutors reversed and after 1945 again reversed back.

Since the establishment of the special and general relativity, quantum mechanics, force fields theories using force-mediating particles, the Big Bang and the Higgs boson theories to the present, hundreds of physicists and many associations of physicists around the world in his works show fatal errors and controversies of these theories.

A good overview of the physicists and the Association of physicists, though not complete, can be found in the publication of 10-year lasting project [6], completed in 2006- G.O.Mueller- 95 Years of Criticism of the Special Theory of Relativity involving 3789 publications criticizing the theory. The following are the main results of this project.

The message to the German public is: since 1922 the criticism is suppressed, the critics are calumniated, the public is told lies about the scientific value of the theory of special relativity. In 1922 the physics community as part of the greater science community has broken away from the tradition of search for the truth, a rupture of the tradition - as far as we know - never before committed by a whole branch of science and with the knowledge and support of the greater scientific community.

We are confronted with the great mystery of modern physics:

- (1) *Why has the rupture of the tradition been tolerated by the whole "scientific community"?*
- (2) *Why has it not been detected by the public?*
- (3) *How can the academic physicists hope to continue forever without one day being called to account for their acting?*
- (4) *What are the motives of the academic physicists?*

During several years of research about the criticism of special relativity we found the following answers.

(1) *The public in Germany has been cheated since 1922 and is cheated by the influential scientific community until today. Academic physics exert strong pressure on newspapers, journals, publishers and congresses not to accept any criticism of special relativity for publishing. Critical papers are suppressed, critical persons are excluded from any participation in the scientific dialogue.*

(2) *The academic physics believe that nobody can expose the truth about their acting to the public because the public would never dare to doubt the integrity of their scientists because of the great achievements of natural science in the last centuries, and that the general public will always trust more the physics establishment than any critics.*

(3) *The motives of the physics establishment are subject of several speculations. Probably the strongest motive is that the physicists are thankful for a theory that "does not need the aether". This was the position expressed in Einstein's paper of 1905. But only 15 years later, in 1920 in a conference held in Leiden he discovered the need of an aether.*

The relativists were not amused about this conference of their master. This change of idea in 1920 should have led, as a logical consequence, to a revision of special relativity, which, however, has not taken place until today. This remarkable fact of non-revision seems to be a strong argument that the aether may be at least one fundamental motive.

About the year 1914 special relativity had already been refuted directly by several experiments and indirectly by the absence of experimental confirmation. The Michelson-Morley-Experiment and its repetitions have had positive results, in complete contrast to the relativist's propaganda until today of an alleged null-result: these experiments have found velocities of the Earth of about 6 km/sec (1887), 10 km/sec (1902), 7,5 km/sec (1904),

8,7 km/sec (1905), and in 1913 Sagnac with his rotating interferometer also found moving fringes, the rate of motion of the fringes depending on the rate of rotation of his instrument. On the other hand there were no experimental confirmations for the pretended length contraction and time dilatation. This desperate experimental state of affairs before World War I has never been recognized by the relativist textbooks.

The apparent great success of relativity came with the observations of the Sun's eclipse in 1919 which were said to have confirmed the general theory of relativity. This supposed result was immediately rejected by several important critics in different countries (for instance: A. Fowler, Sir Joseph Larmor, Sir Oliver J. Lodge, H. F. Newall, Ludwik Silberstein in England; T. J. J. See in the USA; Ernst Gehrcke, Philipp Lenard in Germany) as misleading the public - but the relativists informed the printed media of that time about the greatest achievement of mankind! The public opinion was made enthusiastic about "Relativity" and was told that now both theories, the special and the general relativity, were undisputable truth and nothing less than a revolution of our thinking about space and time and gravitation.

In Germany the critical authors since 1922 are strictly outlawed by academic physics and therefore unite the critical arguments against both relativities in a booklet titled "Hundert Autoren gegen Einstein" [A Hundred authors against Einstein] published in 1931, protesting against the "terror of the Einsteinians";

The critical reader comes to the conclusion that special relativity is an unreasonable theory propagated to the public in academic and high school teaching to be the greatest achievement, together with suppression of any criticism.

"Relativity" as a whole and especially "Special Relativity" as the first of two theories are hailed by academic physics and their propagandists as one of the greatest achievements of mankind in the 20th century, announced to humanity by the "new Kepler-Galilei-Newton" and the like, revolutionizing our ideas of space and time. This picture of magnificence and glory can hardly be outdone.

The normally suspicious and critical reader of relativity textbooks and the original papers of Albert Einstein very soon finds many points of the theory questionable and is irritated that no relativist author, not Albert Einstein himself nor his disciples, is ready or able to deal with these evident critical questions and irritations which arise already from every simple logical analysis. An author who declares the same effect sometimes as "real" and sometimes as "apparent" (Einstein 1905) cannot escape the question what he eventually is going to tell. Instead the relativists declare any criticism to be incompetent and stupid, and the critics to be maliciously motivated. Generally the relativists abhor the common sense and advise the reader not to trust it, but they fail to show which better sense the brave relativist is using.

As a surprise in 1958 the Japanese Nobel laureate Hideki Yukawa is reported to have criticized Special Relativity in a conference at Geneva during the UN Conference on the Peaceful Uses of Atomic Energy: the difficulties are such that "it would probably be found necessary to have a breakdown of the special theory of relativity"

In addition to the publications and associations listed in the extensive research project G.O. Muller after 2006 until today, we can additionally specify the association mainly:

John Chappell Natural Philosophy Society - American Association of hundreds of physicists around the World (from 2014 the main branch of former Natural Philosophy Alliance) since 1993 organizing conferences, publishes Conference proceedings and currently keeps a database of around 6000 publications of dissident physicists.

Database of publications of hundreds dissident physicists since 2007 around the web archive vixra.org that holds around 11000 publications.

Web journal -The general science journal- from year 2011 holds around 5000 publications.

5. Main philosophical and physical flaw of GTR and STR from overall view

GTR

Since 1926 (Lindblad), we know that all the stars and constellations that we see in the night sky with free eyes or spyglasses are just a small part of our nearest surrounding universe in the sphere with a diameter of 2 to 10 thousand light years in our Milky Way Galaxy which has in diameter around 100 to 500 thousand light years. These free eye visible stars in this sphere rotate along with the Earth and the Sun around the center of our galaxy. The ancient Greeks, Newton and Einstein (at the time of 1905, 1915) considered these with free eyes visible stars in this sphere with radius from 2 to 10 thousand light years in the sky (together by a few nebulas), as the whole universe. Newton after the formulation of the general principle of gravitational attraction of all masses could not avoid the question, why the universe had not gravitationally collapsed. Newton's reply to this question is based on the knowledge of his predecessors, that for the previous 2000 years the universe appears to be stable and, secondly, on the knowledge of his own discovery that in the solar system the gravitational force of the Sun acting on the planet is compensated for by the centrifugal inertial force of planets orbiting the Sun. Therefore, Newton was convinced [1, p. 514] that the gravitational forces acting on the stars in the sky does not route to the Earth or Sun, but to their own force center on own orbits of these stars. Since 1926, we know that Einstein's description of the image of the universe in general relativity theory for the universe known to Einstein (a sphere within a radius of 2 to 10 thousand ly) is mistaken, because this universe known to Einstein as a whole rotates around the center of the Milky Way Galaxy and the mutual gravitational interaction of stars within this sphere is not the determining factor of the physical image of this universe. Farsighted Newton belief has proved correct with a small change that all the stars of the universe known to Newton so as to Einstein rotate around the common power Center of the Milky Way

Galaxy. After prove of blunder to use the GTR for the universe known in 1915 it is very alarming allegations of current physics, that this theory is applicable, however, again just as the gravitational collapse or expanding of our new universe of galaxies on rectilinear trajectories from or into one center, announced by the Big Bang theory of physicists and priest Lemaitre (1927).

Physics during the last 100 years has revealed that the basic manifestation of the mass of the observable universe around us are its rotary and curl movements. Quark-gluon field curls inside the proton and the neutron, proton and neutron themselves rotate, proton and neutron most probably rotates as fields at shells in atomic nuclei, electrons rotates as fields at shells around atomic nuclei, Sun and planets rotates themselves, planets rotates around the Sun, Solar system and other stars rotates around the center of Milk way Galaxy. With a full physical conviction we must then assume mutual rotary movements, even for galaxies and their higher grouping. However, from the measurements of observed redshift of spectra of a Galaxy we are not able to determine the Galaxy's direction of movement in space.

Even the evidence of the last twenty years, that Galaxies form filaments in web-like super cluster complexes and move at curved path along these filaments, are not able to get the academic community to a clear rejection of the theory of the big bang forced daily under the supervision of power structures by mass information media to public.

The initial naturel idea even not physicists, which would have seen the curvature of light in gravitational field of the celestial mass body would be the idea that, in the surroundings of this mas body is something that curves the trajectory of light and not the idea that there is nothing, what causes this curvature (ordinary experience on curved glasses, on passage between two various matter density or gradient of fluids). And there is no reason why in accordance with the physical point of view all the physicists in the late 19th century on the gravity as a gradient of the real physical substance (ether), which is also the carrier of the propagation of this light, should not light path be curved in the gradient of this substance of the gravitational field. Consider, however, the phenomenon of the curvature of light in gravitational fields as evidence of the validity of a physical claim that gravity is the curvature of the nonmaterial space and time is clear Dadaism. The best it can to be captured by the words of Nikola Tesla in the New York Herald Tribune 11. Sept 1932[7]

"I hold that space cannot be curved, for the simple reason that it can have no properties. Of properties we can only speak when dealing with matter filling the space. To say that in the presence of large bodies space becomes curved is equivalent to stating that something can act upon nothing. I, for one, refuse to subscribe to such a view".

In the basic physical thought experiment of GTR on equality gravity and inertia the man standing in the stationary elevator in a gravity field is pressed on the floor of the elevator by the same force as the man standing in the elevator pulled by rope with acceleration equal to acceleration of those gravity field. This thought experiment is, however, misleading asymmetric description of physical reality. The force of gravity pulls the elevator but for all parts of the atoms of the lift and all the parts of a man

standing in it. I mean, the situation of the stationary elevator in shaft at a floor block in the gravity field is symmetrical with the elevator pulled in the free space of the universe by pulling rope with the thousands of hair that pull at the same time for all the atoms of the elevator and all parts of man and the free movement of the elevator is prevented by block against the rope mounting. A man standing in the stationary elevator in the gravity field would feel pressure on the sole of his feet as a pressure of his own body and no pressure on his top of the head. In the stationary elevator in the free space pulled by rope with thousands of wires the man would stand on his head, would feel the pressure on the top of his head and no pressure on the soles of his feet. In the case of deletion blocks in both cases, the person would not feel any pressure and would talk about the free fall or about the free acceleration. The claim that at the free fall of a body in gravity no forces exists and so the movement in gravity has to be assigned to curvature of the space and time is a biggest blunder of the GTR.

Finally, today we now know that to change the height of the orbit of the satellite circulating around the Earth we have to turn on the reactive engines acting on the satellite by force in the direction or in the opposite direction to the gravitational forces (not against nonmaterial space-time) and add or subtract energy to the satellite (as cumulative force) according the desired size of the orbit height changes of the satellite.

STR

A whole generation of hundreds of physicists of classical mechanics and electricity and magnetism, at least from Newton until 1905, when most of them after decades with their own hands personally carried out direct experimental observation of the physical world around us, came to the claim of the existence of the force fields as real physical substance around the physical body. This claim did not appeared after two years of speculation about a single Michelson-Morley's (M-M) experiment behind the table in office. Moreover about Michelson-Morley's experiment we now know (the discovery of composite rotary motion of the earth in a surrounding space, around the Sun as (30 km/s), around the center of the Galaxy (220km/s), to the Group of galaxies 700-1000 km/s) that the basic physical assumptions of the explanation of this experiment were wrong.

The assumption of the Earth's rotation around the sun at the rate of 30km/s, as the only motion of the Earth in space, is not valid. Also is invalid, the assumption of the rectilinear of the motion of one arm and the rectilinear of motion of the second arm of an interferometer toward the surrounding space, that is, the ether. So is invalid, that relation represents time difference of flight through light in perpendicular arms of M-M interferometer.

It is necessary to mention that all the experiments similar to the M-M experiment (yet since time of Fizeau) in which medium of transmission of light propagation was under the "control" (interferometers embedded or filled with gaseous or liquid medium) confirmed the expected result of time difference of flight through light in the two perpendicular directions. In addition,

the Sagnac experiment with rotating Interferometer in vacuum also provide the expected results.

In all physics textbooks the illustrative explanation of M-M experiment is presented by situations when one boat or swimmer swims the distance across the river perpendicular to the constant stream of flow from one bank of the river to the other one, and at the same time the second swimmer swims from the same starting point the same distance along the banks of the river downstream and upstream of the river. In the case of mutual rotation of the interferometer and the fluid in its surrounding environment we can present this situation as only rotation of fluid. For the illustrative explanation we can present situation with swimmer swimming at a constant speed in a circular pool rectilinearly from the center of the pool to the edge of the pool and back while the stream of water in this pool, rotates at a constant speed around the center of the pool. A swimmer can swim rectilinearly from the center to the edge of the pool and back in two perpendicular directions or in any two directions and his swimming times will always be the same. I mean, in the case of mutual rotation of the interferometer and the ether time of passage of light in perpendicular arms of the interferometer will be the same in any rotation. It is evident that M-M experiment was based on false assumptions and expected the wrong conclusions. We can be convinced that the pertinent null result of the M-M experiment represents proof of the rotating mutual movement of the Interferometer and ether in its surroundings.

After a hundred years since the inception of the special theory of relativity, we saw the speed of material objects of protons equal to almost the speed of light. Protons accelerated in the LHC tunnel at CERN reach 99.9999991% of light speed so almost 1c. Two direct beams of protons flying against each other with each one speed of 99.9999991% of the speed of light with mutual speed $1c+1c=2c$ collide in tunnel. But STR in equation for composition of velocities $u=(u'+v)/\left(1+\frac{u'v}{c^2}\right)=(c+c)/\left(1+\frac{c \cdot c}{c^2}\right)=c$ claims that this mutual speed is in fact $1c+1c=1c$. In the STR beam of protons from which we do measurement stands or better said its own velocity is in STR eliminated, because of his own time dilated to infinity (exactly 55555556 times) and its own length contracted to zero (55555556 times).

Time dilatation is the most serious forgery of STR. Already basic physical relations established by Einstein are in full contradiction in the issue of time dilation. In relation for the energy of the photon $h\nu=mc^2$ (taken from the Planck), the frequency with increasing energy increases $\nu = m_0 c^2 / h\sqrt{1-v^2/c^2}$ so time unit (one tick) shortens but in STR relation for time dilation $t = t_0 \sqrt{1-v^2/c^2}$ time unit dilate with increasing energy.

Alike in GTR with increasing gravity towards the central source of gravity, so with increasing energy, time unit dilate. Clocks as moves near a source of gravitational field runs more slowly, its frequency is lower. But in GTR according to gravitational redshift the frequency of photon as moves near a source of gravitational field is higher and as moves away is lower.

The physicist that seek to seriously ponder over what represents a quantity of time in physics, may spend any time figuring

this but in the end the man come up only on a single answer. This answer is the same as Aristotle's answer, that time is the measure of the speed of change of movement. The same answer brings e.g. present physicist Julian Harbour who after 50 year inquire into what is the time in physics came to the conclusion that "Time is nothing but a measure of change and time itself does not exist".

The only alone existing change we are unable to assign any time any velocity or any acceleration. Time, velocity and acceleration represents the comparison of the count of speed of one change to the other one.

Time in contemporary physics is not arbitrarily chosen variable, which could by itself, independently flow and vary independently of the objects. The basic concept of modern physics for the last four hundred years lies in the fact that by establishing basic units of length and time, at the same time, the basic unit of uniform velocity is defined as the ratio of this unit length and unit time. The calibration values of all fundamental physical constants are based and firmly linked to this basic definition. By this definition the concept of time in physics is established as speed of movement on a defined distance in the space whereas at once the basic calibration comparative value of velocity is defined. So the unit time and unit velocity are firmly fixed and represents the same in inverse proportionality- basic comparative speed of movement. If body moves ten times faster than the unit velocity so it travels ten times more unit length in one unit time or travels one unit length in one-tenth of the unit time. The change of the time unit is the change of the comparative unit velocity. We can express the velocity identically as the ratio of travelled unit length to the unit time, or the inverse ratio of elapsed unit times to length unit. We do so also in many practical situations. The speed of the runners, e.g. at a distance of hundred meters we express by the ratio of ran off times. The acceleration of the cars we express by the ratio elapsed times at the fixed distance.

During the one hundred years from the inception of STR in 1983 (17th CGPM) length of 1m was defined as length of the path travelled by light in a vacuum in $t_c=1/299\,792\,458$ second. By this definition the ratio of unit velocity, of unit length and of unit time compared to velocity of light in vacuum was inseparable fixed. The unit of time 1second is the speed of the movement measured on unit length, which is in comparison with the speed of light 299 792 458 times slower.

Basic relation of STR v/c for ratio of velocities can be identically express as inverse relation of times $v/c=t_c/t_v$ where ratio of two velocities or inverse time is compared by third- basic unit velocity or unit time. So if a velocity of bodies (their energy) increase time contracts. The unit of time of one second then does not represent the ticking of the clock but the basic comparative speed of movement of the body for comparing other speed on the length of one meter.

Since in STR for the comparative speed is selected the speed of light, which is constant in all inertial frames. Light moves on one meter in the system of the observer or on the contracted meter in the moving frames at the same speed and thus unit of time 1 second is also established and fixed in all STR inertial frames.

If by changing the speed of the inertial system the unit of length contacts in STR as $l=l_0/\sqrt{1-v^2/c^2}$ then to ensure the valid-

ity of international SI definition of 1 meter from 1983 and ensure constant velocity of light in all inertial frames as well as ensure validity of calibration value of all basic physical constants the unit time must also contracts as $t = t_o / \sqrt{1-v^2/c^2}$. Time dilation $t = t_o \sqrt{1-v^2/c^2}$ in accordance with STR leads to the disintegration of calibration value of all basic physical constants. So if unit time in STR changes as $\sqrt{1-v^2/c^2} = t_o / t_c$ than basic comparative unit of velocity change as $\sqrt{1-v^2/c^2} = t_o / t_c = v_c / v_o$. So as time dilates in STR also the basic comparative unit of speed as well as speed of light in inertial frames with increasing speed is slowing down (for speed of light is also valid $1c+1c=2c$) so also dilates.

The STR claim that all the inertial frames always move at the same speed relative to the speed of light and at the same time STR claim that composition of velocities of inertial frames including composition of two rays of light is slowing down relative to speed of light need no comment.

So for constant speed of light any ratio of length and time must be always constant. So to length half meter time t_c half second is fixed. If length 1m contracts to half meter so in order the speed of light remains constant the ratio of unit length and unit time must remain the same and 1 second has also been contracted to half second. If STR claims that when length 1m contracts to half meter then 1 second dilate to 2 second then the speed of light falls to one quarter. In fact, but in STR basic comparative speed unit has four times changed.

The identity of the inertial and gravitational forces

Newton find out that the physical cause of the order of movement of celestial bodies is the existence of a gravitational field as a real physical substances existing in the surrounding of each mass body. This gravitational field around mass bodies is inseparable from any mass body. At the same time with the discovery of the gravitational field around each of the existing mass Newton (along with Galilei and other physicists) discovered the existence of the inertia also inseparable linked with every mass body. Own inertia force of the 1 kg spherical body is measured in the mass center (in the middle) of this body, but its own gravitational forces is measured at a distance of 1 m from this mass center.

About inertial forces, emerging when bodies are accelerated, Newton talks that its physical origin is unknown to him, he will not find its physical cause, but stays with the mathematical description of the inertial forces using quantity of acceleration of these bodies. Logically, the simplest physical conclusion which could do would lead Newton to determine the cause of inertia forces as forces of the resistance of the body against its own medium of the gravitational field.

Inertial force of one kilogram of mass, however, is the enormous power 10^{12} times stronger compared to the gravitational force measured at a distance of 1 m from its center and Newton in addition, didn't know the size of his own gravitational con-

stant $G \sim 10^{-12} N$ (Cavendish's 1798). He also did not know the size of the depth of the structure of matter into atoms, 10^{-10} (Perin 1913) and protons 10^{-15} , (Rutherford in 1920) that are the source and origin of the manifestation of all forces of mass bodies. We can show [10] that sum of the gravitational forces on the surface of atoms of the 1kg mass body equals to its inertial force. In this is a remarkable view of Newton that right in the first paragraph when he defines mass states "I have no regard in this place (place of definition of quantity of matter) to a medium, if any such there is, that freely pervades the interstices between the parts of bodies" [1]. Today we know, that photons (electromagnetic radio waves, X-rays, gamma rays), neutrinos, protons, electrons, alpha particles (and others) pervades freely through bodies and matters in an amount corresponding to penetrant attenuation coefficients of their mass densities. We can prove [10] that more than 99 percent of the forces of the gravitational field is located within the mass bodies and that these forces are in fact magnetic and electrical forces that keep the mass body as a compact object together.

Likewise assignment of great inertial forces to the resistance of mediums (ether), however, would lead to decelerating of bodies moving at a constant speed in this environment. (The initial principle of physics since the time of Galileo and Newton, where without the influence of forces bodies remain in the rest or uniform rectilinear motion). For the past hundred years it is omitted that the absence of the resistance of ether in uniform linear motion was the main argument even at the condemnation of the ether at the time of interpretation of M-M experiment. This irrefutable contradiction about the mechanical resistance of the ether in a uniform motion of bodies in free environment can, however, be removed after the discovery of the depth of the structuring of the mass and spin properties of all the particles of matter in the last hundred years. Since the 1930s, we found that all elementary particles are rotating spherical objects.

From results of dynamics of fluids and mechanics of the continuum, we learned that on the spherical symmetric rotating body moving at constant speed in an ideal fluid only the same force from all directions perpendicular to the surface of a spherical body exists. I mean the rotating spherical object is not decelerated in uniform motion in an ideal fluid environment against the direction of its movement (already the evidence of d'Alembert $\square=0$).

The power of the resistance of the environment on a rotating body in a fluid environment in the direction of its movement is manifested only in the accelerating or decelerating of the body between the two speeds. The subsequent perpendicular pressure on the surface of the rotating spherical body moving at constant velocity in fluid environment is proportional to its speed of motion in the environment. As a result of the pressure changes of the surrounding environment on the spherical surface of the compressible rotational body occurs the change in the radius of its volume.

The current physics, however, this natural relationship of equivalence of inertial and gravitational forces has not revealed, since it for a hundred year removes by all possible means everything that would be associated with the existence of physical

fields as real material substance from a physical image of the world tolerated under dictate of ruling power structures.

The actual physical reality of relationship of inertial and gravitational forces is in current physics disguised by the damaging principle of the equivalence of inertial and gravitational forces in the GTR, in which the force of inertia of one body (the test body) is given to equality with the gravitational force of another body (the central body). For Newton, the use of the law of action and reaction makes no difference in what kind of a force on the body (test) acts well for example the force of the impact of another body, dragging the body (e.g. lift) by the rope or the force of gravity [1, p. 84] "This law (action and reaction) takes place also in attractions, as will be done in the next scholium". The forces in law of action and reaction are the same but the motion of bodies are not. The motion of bodies are reverse proportional to the mass of bodies but just in the moving center of their mutual inertia frame. The independence of the nature of the forces acting on the body (the test) is a statement about the equality of the Newton gravitational and inertial mass of the body. The reaction of mass of the body when exposed to the same gravitational or mechanical forces is the same $F_a/F_g = m_a/m_g$. Confusing and mixing this message with a false embracement of the law of action and reaction in the principle of equivalence in the GTR, as the same time and same place equality and reverse orientation of the forces exerted by actions and reactions (unfortunately, countless times occurring in the current physics although by Newton ever unspoken) would lead to a standstill of the entire universe (the crash or any force action between any two bodies would have had to stop the movement of these bodies, the body in the gravitational field would not have moved, since the force of gravity and inertia are opposite and balanced, therefore it is necessary that the move of the body in gravity field be attributed to the nonmaterial curvature of the space and time).

6. Main historical and physical flaw of Quantum mechanics from overall view

The beginning of the formation of wave and quantum mechanics connects mainly with the names of de Broglie and Schrödinger. In the case of de Broglie, although Einstein was not head of the de Broglie doctoral thesis (major work of de Broglie), Einstein leaded de Broglie in his steps at his work. Even de Broglie final version of the doctoral work has been sent to Einstein for approval, which without this approval would not be accepted for the defense. In the case of Schrödinger there have been his written thanks to Einstein, which states that the formation of his equation would not be possible without the decisive contribution provided him by Einstein.

Einstein's equations for the photon energy $E=hc/\lambda$ and the photon momentum $p=h/\lambda$ from which arise relation $E=hc/\lambda=p\lambda$ are primary physical relations in physics until today. These relations is the primary physical relationship, which caused the degeneration of the physics of the 20 century [9] [10]. Einstein's degeneration of the relation of physical quantities of momentum and energy for photons and also for mass body, putting the identity between these physical quantities $E = pc = h/\lambda = mvc$ which then differs only by the constant c , has become the default phys-

ical premise of the theory of special relativity and quantum mechanics. In relation for photon energy $E=hc/\lambda$, (that in the form of differences of energies $\Delta E = hc/\lambda_2 - hc/\lambda_1$ at photoelectric effect was even awarded by the Nobel Prize), however, nor Einstein nor physics up today told us what is the frequency of a photon or what the physical properties of the photon we have to the frequency of photon assignee. The frequency of a photon cannot in any way be measured. We can measure the wavelength of the photon and in relation $\nu=c/\lambda$ tie the photon wavelength to its unknown physical quantity frequency. Then for Einstein's explanation of photoelectric effect the difference in momentums $\Delta p = hc/\lambda_2 - hc/\lambda_1$ in fact primitively explains this effect.

De Broglie (1924) this deformation extended with the dispersion relationship of frequency and wavelength for material particles at group velocity relation $w = \Delta v \Delta \lambda$ in which nobody up today knows what physical properties represents the frequency of particles and even don't know what is the wavelength (defined in infinity) of these particles. Although Compton up to 1923 during 20 years of his experiments collision of photons with matter uses for photon momentum the relation $p=hc/\lambda$ and for photon energy the relation $E=hc/\lambda$, Schrödinger in 1926 came with another the greatest achievement in history of mankind in equation $\Delta E = \Delta hv = hc/\Delta \lambda = \psi h^2/\Delta \lambda^2$ (1933 Nobel prize) in which up today nobody told us what is the wave function ψ (as well what is frequency) and to what physical properties it belongs. In 1926 so called relativistic Schrödinger equation in form Klein-Gordon (K-G) equation (fall short of Nobel prize award) was presented $\hbar^2 \nabla^2 \psi / (m_0 c^2)^2 - \hbar^2 \psi / (m_0 c^2)^2 \lambda^2 = -\psi / \psi$ from which follows [9] [10] that energy equals $E = \hbar^2 \nabla^2 \psi / c^2 = \hbar^2 / \lambda^2 = m^2 c^2$. And subsequently in 1928 Dirac (1933 Nobel prize) presented equation $\hbar \nabla / (m_0 c) \psi - \hbar / (m_0 c) \lambda = -\psi / \psi$, in which nobody up today knows what physical properties represents the frequency ν of particles, what physical properties represents the wavelength λ (defined in infinity), what is the wave function ψ or to what physical properties it belongs. From Dirac's equation follows [9] that momentums $p = \hbar \nabla / c = \hbar / \lambda = mc$ equal so he at last allegedly reached (of course in advance dictated) the first quantum mechanics theory that fully accounts for special relativity. Cultish equations for energy of photons $E = \hbar \nu = (hc/\lambda) \times c = pc$ and energy of particles $E = mc^2 = (mc)c$ or $E_k = (mc)c - (m_0 c)c = mvc = pc$ in which Einstein simply purposefully multiplied momentums by c were not rejected from physics to this day.

In our previous paper [9] [10] it was shown that in fact wavelength λ represents the diameter of real dimensions of photons and particles as spherical curl compression of ether into photons and particles. Frequency ν represents the time of the light's flight $\nu/c=1/cdt=1/\lambda$ through this diameter λ of photons and particles. Thus consequently, since a photon is entity in quantum mechanics as well in electrodynamics, we receive for photon the same physical base in both theories as $\frac{\partial^2 E}{\partial t^2} = \frac{1}{\epsilon_0 \mu_0} \frac{\partial^2 E}{\partial r^2} = c^2 \frac{\partial^2 E}{\partial r^2}$ so $E^2 / c^2 dt^2 = E^2 dv^2 / c^2 = \hbar^2 dv^2 / c^2 = E^2 / dr^2 = \hbar^2 / d\lambda^2 = m^2 c^2$ and from

Pointing vector, from Compton's works as well from right hand side of Schrödinger equation we know that this writing represents writing for energy. So energy in relativistic mechanics represents relations $m^2c^2 = m_0^2c^2 + m^2v^2/c^2$ or $m^2c^2 - m_0^2c^2 = m^2v^2/c^2$ as equivalent relations to Klein-Gordon (K-G) equation or to right hand side of Schrödinger equation. So we receive the unified physical base for unification of classical mechanics, relativistic mechanics, quantum mechanics and classical electrodynamics in kinetic (added) energy as

$$E_{k[2m_0]} = p^2 = m^2v^2 = \gamma^2 m_0^2 c^2 \cdot v^2 / c^2 = h^2 / d\lambda^2 = h^2 dv^2 / c^2 = E^2 / c^2 dt^2 = E^2 / dr^2$$

This unification has to be done for kinetic energy because classical and quantum mechanics does not know the concept of rest energy for free particle. These energies represents the amount of cumulative forces embedded into particles caused by change the speed v of particles or of bodies or by change the volume dr of particles, or energy embedded into ether at creation of photon of diameter of in quantum or in electro magnetism

$$p = mv = \gamma m_0 v / c = h / \lambda = hv / c = E / c dt = E / dr$$

7. Conclusion

Gravity, electricity and magnetism were in physics explored independently and are also currently in physics presented in independent parts of physics. Gravity in physics is referred to as (and often as the only) universal power and universal attribute of matter. After last hundred years of exploring the molecules, atoms, protons, electrons, and other elementary particles, however, we know that each atom or molecule, each proton or electron, and other elementary particles of matter exhibit in its vicinity magnetic field, and in their inside or around the electric field.

If we see into tables and catalogues (CODATA, Wikipedia or others) showing the basic properties of elementary particles and atoms, we find that for every particle or atom is given one or both values of the force of the electric or the magnetic charge.

For these elementary particles in these tables, however, we find no value of the size of the gravitational forces fall to the size of the mass of these particles, even when the size of these gravitational forces on the surface of the particles or atoms equals their magnetic force. We can prove [10] that more than 99 percent of the forces of the gravitational field is located within the mass bodies and that these forces are in fact magnetic and electrical forces that keep the mass body as a compact object together. The gravitational field surrounding the mass bodies is much smaller than 1 percent remnant of these forces. We can consider, with great conviction, that the gravitational force is not a universal fundamental universal attribute of matter, and that the force of gravity as the individual fundamental power does not exist. We can consider that gravitational fields and gravitational forces surrounding great mass objects represents the sum of a huge number (1kg steel ball 10^{26} atoms) of disordered magnetic fields of atoms and elementary particles, from which these mass objects

are composed. We can consider that gravitational field of the Earth is the dominant vertical component of the sum of a huge number of disordered fields of atoms and elementary particles of the Earth. The magnetic field of the Earth is a manifestation of the asymmetry of the layout of the dominant vertical component of the magnetic fields of atoms and of elementary particles of the earth caused by the spherically asymmetric ellipsoidal shape of the Earth. For the measurement of the magnetic field of the Earth e.g. by a compass we have to eliminate this main dominant component of the field and spar the needle of the compass in the middle (in its center of gravity). Subsequently, under the so-called gravitational waves of large gravity mass bodies established in GTR, it is necessary to consider the broad spectrum of the disorderly flow of so-called thermal electromagnetic radiation of the individual atoms and elementary particles from which are these large gravity mass objects composed. Maybe relic radiation (cosmic microwave background) is just a manifestation of this way presented the existence of so-called gravitational waves as the broad spectrum of the disorderly flow of very low electromagnetic radiation frequencies of the individual atoms of large mass bodies rotating (cyclotron radiation, they are exposed to acceleration component along orbital path) in solar system, in Milky way and other Galaxies.

The discovery of creation of elementary material particles, as electrons and protons, form the electromagnetic curl compression of ether and vice versa the annihilation of the elementary particles into the curl of electromagnetic field is the largest and the most important physical discovery in the history of mankind. This discovery shows that the essence of the composition of the mass of all atomic particles, as well as all force fields in the universe is the same and is created by the curl compression of density of the energy of the not void space of the universe.

This discovery of the creation of elementary particles of matter from ether curl field, at which at the same time must necessarily a corresponding gravity, electric and magnetic fields be created allows us explain [10]:

-What is the origin of huge internal energy of mass particles?

-What is the origin of the gravitational field?

-Why there is equality between the size of the mass (energy in particles) and size of the gravitational field (the same energy in this field) as a reverse-oriented forces to the surface of elementary particles?

-How has this huge internal energy got into the particles of matter and how it is kept inside these particles of matter?

-What is the origin of the inertial forces of the mass body?

If we want to ask, what is the physical picture of the universe, so we must answer in the first place, that the universe is mainly the space filled in each unit of its volume with ether as the real curling material substance (maybe curling oscillating neutrinos) with a vast amount of this curl in the form of electromagnetic radiation and large amount of this curl in the form of mass particles mainly in the form of protons. All the great mass bodies as planets, the stars, galaxies and the clusters of galaxies is the concentration of these mass particles in small local parts of the universe space. After the gravitational collapse of local shrinks and explosion of supernovae, this shrink of mass is again spread mainly by the electromagnetic radiation across the space of the

universe. This image is similar to the image that has today astronomers in their concepts of dark energy, dark matter and visible matter.

The current physics is separated into several parts of physics. These parts of physics are based on inconsistent, often controversial physical foundation on which they build their own mathematical apparatus, however, that even the creators of these apparatus do not understand them. In contemporary physics is talking about finding a single unifying theory of Physics (theory of everything), which is supposed to be the featuring umbrella obtained in new math super apparatus as extension of the current apparatus of each parts of physics. However, for the unification of the separated of parts of the current physics is primarily the need to unify the physical foundations of these parts of physics. The first simple step on this path is the removal of the degeneration of the relation for quantities of energy and momentum in relativity and quantum mechanics [9]. For such a step, however, there is currently no political will of existing power structures. Therefore, the more likely we live to see further super theory as the next largest achievement of the human spirit in the history of mankind. This theory will disguise mismatch and controversial of physical foundations of current physics at even higher and more complex new math than those of the present.

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