The Physical Medium of the Universal

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Abstract and Introduction:

The transformation mechanism of principles of classical mechanics in statistical interpretation of the quantum theory are shown. Physical interpretation of the principle of uncertainty and the dimension of Planck's constant (J/Hz instead J·s) is given. Inexplicable before phenomenon, taking place in experiments and supervision, are explained.

The physics of a beginning of the 20 century has made resolute transition from the ether concept of space to mathematical representation of its properties which to it were known for that time. It is considered that the beginning to such transition was put by A. Einstein's work [1]. Refusal of the ether concept was preceded by A. Michelson's experiments. Without going into detail considered in that moment of time of ether models, it is possible to tell that the ether is the certain medium consisting of particles in which the body is moving. This movement has some features:

• If the body is impenetrable for particles of the medium in it there is a frontier to a surface of a body; a layer in which speed of particles of the medium has the speed equal to the speed of a body.
• If a body is partially penetrable for particles of a medium the speed of movement of these particles relative of a body will depend on their ability to get through a body; that is, from interaction of particles of medium and particles of a body. In this case we will observe certain values of speeds of "an ether wind".
• If particles for a body are not exactly or entirely impenetrable for medium particles, and the body is moving for a long time on the same trajectory with the particles of medium in nearby area, which poorly interact from the beginning with a body, are gradually involved in its movement (such as the movement of water stirring in a pan via a strainer).

Thus, with the result of A. Michelson's and other scientific experiments, which are different from the speed of the Earth in the solar system and from the speed of the Sun in the galaxy, but at the same time much higher, then an error of experiments (from 3 to 10 km/s), do not contradict any of the specified possibilities of movement of a body in the medium which is necessary to explain the ether.

All considered models of the ether had other deficiencies: the perturbation of density of the ether could be transferred only by collisions of its particles (approximately the same way as any gas). In this situation for maintenance of the transfer speed of the perturbation equal to a velocity of light, the density of the ether equal of 10^{17} kg/m^3 was required. It contradicted the possibility of movement of bodies in the ether. Another model of the ether is possible: its particles interact on distance— according to Coulomb law— which means it has an electric charge. This charge of the medium particles is the same in all volume of the Universe. The electric forces surpass forces of gravitation in 10^{36} times and the same speed of transfer of the perturbation is possible at density of the ether about 10^{-19} kg/m^3.

I have considered such ether in articles [2-4]. There is a theoretical work [5] where the author considers electric potential in space as one more degree of its freedom. In works [2-4] the most paradoxes of physics and ordinary life are considered and "deciphered" on the basis of the ether theory. The most important of them is paradoxical equality of absolute value of the electron and the proton charges (within 10^{-20} their value). According views of the modern physics particles were created at the different time by a particle-antiparticle pairs (their charges must be equal in absolute value), but it is absolutely not clear how the nature has taken care of the equality of charges in "unpaired" particles? We know only one possibility of an explanation of this phenomenon on the basis of human experience: for creation of identical products it is necessary to have the unit of measurements in ten times smaller than a demanded difference. According to this experience it is possible to say that there is a particle, which value of a charge approximately 10^{-21} electron charge in absolute value (even if we haven't found out such a particle).

Presence of such particles creating the ether of the Universe and also creating all known particles of the Matter generates new problems in physics. Here I would like to stop on some questions of quantum mechanics

which, in my opinion, provide the most convincing proof of the ether existence.

God Doesn't Play Dice

In 1924 when Louis de Broglie formulated a principle of wave-corpuscle dualism and had written down for a wave expression $\psi(r, t) = Ae^{-j(\omega t - kr)}$, any data of statistical character of processes in a microcosm yet wasn't, in his understanding wave function was hardly interpreted as a 'distribution of probabilities'. Moreover, the E. Schrodinger's equation which solution was function ψ, could describe not only statistical, but also the determined processes. In some years people known that only product $\psi \cdot \psi^*$ can be interpreted as distribution of density of probability of occurrence of a particle at some point in space. The situation has turned out strange from the point of view of psychology; de Broglie's waves have appeared what he couldn't have assumed otherwise. This article does not say that we can't use principles of the Copenhagen interpretation of quantum mechanics. Here it is shown how the classical mechanics with its determined laws of movement is transformed to the Copenhagen interpretation.

The Uncertainty Principle

The cornerstone of quantum mechanics is the principle of uncertainty by Werner Heisenberg. We will try to consider some features of this principle by observing this principle in a macrocosm. Let's make an experiment: we will move apart fingers of a hand and wave them in front of our eyes. We observe that fingers will blur in space, and the puck blurs on the TV screen at the slowed down repetition. The photos of quickly moving objects made with long endurance turn out smeared. The reason is that any detector can work only in a discrete mode: part of time leaves on excitation, another part on a relaxation (that means, a part of time that the detector cannot accept a signal). It concerns to the eye with its biochemical detectors, to the TV with vertical and horizontal sweep (time scan) and to the camera (chemical detectors on a film).

We have faced an obvious display of the principle of uncertainty in ordinary life: in time interval Δt the object is in volume ΔV. Let's consider some analogy of that scientists have done in the experiments. We will imagine the rotating propeller of a plane we never saw in a motionless condition. We will observe a certain area of space hardly less transparent than the surrounding areas. We will throw through this area a tennis ball: it cannot overcome this

area, and we do a conclusion that its energy is insufficient to break a potential barrier in the space-field. Then we are able to shoot through the area with a pistol; a fragment of bullets get to the target located behind the given area and the fragments are reflected. Then we start to speak about tunnel effect (the probability of overcoming a potential barrier for bullets that are not possessing kinetic energy, necessary to break the given barrier in hundred percent of cases). And we start to understand a certain cloud of distribution of probability of occurrence of any reflecting object as a propeller. And, as we have a tunnel effect inevitably there is an idea of a principle of uncertainty. Moreover, if the frequency of rotation of a propeller decreases, we will see that some directions in hardly the blacked out area will be even more dark and then we can tell that there are directions where probability of occurrence of reflecting objects are bigger than in other directions (actually we know that at some speeds the eyes have time to seize the image). It is possible to continue the given analogy but it is clear that in optics we can be in the same situation. That means if we take the most high-speed detectors it can appear that any processes go with much higher speed. The optics of phenomena is such very high-speed process.

Understanding the Statistical Character of Movement

Why has it been decided that these fast processes will be statistical instead of determined (having certain trajectories)? How it is necessary to understand that particle movement has statistical character? First, one of the most important principles of logic is broken: each subsequent position should be explained within the frame of the previous positions. "Statistical" movement isn't described within the frame of classical movement. And besides, the function of distribution probabilities says to us that the particle in the close moments of time can jump over from one point of space to another point and thus instantly change the speed. The distance between two points is finite-dimensional, and time infinitesimal, the speed of moving can be (there is a probability) more velocity of light.

We already made the assumption that we have the very high-speed process described, for example, as $E=\sin\omega t$, where ω is much more above the frequency of excitation and relaxation Ω of the atom-detector. In this situation we will observe this process in the discrete image. The period $T_0= 1/\Omega$ isn't necessarily constant in the time and isn't multiple with the period of process $T_1= 1/\omega$. It means that value of arguments of a sinus in taken points

will not be equal $2\pi n\omega$ (n - integer number) and then value of function of a sinus will look a random numbers.

To look a random numbers means that a set of numbers received in experiment (points on the spectral curves received in the analyzer of a spectrum) completely not necessarily should be a set of casual (in mathematical understanding of this word) numbers. Its set can be pseudo-casual (and with short period of repetition), that is, with high degrees of correlation. We observe this correlation in optical experiments because without it we wouldn't see spectral lines. They show us that some positions of electrons are more probable than other positions. Besides, it is necessary to pay attention to one of properties of function of a sinus: at uniform search of arguments density of values of function near to an amplitude maximum above, than near to zero (the density of values of function is defined $\cos \omega t$). In other words, if we take set of values of arguments of a sinus and we have values of function in the device by which we do it, we have double "dark" lines with blanks between peaks. Lines should be double for any ω. Such doubling of lines (which it is observed in experiments) will be characteristic for any determined periodic process.

This is the way of transition from classical processes in a macrocosm to statistical processes in the quantum mechanics. In a microcosm we are limited by the possibilities of particles of matter to measure high-speed processes, and we cannot increase the speed of detectors up to the necessary values (for this reason we are doomed to use statistical methods). What can be these determined processes? Let's represent from Figure 1 a potential barrier in the form of a triangle which height changes from zero to any value. The curve in drawing shouldn't be understood as a barrier with the rigid walls, growing from zero up to the maximum value on an axis of energy E: the density of a potential barrier should change on an axis of distances d, increasing to an average vertical line of a barrier. That means that at the movement the particle will fly in barrier area at gradually braking resistance from this barrier.

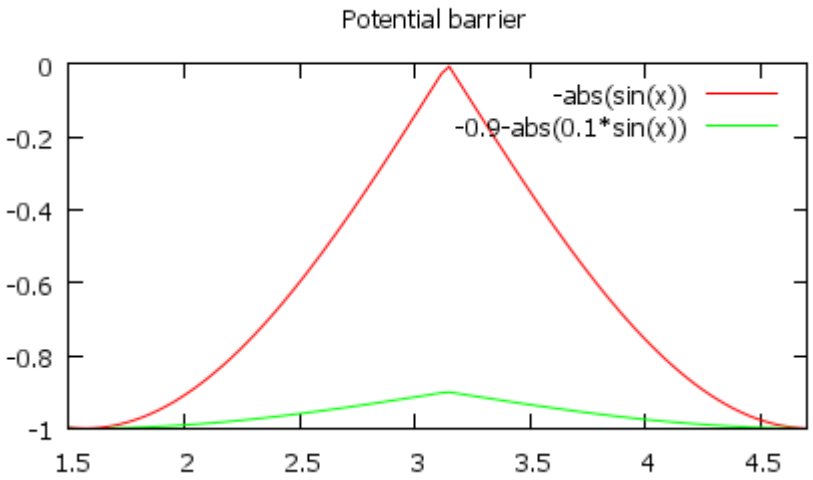

Fig. 1. Overcoming by electron variable on size of a potential barrier. Red line corresponds to the maximum size of a potential barrier E_0, green line – size of a potential a barrier is close to zero.

Let's write down $E=E_0 \sin\omega L/\upsilon$; here E – energy, ω – frequency of fluctuations of a potential barrier, υ – average speed of electron movement, L – semi width of a potential barrier. The semi width undertakes, as the electron will be reflected back if the barrier grows earlier, than electron will overcome semi width. If it appears on other side of a triangle will receive acceleration in the following area. If initial energy of movement of a particle is insufficient to overcome semi width of a barrier then the particle will be pushed back out.

Kinetic energy of electron overcoming current value of height of a potential barrier is equal to $m\upsilon^2/2 \geq E_0 \sin\omega L/\upsilon$, or $m\upsilon^2/2E_0 \geq \sin\omega L/\upsilon$. We know that energy of transition from one power level on another is equal to $E=h\cdot\nu$ (ν is not equal ω). Frequency $\nu = 1/T$, which means $E=h/T$. Let's transform the formula $(m\cdot\upsilon)\cdot(\upsilon\cdot T)/h \geq 2\sin\omega L/\upsilon$. That means, $ps \geq 2hs\sin\omega L/\upsilon$, where p – an impulse, s – distance. As the symbol E actually means ΔE the symbol υ is Δυ, ps means ΔpΔs. In this case the uncertainty principle gets physical sense: it means that the probability of overcoming by electron an oscillating potential barrier, when speed of electron is insufficient to overcome a constant barrier, is more than zero. In particular for that phase of input particle in the barrier region, which is considered above $\sin\omega L/\upsilon \leq ½$, that means $\omega L/\upsilon \leq \pi/6 \approx 0.523$. The distance between levels in atom above $L=10^{-11}$ m (electron overcomes it) and average speed of electron above $\upsilon = 10^6$ km/s (≈3 eV). That means, that the electron has the chance to overcome a potential barrier when the frequency is $\omega \leq 0.5\cdot 10^{17}$ Hz.

There are no doubts to consider that such frequency of fluctuations of a potential barrier is unattainable. As according to an inequality smaller frequency is necessary to us. Besides, the probability of overcoming by a barrier particle will increase approximately twice if it flies in a zone of a potential barrier when that only starts to decrease. For an establishment of the general probability of overcoming of a barrier it is necessary to summarize "probability" of overcoming of a barrier to all phases of input. That means that the restriction from above can come at an even higher frequency. But it is clear that the probability of overcoming a particle with “small speed” over an oscillating barrier isn't equal to zero. It is necessary to specify that E_0 isn't the height of potential barrier $E_б$ accepted in practice. E_0 is more than $E_б$ because we have the reflection of particles with higher energy than a potential barrier. We can see that the tunnel effect we have used in order to connect with the statistical character of a principle of uncertainty naturally appears at an oscillation of a potential barrier. Differently little girls couldn't jump with a skipping rope.

The Mechanism of Formation of Potential Barriers in an Atom

I did not casually explain about an ether in the introduction. A. Michelson’s experiences didn't testify the absence of an ether. The wave-corpuscle dualism of Louis de Broglie is evidently interpreted by a particle movement in some medium (or ether). In this situation we have waves of density of this ether (probably there is no need to explain this, however in this case there is a diffraction of electrons with the double slit experiment). "Mystical" interpretation of quantum mechanics (subjective-idealistic) disappears by the presence of oscillating potential barriers (waves of the ether). Probably, it is enough in these moments to declare that the ether exists. We don't know with accuracy that occurrences at the interaction of a positive nuclear of atom to positively charged ether [2-4], but to assume an event to us the analogy will help. As the ether is in a constant oscillate motion (at least, bodies always move in space) around a nuclear atom there should be a standing wave of density of an ether in the same way as a round a beacon there is a standing wave of water as if on water there are waves. In the charged ether the amplitude of fluctuations of density will decrease with removal from nuclear borders in inverse proportion to a second power of a distance (according to Coulomb’s law). The amplitude of a standing wave in nodes is always equal to zero, and in antinodes it changes in time from zero to some value.

Considering that negatively charged electrons should aspire in the field of an ether with the greatest density of a positive charge (the statement directly following from Coulomb's law), we can be almost assured that electrons will aspire to be in antinodes waves of density of an ether. In this situation a potential barrier for an electron is moving from one antinode to another is a knot of a standing wave of density of an ether. In absence of external influence electrons aspire to a nuclear therefore they will pass from high power levels to the bottom.

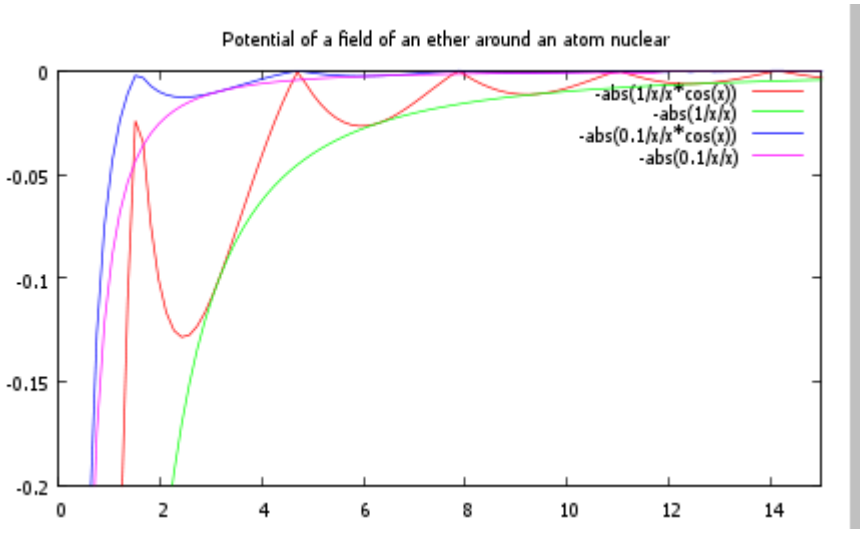

Fig. 2. Distribution of potential of a field of an ether Φ around an atom nuclear (d=0 corresponds to nuclear position). Orange line - the amplitude of potential in antinodes of a standing wave of density of ether is maximum, blue line - is close to zero. Pink and green lines show the reduction potential according $1/x^2$.

It is possible to approximate an estimation of such a transition. We will write down the Coulomb's law for an electron in atom $F=KQq/r^2$. Here K – proportionality factor in SI, Q and q – charges of a proton and an electron, r – distance from a nuclear to an electron. Substitution of known values and approximate distance $r=10^{-10}$ m gives value about 10^{-8} n. a An electron passing from one level to another overcomes distance about 10^{-11} m (it is possible to consider that $F\approx const$) work on overcoming of this distance is approximately equal $E\approx10^{-19}$ J or this value of work is approximately 1 eV and that is less than size of many potential barriers in atom. But nevertheless an electron practically "does not jam", passing from the highest levels to the bottom. However transition occurs in the "strange" image: the speed of an electron at such transition is approximately 10^6 m/s (as shown above) and

length of transition is 10^{-11} m, the time of the transition should be approximately 10^{-17} s. But actually it is distributed so: the transition looks infinity small (may be those 10^{-17} s), and at any level an electron is “living” at least 10^{-8} s (at meta-stable levels even longer).

How an electron can break a potential barrier (without possessing "necessary" energy) is clear from the above-stated explanation. But how it is possible to explain that it can be so long at any level? It is obvious that in the present state of affairs an electron doesn't possess sufficient energy that with an once to break a potential barrier growing in front of the moving electron. Some analogy of the given situation the gradual increase in height of a jump at a trampoline, or rocking of the car that has gotten stuck in slippery substances will serve. But, unlike the resulted cases energy undertakes not from the jumper, or people pushing the car, energy is taking from an ether field. An electron is shaken in the potential hole, increasing amplitude of fluctuations at the expense of an ether field, while its energy won't appear sufficient to overcome current height of a potential barrier. That means it is necessary to make 10^9 oscillations (even more at meta-stable levels), and each fluctuation is increasing the energy on the 10^{-9} eV. It is necessary to know that at the expense of pushing apart by a proton of positively charged ether round a proton the sphere with the low density of the ether insuperable for an electron is formed; therefore it can't "fall" to a proton itself.

Another matter transition from the bottom levels on the higher. Such transition is possible only when an electron will receive photon "blow", sufficient to overcome a difference of an energy in antinode and in knot. Actually for an electron a potential barrier will be "height" (and the form) knot over antinode (practically a triangle). As the maximum energy in an antinode will be inversely proportional to a square of distance from the center of proton $E = R/n^2$, (here n corresponds R) the difference of the energy in next antinodes will be equal $\Delta E=R\ (1/n^2-1/(n+1)^2)$. I have specially designated factor letter R that the Rydberg’s formula has turned out. That is, the ether density can be represented how it is made on fig. 2.
It is clearly that knots of a standing wave (potential barriers) are better for overcoming during that moment of time when amplitudes of a wave in antinode lie near to a curve 2. So, it is visible that variable on size the potential barrier transforms a "mystical" principle of uncertainty gets a quite classical parameter, but also there is obvious physical mechanism of formation such variable on size of a potential barrier.

Optical Paradox

Lengths of waves of radiations are in many times more than the sizes of an atom. Distances between orbital's of electrons (length of a wave between antinodes), is about 10^{-11} m (all atom is approximately 1 Å). That means this frequency of radiations of atom should be approximately 10^{19} Гц. But in practice we are seeing fluctuations with lengths of a wave s thousand times more and with a frequency 10^{15} Hz and even lower. Physicists know that the optimum size of oscillator should be equal to a quarter of length of a wave of oscillation, but the size and length of the wave shouldn't differ by a thousand times in any way. The paradox is authorized in the ether medium, a wave of ether medium density can extend with proper speed (proper speed of distribution of indignation have all the mediums). If now we force to somehow move this wave with another speed we will see a palpation of amplitude of the waves which frequency will be much less frequency of waves (there is "highest wave").

We will show at first how such palpations arise in oscillatory processes. We will combine two oscillations with close frequencies.

$$X_1=A\cos\omega_1 t$$

$$X_2=A\cos\omega_2 t,$$

It is as a result received:

$$X=2A\cos 1/2\ (\omega_1 - \omega_2)\ t\cdot\cos 1/2\ (\omega_1\ \omega_2)\ t.$$

The palpation has appeared with difference of frequency $\omega_1 - \omega_2$. Such palpation everyone can observe like a guitar attuning by raising the string which has not been adjusted to absolutely precision. Oscillations with palpations will arise on other string (which one you don't touch) as a result of the resonance phenomenon (the string oscillates with frequency about 300 Hz, and palpation has frequency less than one hertz).

What would happen if we were to combine two waves extending with different speeds?

$$U_1=A\sin\omega\ (t-r/\upsilon)$$

$$U_2=A\sin\omega\ (t-r/(\upsilon\ \Delta\upsilon)).$$

Simple trigonometrical transformations show that the total signal will consist of a signal with frequency ω (it is possible to consider as a carrier frequency which one in this case does not represent interest for us). In a total signal there is the trigonometrical function which argument is equal

[ω(tυ-r)/(υ+Δυ)+ωtΔυ/(υ+Δυ)], that means the argument will have frequency rather close to frequency ω as far as Δυ is much less υ (this frequency again is not interesting to us), and the frequency ωΔυ/υ. It is the low-frequency palpation appearing at the expense of a difference of speeds of distribution in the ether medium. This low-frequency palpation in water during a strong wind makes waves with variable height (the highest wave phenomenon).

All drivers of small motorboats know that the boat can be accelerated by a wave and be slowed down by it the same way as the body interacts with an inclined plane. Clearly there is an exchange of energy between a wave and a body (boat). Considering at school of a problem with an inclined plane, we implicitly considered that an inclined plane has a mass much bigger than mass of a body. But it is not correct in the free medium; the body interacts only with small part of the medium and all depends on a parity of their weights. Thus it is possible to consider that if the body (boat) is accelerated, the wave is slowed down and on the contrary. Unfortunately, for calculations we don't know yet the weight of a wave interacting with a body.

It is obvious that similar interaction can take place between a wave an ether and an electron. And again the mass of electron is less than the "weight" of a wave of density of an ether. And, besides, not clearly, as it is possible to compare numerically the interaction between an electron and an ether. At best it is necessary to solve a recurring problem: with known energy of interaction to define interaction of a wave and an electron. One is clear, being slowed down, an electron gives energy to a wave, accelerating this wave, bringing frequency change, that is, bringing palpation. Exactly the opposite at acceleration an electron a wave of an ether will absorb energy. Here the role of Planck's constant is interesting. The matter is that the height of water waves and amplitude palpation depend on a number of the reasons: there is the viscosity of water and the average depth of a reservoir, average speed of a wind in the given reservoir, and all parameters influence that I have named. Obviously, here there is a dependence on conditions of occurrence of low-frequency palpation. Most likely Planck's constant is defined by ether characteristics in our area of the Universe and the density of an ether around substance particles.

Physical Sense of Planck's Constant

Let's define Planck's constant physical sense. From the time, when it has been entered into use of physics, nobody could explain a physical sense

of the dimension of product of energy and time J·s. This dimension contains a certain paradox. The concept of energy already is the total result of actions (it can be interpreted a quantity of water, poured in a bucket) so what for this quantity still to multiply by process time? But the dimension of Planck's constant can directly follow from formula $E=h\cdot\nu$. It is energy divided on frequency (J/Hz). In this situation Planck's constant gets a clear physical sense: h becomes the quantity of energy necessary for change of frequency on one hertz. And it becomes clear that this energy undertakes not from "mystical oscillation" of a particle but grows out from acceleration (or, on the contrary, delay) of an electron. But an electron interacts not with a nuclear as differently the radiation spectrum would be continuous, and with the certain field having a wavy character that is electrically charged ether.

Let's present space like a kind of 'a washing board'. The amplitude of a wave of a washing board for us will not have value, length of a wave we will designate L. We will present a particle, moving without a friction with average speed υ along a washing board (in one length of a wave speed can be unequal, but each site L is crossing for the same time). Then the period will be equal $T=L/\upsilon$ and frequency $\omega=\upsilon/L$. Kinetic energy of a particle will register as $E=m\upsilon^2/2$. Let's increase speed of movement of a particle on value $\Delta\upsilon$. Frequency will increase $\omega_1=(\upsilon\Delta\upsilon)/L$ and energy $E=m(\upsilon\Delta\upsilon)^2/2$ will increase too. The difference of frequencies will make $\Delta\omega=\Delta\upsilon/L$, energy difference will make $\Delta E=m[\upsilon\Delta\upsilon(\Delta\upsilon)^2/2]$, or with the $\Delta\upsilon<<\upsilon$ it is possible to write down $\Delta E=m\upsilon\Delta\upsilon$. Let's define the value of energy necessary for change of frequency on one hertz $h=\Delta E/\Delta\omega=mL\upsilon$ (I have deliberately designated this factor a letter h to show its formal communication with Planck's constant and how it can be received).

Let's analyze this expression. Volumes m and L are constants. As we have assumed that the friction is not present, and speed changes slightly it is possible to consider that the value of energy necessary for change of frequency on one hertz will be a constant practically for all frequency range (parameter h is a constant). And it is clear that for this conclusion has no meaning character of force leading to change of speed, or how it depends on distance in space. It is only important that speed has changed. That is, to us it is not important that the height of waves in a washing board can accrue, or decrease, the value of energy necessary to change the frequency on one hertz, will be a constant. For this reason Planck's constant has so universal character for all Universe (probably, for our aria of the Universe), after all we consider interaction an electron constant mass with an identical field of

an ether. But also for all objects of identical mass energy change on one hertz will be universal value. Moreover, for all speeds of movement when frequencies of radiation, or absorption will exceed 100 Hz, 'Planck's constant' within one percent will be universal.

What do the certain strange optical effects observed during the explosion of a Tunguska meteorite and around the Bermudas triangle mean? In a testimony of the people who are in some affinity from epicenter of explosion of a meteorite one improbable circumstance is noted: color of foliage and a grass through small time after explosion became at first yellow, then orange, red, black, and then all has returned to primary colors [For example, the article "*The Tunguska Meteorite – Great Secret*", published on a site http://ytungus.dopinfo.ru and generalizing messages of witnesses]. In the Bermuda triangle pilots of the lost planes have declared that do not see the sun (on a clear sky) [Lawrence Kushe, *The Bermudas Triangle: Myths and Reality*].

It is possible to explain both these strange events if suggested that frequency separation of fluctuations represents for us visible light, can change on considerable size (and leave a visible range) even in that case when "high" frequency of the basic fluctuation will change on microscopic size. That means, in both cases we can have changes of density of an ether and these will be accompanied by such optical phenomena. The given strangeness does not have an explanation in any standard theories. And this explanation can prove existence of the charged ether. Events near to Tunguska and in the Bermudas triangle are unique and practically inimitable, which indicates why we should be extremely attentive of all optical anomalies. For example, to pay attention to a strange small house ("mystery spot") somewhere near Santa Cruise in California. Improbable optical anomalies are observed among other things in this place: lengths of objects spaces at one point are identical, in other points become very different from each other. The given effect also can explain the minor alteration of density of the ether, causing essential separation of frequencies. The matter is that our methods of measurements of length (including eyes) are based on frequency standards.

Conclusion

Many questions of quantum mechanics are not considered in this article; we only touch on the diffraction of the electron, and the questions

presented by experiments of the proof of the theorem of Bell (they were already considered in works [2-4]) are not considered. But I hope the above observations give enough grounds to consider that other treatment of the phenomena of quantum mechanics is stated, and also to think that the charged ether allows to interpret events in a microcosm (by the way, from all previous works it was visible that with its help it is possible to explain all kinds of interactions in the physics).

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