

THE NEXT ERROR COMMITTED BY THE NOBEL COMMITTEE
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Announcement. We shall demonstrate a gist of impropriety of the scientific result, for which the 2011 Nobel Prize in physics has been awarded. In order to expedite an apprehension of the essence of the error, let us make our representation in the form of the answers to the questions.

- 1. What is the gist of the scientific result, for which the Nobel Prize in physics has been awarded this year?** A proof of the expansion of the Universe is the gist of the American astrophysicists scientific result, for which they have been awarded the Nobel Prize this year.
- 2. How should the concept of “the expansion of the Universe” be understood?** It is understood as a process of moving apart of the Universe galaxies.
- 3. How is availability of this process proved?** It is proved by a value of the red shift of spectral lines of the galaxies (Fig. 1).

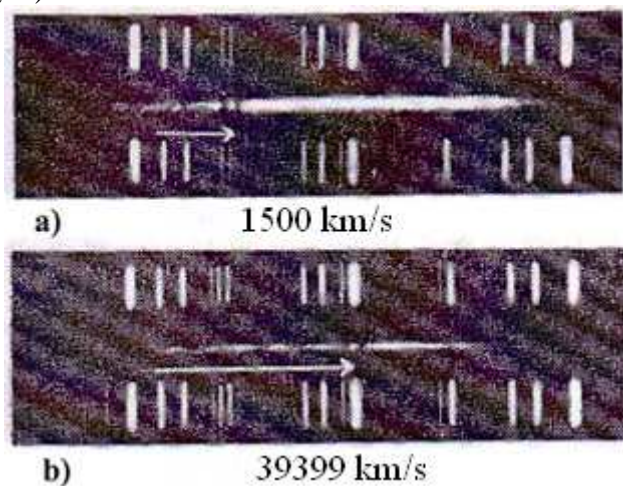


Fig. 1. The red shift of the spectral line (it is shown with the help of the arrows); according to it, velocity of moving apart of the galaxies from the Earth is calculated.

- 4. What is the physical gist of the red shift?** The scientists have learnt to register the spectra of various chemical elements long ago. Two spectral lines of the hydrogen atom are given in Fig. 2.

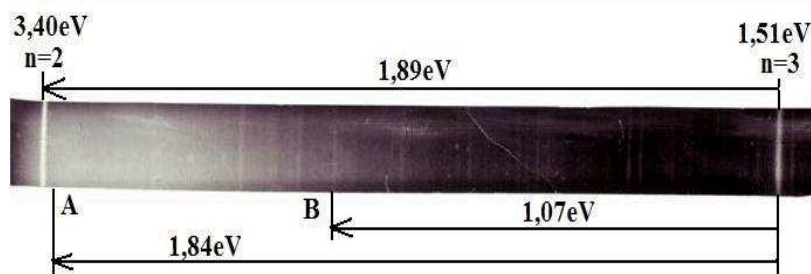


Fig. 2. The hydrogen atom spectrum: the 2nd (n=2) and the 3rd (n=3) stationary energy levels of the electron

Each spectral line is formed by a set of the photons, which have the same wavelength λ . The most astonishing thing is the fact that it appears from all mathematical models describing the photon that it consists of six magnetic fields, which are circular loop closed. In case of the straight line motion with speed of light C , the photon (Fig. 3) rotates in such a way that its wavelength λ , which

is described by its centre of mass (M, Fig. 3), is equal to the radius r of the photon, i.e. $\lambda = r$. It means that the photon has both the wave features and the corpuscular features, which are exhibited by it in innumerable quantity of the experiments [1]. Both its open parameters: the radius, which is equal to the wavelength $r = \lambda$, oscillation frequency ν , mass m , energy E , and its hidden parameters: the amplitude of oscillation of the centre of mass of the photon, the radii of the conditional circumferences, which describe the motion of the centre of mass of the photon and the centre of mass of its separate magnetic fields, angular rotational velocities of these circumferences and other parameters are changed within the region of 18 orders of magnitude [1].

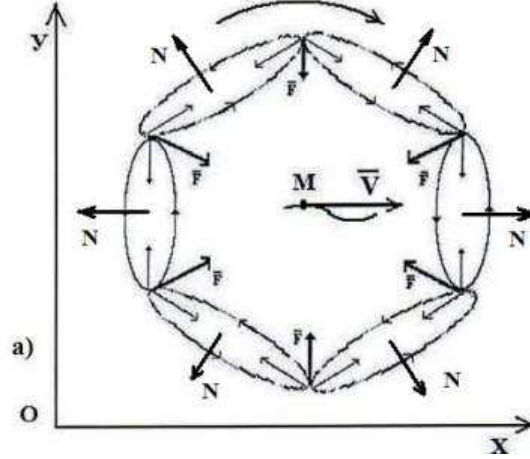


Fig. 3. Diagram of the annular magnetic fields of the photon

The product of mass m of the photons by its radius r is a constant value resulting from continuity of Planck's constant h and speed of light \tilde{N} [1].

$$k_0 = m \cdot \lambda = m \cdot r = \frac{m\lambda^2\nu}{\lambda\nu} = \frac{h}{C} = \frac{6.626176 \cdot 10^{-34}}{2.997925 \cdot 10^8} = 2.210254 \cdot 10^{-42} \text{ kg} \cdot m = \text{const.} \quad (1)$$

A physical law results from dimensionality of the constant (1): **the product of masses of the photons by the lengths of their waves or radii is a constant value**. There is no name for a constant with such dimensionality in SI system; that's why it is called the photon localization constant [1]. In the first approximation, the photon can be presented in the form of a ring, and a reason of its localization becomes clear. The magnetic forces, which compress the ring, are counterpoised by the centrifugal inertial forces, which exert influence on the centre of mass of its six magnetic fields in case of rotation and translational motion with speed of light.

Let us pay attention to the fact that in the engineering system of units the constant (1) has another physical essence: moment of force M_K . It means that the moment of the forces, which play the role of a so-called perpetual motion machine in the inner structure of the photon, is a constant value for the photons of all radiation regions.

$$M_K = m \cdot r = 2.210254 \cdot 10^{-42} \text{ kg} \cdot m = \text{const.} \quad (2)$$

Let us note that the constant moment of force, which rotates the photon, can take place only in the case when the force vectors, which generate this moment, do not cross a geometrical centre of the photon model, i.e. they are eccentric forces.

The experiments, which have been carried out by the scientists from the Tel Aviv University, serve as the most convincing proof of a lack of resistances between the effective magnetic and electric forces (Fig. 4) [2].

The photon electromagnetic structure formation is governed by three main constants: speed of their motion C , angular momentum \bar{h} and localization constant k_0 or constant moment of forces M_K , which rotate the photon. It is quite natural that this moment is generated by the inner forces of the photon, that's why we have every reason to suppose that these forces provide its straight line motion with constant speed C .



Fig. 4. Photo from the video film

<http://mobilochko.ru/blog/43007741128/Izrailtyane-udivili-publiku-kvantovoy-levitatsiey>

It results from the localization constant $k_0 = m \cdot r = const$ (1) of the photon that its mass m and, consequently, energy $E = mC^2$ are decreased when the photon radius is increased ($r = \lambda$). It has been established that these changes depend on a coincidence or an opposition of the directions of motion of the source and the photon being emitted by it. When their directions coincide, the photon radius is decreased; when they are opposed, the radius is increased.

Then, a visible portion of the spectrum, which photons with smaller wavelength (or the radius) are of violet colour and with larger one are of red colour, are taken as the basis. It appears from this that if the wavelength (the radius) of the photons, which complex forms the spectral line of any star, exceeds the wavelength (the radius) of the photons, which have formed the same spectral line under the stationary conditions of a terrestrial laboratory, such line is considered to be shifted into the red region of the spectrum.

5. How is a change of the wavelength of the photon or its radius r or frequency ν determined in the astrophysical observations? Doppler effect is used for such calculations; it is based on a well-known phenomenon of the change of the wavelength or frequency of the acoustic signal, which is emitted by a moving acoustic source. If the directions of the acoustic source motion and the acoustic wave expansion coincide, acoustic wavelength frequency is considered to be an increased one and its length is considered to be a decreased one, and an observer, who is in front of such source, registers these changes. When the source radiates its wave conversely to the direction of its motion, the wavelength is increased and frequency is decreased, and the observer, who watches the recessive source of such wave, registers these changes.

6. May the regularities being observed be applied to the analysis of the phenomena, which are formed by the photons? The acoustic Doppler effect variants being described must not be applied to all instances of behaviour of the photons, which appears on the moving source or is reflected from the moving object. We shall consider these instances later on.

7. How is it possible to obtain a mathematical model from Lorentz's transformations (3 and 4) for a calculation of a change of frequency ν' of the photon, which starts from the source moving with velocity V (Fig. 5)? In order to obtain the mathematical model for the calculation of the change of frequency of the photon, which starts from the moving frame of reference in the direction coinciding with axes OX and OX' , it is necessary to put the values $x = Ct$ and $x' = Ct'$ into Lorentz's transformations (3 and 4).

$$x' = \frac{x - Vt}{\sqrt{1 - V^2/C^2}}; \quad (3)$$

$$t' = \frac{t - Vx/C^2}{\sqrt{1 - V^2/C^2}}. \quad (4)$$

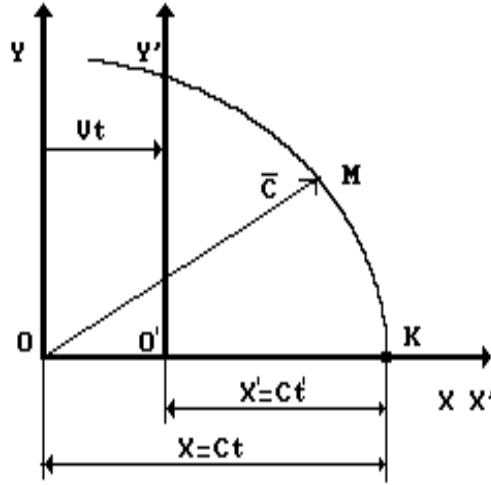


Fig. 5. Diagram to the analysis of Lorentz's transformations

As a result, we shall obtain the formula (5); it results from this formula that frequency ν' of the photon, which starts from the object, which moves with velocity V in the direction of this motion, is calculated according to the formula (6).

$$t' = t \cdot \sqrt{\frac{C - V}{C + V}}; \quad (5)$$

or

$$\nu' = \nu \cdot \sqrt{\frac{C + V}{C - V}}, \quad (6)$$

where ν' and ν are frequencies of photon radiation in the moving frame of reference and the fixed frame of reference, respectively (Fig. 5).

We denote $V/C = \beta$ and get the formula (7) for the calculation of frequency of the photon, which starts from the object, which moves with velocity V , to the direction of its motion.

$$\frac{\nu'}{\nu} = \sqrt{\frac{1 + \beta}{1 - \beta}}. \quad (7)$$

This is a relativistic mathematical model for the calculation of the photon Doppler effect. As $C > V$, it results from the relationship (6) that frequency ν' of the photon, which is emitted by the moving source, exceeds frequency ν of the photon, which is emitted by the quiescent source, i.e. both mathematical models (6) and (7) describe **solely** an ultraviolet shift of the spectra of the atoms.

8. It results from the formulas (6) and (7) that frequency ν' of the starting photon is increased with an increase of velocity V . To which shift of the spectral line will it correspond? The answer will be an unambiguous one: it will correspond to the ultraviolet shift of the spectra; it proves closing-in of the object, from which the photon starts, and the observer who is in the fixed frame of reference. It is because $C > V$; that's why it results from the formula (7) that frequency ν' of the photon, which is emitted by the moving source, exceeds frequency ν of the photon, which is emitted by the quiescent source, i.e. the mathematical models (6) and (7) describe solely an ultraviolet shift of the spectra of the atoms.

9. How is it possible to obtain a mathematical model from Lorentz's transformations, which could demonstrate a decrease of frequency of the photon, which starts from the moving source, and could describe the red shift corresponding to the expansion of the Universe? It cannot be done. It is impossible to obtain the mathematical model, which describes a decrease of the starting photon frequency, from Lorentz's transformations in order to prove the expansion of the Universe.

10. Why is it impossible to obtain the mathematical model for a calculation of the so-called red shift from Lorentz's transformations? The answer is very simple. In case of the red shift, the photon starts from the object in the direction, which is opposite to the direction of the motion of the object. Lorentz's transformations describe solely a variant of the coincidence of the directions of the motion of the object and the photon, which starts from it (Fig. 5).

11. How did the relativists manage to slip out of this impossibility when they calculated the red shift and stated that it originated from Einstein's relativity theory and they obtained the Nobel Prizes? It is awkward to give a direct answer, but the situation is such that the answer is required. The relativists managed to slip out of this situation by swindling as it may be said. They did it simply having rewritten the formulas (6) and (7) groundless in the form, which was necessary to them (8).

$$\frac{\nu'}{\nu} = \sqrt{\frac{C-V}{C+V}} = \sqrt{\frac{1-\beta}{1+\beta}}, \quad (8)$$

There was neither mathematical right, nor physical right to do it, but they did it, and they are proud of their swindling beyond measure.

12. Do Lorentz's transformations exist for the case when the directions of the motion of the object and the photon, which starts from it, are opposite? It is astonishing, but they do not exist.

13. Is it impossible to obtain Lorentz's transformations for the case of the motion of the moving frame of reference in the negative direction of axis OX and a formula (8) later on? It is a natural question. An answer to it results from Fig. 6, and we suggest that the reader should do it.

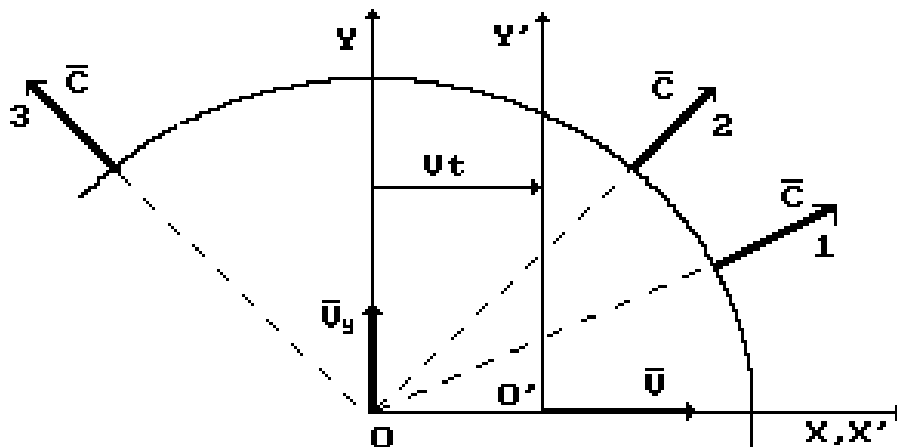


Fig. 6. Diagram for the analysis of the opposite motions of the moving frame of reference and the photon, which starts from it

14. Can the results of the calculation according to the formulas (7) and (8) be transformed?

Naturally, it is possible to do it. For this purpose, let us assume several values β and determine the values ν'/ν for them. We substitute them in the formulas (7) and (8). As a result, we shall obtain a logical result, but the physical essence of its acquisition is violated completely (Table 1). This result (7) ν'/ν (Table 1) demonstrates unambiguously that if velocity V of the motion of the moving frame of reference (of the star, for example) is increased, frequency ν' of the photon being emitted is increased; it means that the ultraviolet shift of the spectral lines is increased. We have already proved that there is no reason to use the formula (8) though it gives the result, which is observed by the astrophysicists (Fig. 1, Table 1).

Table 1. Relativistic result of the calculation of the photon Doppler effect

$\beta = V/C$	ν'/ν (7)	ν'/ν (8)
0.000001	1.0000009	0.9999989
0.00001	1.0000099	0.9999899
0.0001	1.0000999	0.9998999
0.001	1.0010004	0.9990004
0.01	1.0100504	0.9900494
0.1	1.10554	0.904534

Thus, we have obtained an unambiguous answer: the relativists have only one mathematical model (7) for the calculation of the ultraviolet shift of the spectra of the atoms and the ions; they have no right to use the mathematical model (8) for the calculation of the so-called red shift of the spectra.

15. How should we regard the Nobel Prize bestowal on the astrophysicists who have proved the expansion of the Universe? In order to be impersonal, we should feel sorry for the experts of the Nobel Committee. They try to estimate novelty and importance of the scientific investigations for the mankind though they lack necessary knowledge for it. As a result, an amusing situation is created for our descendants who will puzzle out these errors and will treat the experts of the Nobel Committee approximately in the same way as we treat now the experts who stated that the Sun rotates round the Earth. It is a mere fun and nothing more.

16. Is there any formula for the calculation of the red shift of the spectra resulting from the classical notions, not from the relativistic ones? Such formulas do exist. They are published in the year of 2002 in “Galilean Electrodynamics”, the American magazine, and belong to L. B. Boldyreva, N.B. Sotina, the Russian women (L. B. Boldyreva, N.B. Sotina. The Possibility of Developing a Theory of Light Without Special Relativity. “Galilean Electrodynamics”. Volume13, Number 6. Pag. 103-107).

17. How did the Russian women manage to solve a scientific task, which was too much for the learned men? They did it simply and logically. They refused from a kinematic approach to the solution of this task and used an energy variant. For this purpose they wrote total energy of the photon in the form of two components: the first one $mC^2/2$ takes into account the energy of translational straight line motion of the photon; the second one $h\nu/2$ takes into account a rotary part of its energy; they assumed that a sum of these energies depends on velocity V of the photon motion. If the angle between the direction of the velocity vector V of the source motion and the direction of the velocity vector C of the photon being emitted (Fig. 7) equals α , total energy of the photon being emitted is written in the following way:

$$h\nu' = \frac{1}{2}m|\vec{C} + \vec{V}|^2 + \frac{1}{2}h\nu = \frac{1}{2}m(C^2 + V^2 + 2VC \cos \alpha) + \frac{1}{2}h\nu. \quad (9)$$

Taking into account that $m = h\nu/C^2$ and designating $\beta = V/C$, we transform the equation (9) and find that

$$h\nu' = \frac{h\nu}{2}(2 + \beta^2 + 2\beta \cos \alpha). \quad (10)$$

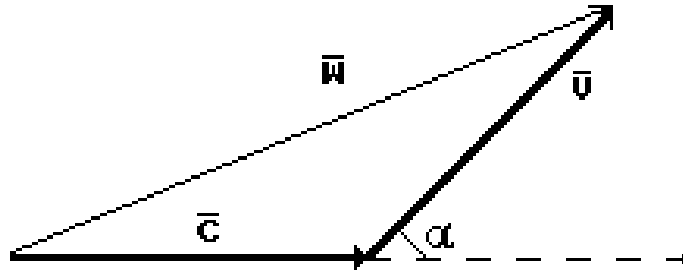


Fig. 7. Diagram of addition of velocities of the source \bar{V} and the photon \bar{C}

If the motion directions of the source and the photon being emitted coincide, $\alpha = 0$ and

$$\frac{\nu'}{\nu} = 1 + \beta + \beta^2 / 2. \quad (11)$$

If the motion directions of the source and the photon being emitted are opposite, $\alpha = 180^\circ$ and

$$\frac{\nu'}{\nu} = 1 - \beta + \beta^2 / 2. \quad (12)$$

In Table 2, you can see the calculation results according to the classical mathematical models (11), (12) and the relativistic ones (7 and 8).

Table 2. Calculation results of the photon Doppler effect

$\beta = V/C$	ν'/ν (7)	ν'/ν (8)	ν'/ν (11)	ν'/ν (12)
0.000001	1.000001	0.999999	1.0000010	0.9999990
0.00001	1.000010	0.999990	1.0000100	0.9999900
0.0001	1.000100	0.999900	1.0001000	0.9999000
0.001	1.001000	0.999000	1.0010000	0.9990005
0.01	1.010000	0.990000	1.0100500	0.9900500
0.10	1.100000	0.900000	1.1050000	0.9050000

It is easy to see that the results are close; the only difference is in the fact that both mathematical models (11) and (12) reflect reality; in case of the relativistic approach, only formula (7) is connected with reality. If we take into consideration the fact that relativistic reality results from relativistic kinematics and the classical result of the Russian women originates from classical energetics, I (being an expert) insist that L. B. Boldyreva and N.B. Sotina deserve to be conferred with the Nobel Prize in astrophysics.

18. Are there the astrophysical observation results, which prove reliability of the mathematical models (11) and (12)? The results of the simultaneous registration of the ordinary spectral lines of the hydrogen atom, which are obtained from SS433 extraterrestrial object, and the spectral lines, which are shifted to the ultraviolet and red regions of the spectrum, serve as a classical experimental fact, which proves validity of the mathematical models (11) and (12). It points out to the fact that the main part of SS433 extraterrestrial object is at rest in relation to space; two other parts move in relation to space. The part, which generates the ultraviolet shift, moves in the direction to the Earth; the part, which generates the infrared shift at this very time, moves in the direction from the Earth. Periodicity of a change of the values of these shifts is registered as well.

19. Is it possible to make a conclusion concerning the expansion of the Universe without knowledge concerning physics of the process of the photon emission from the moving objects? It is impossible, because knowledge concerning a real physical process of a mass loss by the photon in case of the radiation from the object, which moves in space in the direction being opposite to the photon radiation, can change an interpretation of this phenomenon in such a way that the existing dominant interpretation of the expanding Universe will become completely erroneous.

20. What is the gist of such error? The essence is in the fact that no actual reason of the mass loss by the photon being emitted in the direction, which is opposite to the motion direction of the emission source, has been found yet.

21. What reasons evoke the mass loss by the photons when they are emitted in the direction being opposite to motion of the object, which emits the photon? There are two reasons; both of them are equivalent. The photon loses its mass at the time when it is emitted by the electron, and the same mass is lost in the interaction with the medium, in which the photons move, in this case during millions and billions of light years. It is still unknown, which process out of these two processes makes the largest contribution in the mass loss by the photon. Nevertheless, the Nobel Committee experts award prizes without further ado disgracing the founder of this prize.

22. It is known that Isaac Newton was the first to set forward a ballistic hypothesis concerning the photon start at the moment of emission. How does the new theory of microworld explain this hypothesis? The ascertained corpuscular nature of the photon (Fig. 3) gives every reason to return to the ballistic hypothesis, which is based on Newton's notions considering light as a stream of material corpuscles. But this hypothesis acquires a considerable limitation. Its essence is as follows.

If we connect the fixed frame of reference with space and consider a motion of the source, which emits the photons, in this system, velocity of the photons being emitted in reference with the chosen frame of reference, which is connected with space, will be always one and the same and equals C . Such result is stipulated by the fact that photon motion velocity consistency is generated by the electromagnetic (or magnetic) processes, which take place in its magnetic structure (Fig. 3).

The essence of the photon emission process can be compared figuratively with the gun-shots of such shells that despite of initial velocity of the exit of the shell from the gun barrel would gather one and the same speed with regard to the fixed frame of reference being connected with space. It stipulates a peculiarity of the photon ballistic hypothesis: an absence of the phenomenon of the Galilean composition of velocities of the source and the photon being emitted. When the photon is emitted, it gathers one and the same constant speed with regard to space being equal to C . However, the Galilean composition of velocities is preserved completely when the photon meets with the receiver, but it exerts no influence on the energy state of the photon itself.

At present, the infrared shift of the spectral lines being formed by the atoms of the stars of the galaxies serves as the main proof of the expansion of the Universe. The problem concerning an influence of the direction and velocity of the radiation receiver on a value of this shift remains unsolved.

23. Does the set out new information allow us to make an unambiguous conclusion concerning the expansion of the Universe? No, it does not; on the contrary, it impugns reliability of the idea concerning the expansion of the Universe.

24. What is such assertion based on? Let us begin with the second Einstein's postulate: "Any ray of light moves in the stationary system of coordinates with the determined velocity c whether the ray be emitted by a stationary or by a moving body". It is known that the rays of light is a scanty part of the whole scale of the photon emissions; that's why it is time to extend the operative region of this postulate and to substitute the concept "rays of light" for the concept of the photons. The postulate says nothing about what the system of coordinates is at rest. It requires a

specification as well. The meaning of the stationary and the moving body is unclear as well. With regard of what is it stationary and with regard of what does it move?

25. Which should be the new definition of the second Einstein's postulate if we take into account all inexactnesses in the definition of the second Einstein's postulate? It should have the following wording: "Velocity of the photons, which are emitted by a stationary or by a moving source, is constant in reference to space and does not depend on the motion direction of the source and its velocity". Thus, velocity of the photons is constant in reference to space. It is a significant improvement.

26. How is the photon emission process with regard to space written if its source is stationary ($V=0$)? If the source S is stationary in reference to space, the photon will move with the acceleration a at the time when it is emitted, and the process of its nascence will be written in the following way (Fig. 8, a)

$$C = a \cdot t. \quad (13)$$

From (13), we have

$$a = C/t. \quad (14)$$

27. To what is frequency of the photon being emitted equal if the source is stationary in reference to space? When the source is stationary ($V=0$), frequency of the photon being emitted will be equal to

$$\nu = 1/t = a/C. \quad (15)$$

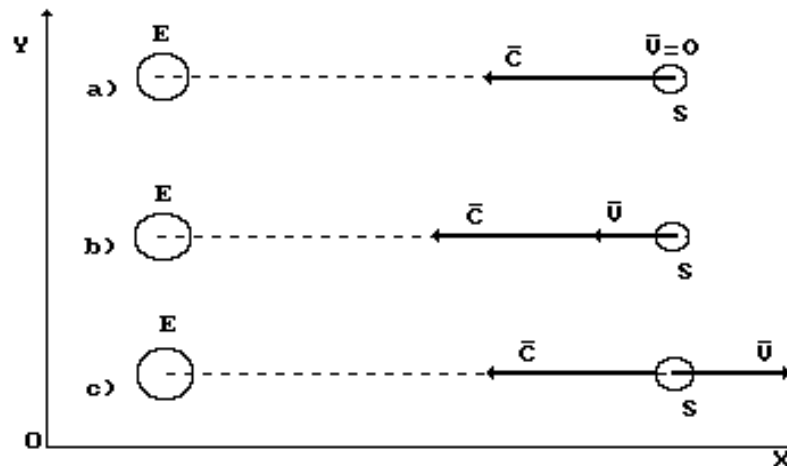


Fig. 6. Diagram of combination of velocities of the source V and the photon C : E is the observer, S is the source

28. In what way will velocity of the photon be changed when the motion directions of the source and the nascent photon coincide (Fig. 8, b)? It will be changed according to the law

$$C = V + a \cdot t'. \quad (16)$$

29. In what way does the photon start process duration depend when the motion directions of the source and the photon coincide (Fig. 8, b)? If we substitute the acceleration a from (14), we shall find an answer to this question

$$t' = t \cdot \frac{C - V}{C}. \quad (17)$$

When the motion directions of the emission source and the photon being emitted coincide (Fig. 8, b), the duration of the process of the acceleration of the photon from V to C is decreased with an increase of velocity V of the radiation source in reference to space (17).

30. Will frequency ν' of the photon being emitted be increased or decreased with the increase of velocity V of the source motion when the motion directions of the source and of

the photon coincide (Fig. 8, b)? The answer to this question results from the mathematical model (18), which originates from the formula (17).

$$\nu' = \nu \cdot \frac{C}{C - V}. \quad (18)$$

If the motion directions of the emission source and of the photon coincide, frequency of the photon being emitted is increased with the increase of velocity V of the source, and its spectral line is shifted into the ultraviolet region of the spectrum.

31. In what way will velocity of the photon, which starts from the source in the direction being opposite to its shift, be changed (Fig. 8, c)? If the directions of the moving source and of the nascent photon are opposite (Fig. 8, c), the equation of an alteration of its velocity will be written in the following way

$$C = -V + a \cdot t'. \quad (19)$$

32. Will the start time of the photon from the source in the direction being opposite to the source motion be increased or decreased? The answer to this question results from the formula

$$t' = t \cdot \frac{C + V}{C}. \quad (20)$$

When velocity V of the source is increased, duration t' of the process of the photon start in the direction being opposite to the source motion direction is increased.

33. In what way will frequency of the photon, which starts in the direction being opposite to the emission source direction, be changed? It results from the mathematical models (21), which describes this process, that frequency ν' of the photon being emitted is decreased, and the infrared shift of the spectra should be observed.

$$\nu' = \nu \cdot \frac{C}{C + V}. \quad (21)$$

34. It results from the kinematic analysis of the processes of the photon start from the moving source that energy intensity of the start process depends on the photon start direction. If the directions of the source and of the photon coincide, frequency of the starting photon is increased, and it increases its mass and, consequently, energy as compared with the start from the source being at rest in relation to space; if these directions are opposite, mass and, consequently, energy of the starting photon are decreased. Can these processes be compared with the start of a rocket from the Earth to the orbit? There is some parallel in these processes. It is known that the start of the rocket in the Earth's rotation direction is less energy-intensive than its start toward the Earth's rotation.

35. Can the analysis, which is described, be summed up? It not only can be done, but it must be done. The process of the separation of the photon from the electron of the atom is not momentary. A bond between them is preserved within a certain period. Mass and, consequently, energy and a photon wavelength, with which it is radiated having separated from the electron, depend on duration of this bond preservation. It is clear from the ratio (17) that if $V \rightarrow C$, it means that $t' \rightarrow 0$. It implies that the photon start in the motion direction of source, which moves in reference to space with speed C , is impossible (Fig. 8, b). In this case, the photon will not be emitted by the electron.

When the motion direction of the photon being emitted coincides with the motion direction of the source (Fig. 8, b), duration (17) of the transition period is decreased as compared with duration of the transition period in case of the start from the source being at rest. The wavelength and frequency of such photon are shifted into the ultraviolet region of the spectrum.

When the photon starts in the direction being opposite to the source motion (Fig. 8, c), duration of the transition period is increased as it is clear from the ratio (20). We have every reason to think that in this case (in the process of the loss of the bond with the electron) the photon will transfer more its electromagnetic mass and will arrive to the receiver E with the wavelength and frequency, which are shifted into the infrared region of the spectrum.

If the velocity directions of the source and the photon coincide, duration of the transition period (17) is smaller than in case of the photon emission source being at rest; if they do not coincide, it is larger (20) than in case of the photon emission source being at rest. In the first case (Fig. 8, b), when the photon is born, it will lose less energy (mass) and will arrive to us with the wavelength, which is shifted into the ultraviolet region. In the second case (Fig. 8, c), it will lose more mass and will arrive to the receiver with larger wavelength, which is shifted in the infrared region.

Thus, using its field the electron of the emission source atom will try to retain the photon with the help of its magnetic lines of force, via which the mass of the photon electromagnetic field (the field itself, to be more exact) will flow to the electron of the emission source atom. The slower the photon moves away, the larger part of the mass is lost. Apparently, this energy transfer process is appropriate of other particles. Since in this process as if pumping of “the mass” (the ethereal substance) from one particle to another takes place and it has no opportunity to be formed as the energy photon (Fig. 3), this part of energy is not registered in the experiment.

A value and a direction of the shift (into the infrared region or the ultraviolet region of the spectrum) depend only on the emission source motion direction and radiation itself. If these directions coincide, **only** the ultraviolet shift of the spectral lines should be observed. If they are opposite, **only** the infrared shift of the spectral lines should be observed. Such regularity shows that the presence of the infrared shift of the spectral lines is insufficient for an unambiguous conclusion concerning the expansion of the Universe.

36. What is the gist of impossibility of the unambiguous conclusion concerning the expansion of the Universe? In order to give an answer to this question, let us consider an interpretation of the shift of the spectral lines from the sources, one of which approaches the Earth and another moves away (Fig. 9). As the Earth moves in reference to **space**, it should be taken into consideration compulsory when analysing a connection of the shift of the spectral lines with the expansion of the Universe (Fig. 9).

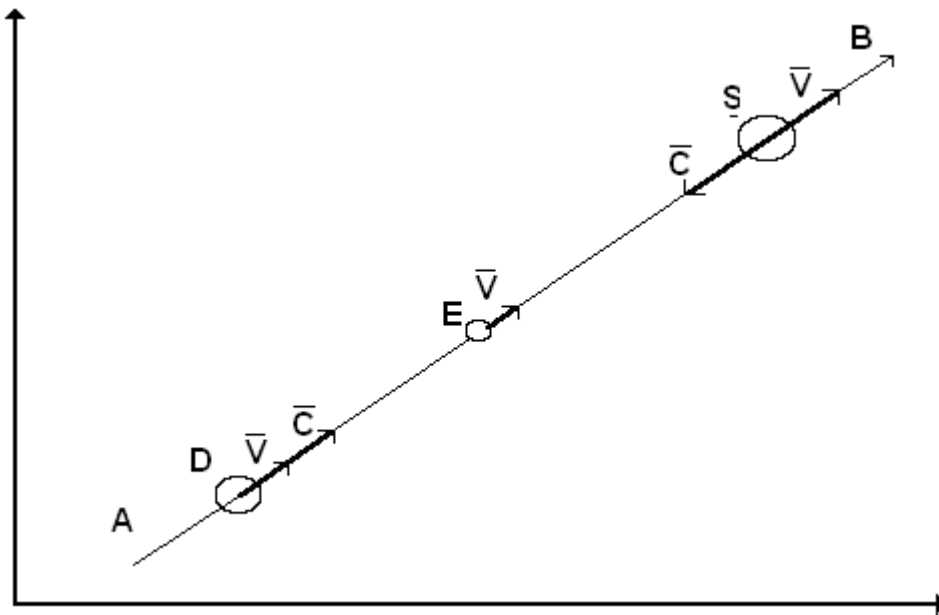


Fig. 9. Diagram to the analysis of the expansion of the Universe
 AB is a radial direction of the expansion of the Universe; D, S are the stars, which are situated in the radial direction of the expansion of the Universe; E is the Earth

The first case. If, for example, the velocity vectors of the Earth E and the star D are directed along one line and are one-way (Fig. 9), a value of the spectral line shift to the ultraviolet region being registered on the Earth E will point out to the fact of the start motion in relation **to space**, not **to the Earth**, which moves in relation to space, and the fact of their approach or moving away depends on a difference of their velocities $\Delta V_{DE} = V_D - V_E$ (Fig. 9). If velocity of the star D in relation to space exceeds velocity of the Earth E, the star and the Earth will approach each other in case of the ultraviolet shift of the spectra on the Earth. If velocity of the Earth in relation to space exceeds velocity of the star, they will move away from each other under the conditions of the registered shift of the spectral line of the star on the Earth to the ultraviolet region. Thus, the ultraviolet shift of the spectra will be registered both in case of the approach of the star and the Earth and their moving away from each other.

The second case (Fig. 9). The star S moves away from the Earth E with velocity (in relation to space), which is smaller than velocity of the earth. As a result, the Earth and the star S will approach each other under the conditions when a spectral line, which is obtained on the Earth E from the star S, will be shifted into the infrared region. **It is quite enough in order to impugn the hypothesis concerning the expansion of the Universe and to refrain from Nobel Prize granting for the scientific result, which has no unambiguous proof of reliability.**

The astrophysicists register the infrared shift of the spectra of the stars and the galaxies stably, but it is insufficient in order to prove the expansion of the Universe, because the values of velocities of the stars and the galaxies with the red shift of the spectra and the Earth, the receiver of these spectra, **in relation to space** remain unknown. In absence of this information, a conclusion concerning the expansion of the Universe becomes a result of a guess-work. **In the second example**, we have already shown that the red shift is registered on the Earth under the condition of the approach of the star and the Earth, not the moving away.

37. Do all stars of the Universe form the infrared shift of the spectra? Not all of them.

38. Are there the stars, which form the ultraviolet shifts of the spectra, in the Universe? There are such stars.

39. What shift of the spectra is larger: the infrared shift or the ultraviolet shift? To what extent larger and why? The infrared shift of the spectra is twentyfold as compared with the ultraviolet one. Its exact cause is unknown yet.

40. Is there an unambiguous answer: does the Universe expand or not? There is no answer, and we have already proved it with the help of the elementary examples, which have been considered within the framework of the new wording of the second Einstein's postulate.

41. Astrophysics has plenty information concerning the expansion of the Universe. Is it possible to impugn such information? There are all reasons for that. We have already given them. That's not all that impugns the hypothesis concerning the expansion of the Universe. There are other facts, which prove correctness of our conclusions. The point is this. The exact cause of the red shift of the spectral lines (Fig. 1, a, b) has not been found yet. This phenomenon can be the result of two causes. The first cause: the red shift appears as a result of the emission of the photons by the electrons of the star in the in the direction, which is opposite to the direction of the star motion in relation to **space**; we'd like to say it once more for the Nobel Committee experts: in relation to **space**, not in relation to the Earth where this shift is registered. In this case, there is no information concerning motion velocity of the star and the Earth in relation to **SPACE**, according to which we should make a conclusion concerning the approach or moving away of the star and the Earth from each other (Fig. 9). The second cause of the red shift is the so-called ageing of the photon as a result of duration of its travel (milliard of light-years) from the galaxy to the Earth. It has not been found yet what cause is responsible for the red shift of the spectral lines.

42. Are there indirect proofs of an influence of duration of the travel of the photon in the Universe on the value of the red shift? There are such proofs. It has been found that the red shift of the spectral lines is greater, the larger is the distance from the radiation source (the star or the

galaxy) to the Earth. It is a vivid property of the influence of duration of the travel of the photons in the Universe on the value of the red shift, but the astrophysicists are of the different opinion. They think that the remoter the radiation source is from the Earth, the larger the velocity of its moving away is. It is a strange logic. It appears from this that the Earth is the centre of the Universe. It is a stupid conclusion, but it is adored and the prizes are given for this stupidity.

43. Is it possible to recollect the erroneous scientific results, for which the Nobel Prizes have been awarded? We'll show only a part of them that have been included in textbooks and have formed the erroneous scientific notions of schoolchildren, students and scientists.

“November 9, 1922. 1921 Nobel Prize in physics goes to Albert Einstein for his services to Mathematical Physics, and especially for his discovery of the law of the photoelectric effect, and 1922 Nobel Prize goes to Niels Bohr for his services in the investigation of the structure of atoms and of the radiation emanating from them”.

An impropriety of Einstein's contribution in the field of mathematical physics has already been proved, and the essence of his errors is being widely discussed on the Internet. The impropriety of his law of the photoelectric effect has been proved as well, but it is not known to the scientific community as yet. Its essence is described in detail in our monograph. If the components of the mathematical Einstein's equation, which describes the experimental regularities of the photoeffect, are interpreted correctly, it becomes a mathematical model of the law of the formation of the spectra of the atoms and the ions being discovered by us in the year of 1993.

The essence of Niels Bohr's error originates from the new law of the formation of the spectra of atoms and the ions discovered by us during the analysis of the regularities of the formation of the experimental spectra of the atoms and the ions. An absence of the orbital motion of the electrons in the atoms originates from this law unambiguously. It is impossible to prove an impropriety of the new law of the formation of the spectra of the atoms and the ions, because it originates from the largest set of the experimental data: from the spectra of the atoms and the ions.

“1929 Nobel Prize in physics goes to Louis-Victor de Broglie for his discovery of the wave nature of electrons”. An impropriety of the notions concerning the wave nature of electrons does not require a special comment. The diffraction patterns being formed by electrons are a result of an interaction of their spins after a reflection from the objects, which form these patterns. The photons diffraction patterns are formed in the same way. A process of their formation is described in detail in our monograph.

“1932 Nobel Prize in physics goes to Werner Heisenberg for the creation of quantum mechanics, the application of which has, inter alia, led to the discovery of the allotropic forms of hydrogen”.

Heisenberg inequality served as a foundation of quantum mechanics in the period when it was created. And only recently a physical essence of this inequality and a limitation of the field of its application have been found. This inequality operates only within the framework of a specific wavelength, for example, of radiation; it loses its influence completely outside this wavelength.

Modern knowledge concerning hydrogen atom and molecules causes bewilderment concerning the introduced notion of “the allotropic forms of hydrogen”.

“1933 Nobel Prize in physics was divided equally between Erwin Schrodinger and Paul Adrien Maurice Dirac for the discovery of new productive forms of atomic theory”. The way, in which these Nobel Prizes have closed the prospects of development of atomic theory, has been described in our monograph and in the books devoted to the detailed analysis of the errors of the laureates of the Nobel Prizes.

“November 15, 1945. 1945 Nobel Prize in physics goes to Wolfgang Pauli for the discovery of the Exclusion Principle, also called the Pauli Principle”. The Exclusion Principle is a result of Niels Bohr's error concerning the orbital motion of electrons in the atoms and Schrodinger equation, which has strengthened Bohr's error.

“November 3, 1954. 1954 Nobel Prize in physics goes to Max Born for his fundamental research in quantum mechanics, especially for his statistical interpretation of the wavefunction”. The most

successful colligation of these “achievements” belongs to Albert Einstein who said: “God does not play dice”.

“November 5, 1963. Half of the Nobel Prize in physics goes to Eugene Wigner for his contributions to the theory of the atomic nucleus and the elementary particles”. Modern knowledge and theories concerning the atomic nucleus and the elementary particles are far from those one, for which these prizes have been awarded, and it is unnecessary to comment their differences.

“October 21, 1965. Nobel Prize in physics goes to Sin-Itiro Tomogano, Julian Schwinger and Richard Feynman for their fundamental work in quantum electrodynamics, with deep consequences for the physics of elementary particles”. No consequences happened after the prize was awarded. Quantum electrodynamics proved to be completely erroneous. Only recently we have started a correction of these errors.

“October 16, 1975. Nobel Prize in physics goes to Aage Bohr, Ben Mottelson and James Rainwater for the discovery of the connection between collective motion and particle motion in atomic nuclei and the development of the theory of the structure of the atomic nucleus based on this connection”. What theory of the structure of the atomic nucleus can be discussed if the latest achievements of orthodox physics describe the nucleus as a drop similar to a water drop?

“October 18, 1976. Nobel Prize in chemistry goes to William Lipscomb for his studies on the structure of boranes illuminating problems of chemical bonding”. These achievements are far from the modern ones, and a wish of chemists to cover over a complete incomprehension of the essence of nature of chemical bonding by a notion of “congeniality to the electron”, which characterizes a complete incomprehension of the essence of the formation of chemical bonding between the atoms of the molecules, makes one smile.

44. Will this list of pseudoscientific achievement be continued? There is no force that could prohibit the future generation of scientists to analyze the scientific errors of their predecessors, including the Nobel laureates.

45. In what way will the scientific community estimate awarding of 2011 Nobel Prize in physics for the results of the investigations concerning the expansion of the Universe? The absolute majority of this community will give no estimation. When the scientists read our answers to the questions connected with “proving” of the expansion of the Universe, they will make a conclusion concerning a prematurity of the Nobel Committee themselves, because there is no unambiguous conclusion of proving of the expansion of the Universe. Nevertheless, our information will exert no influence upon an issue of the awarded Nobel Prize for the astrophysical myth of ‘the expanding Universe’. TV will broadcast a magnificent ceremony of the delivery of the Nobel Prizes for the hyped-up scientific achievements in the field of physics and chemistry in the presence of the king of Sweden. As the prizes are awarded for the hyped-up scientific achievements, but the king does not know it, he has nothing to do, but to play the role of the emperor with no clothes who was described in the fairy-tale “The emperor with no clothes” by Andersen, the teller of the fairy-tales. It will be the next scientific fun for the future generation of the earthlings.

46. The scientists of what country will be the first in this disgraceful list when all Nobel Prizes, which have been given for the erroneous scientific results, are traced? The answer is an unambiguous one: the scientists of the United State of America.

47. What is the gist of the cause of the future disgrace of the United State of America in the acquisition of the Nobel Prizes for the erroneous scientific results? We should note that this gist is natural, because the Americans speaking English are the natural creators of the majority of the erroneous physical theories, which have been used for experiment data interpretation. An erroneous theory gives always an experiment result interpretation. A fabled theoretical boson by Peter Higgs, an English physicist-theoretician, a Fellow of the Royal Society of Edinburgh and a Fellow of the Royal Society of London, cost the mankind dear. All scientists who try to find this boson in the accelerator in the European Organization for Nuclear Research understand that it is a sheer theoretical fable.

48. What is the cause that produces the erroneous scientific physical theories? An impropriety of the language for the theoretical scientific investigations results in a weak consistency of scientific thinking.

49. What is the gist of this impropriety? The English language is replete with the conceivable and inconceivable exceptions to the rules, which promote a formation of the existence of such exceptions in the law of nature.

50. Are the answers to the above-mentioned questions at variance with the incontestable achievements of the American and English scientists in the many fields of engineering where they have implemented their theoretical results? They are not at variance, because the absolute majority of the practical results have been obtained by them not in the result of the theory implementation.

51. How is the main method, which serves as basis of all new experimental achievements, is called? It is called “the trial and error method”.

52. What is the gist of obtaining such significant scientific results by the US scientists? The Americans understand the main thing: the significant scientific results are obtained by the individuals who try to find them. The Americans have learnt to find talented people in the countries all over the world and to invite them to the United State of America. There are many Russians among them.

53. In what state is understanding of this gist in Russia? It is in the medieval state at best; to say it more exactly, it is in the antediluvian state.

54. Do the proofs of reliability of such categorical statement exist? They are apparent. Is it possible to trust a process of a detection of the new prospective results of the scientific investigations to a man who has an intellect of a florist? It is a completely absurd situation, but the modern Russian power is proud of it, because it fails to understand a disgrace of this situation.

55. Would the presence of a scientific service exert an influence upon an acceleration of the scientific-and-engineering progress in Russia if there were such service being busy with the detection and the objective estimation of exploitability of the scientific investigation results (by its citizens, first of all) with the functions of operational decision making concerning an immediate commencement of financing of such results or their use if they already existed? The scientific investigations are financed the United State of America in such a way. There are lots of talented people in Russia. If we adopt their experience, we shall outgo in the fields where we lag behind.

56. On what is this conclusion reposed? It is based on the new theory of microworld that facilitates a prediction process of any experimental investigation, which has already been started, as well as the contacts with some Russian engineers who are the men of genius and who have already obtained the new convincing experimental results, which require an immediate beginning of their financing; but there is no financing; there is nobody who can solve such matters operatively. As a result, the terms of commercialization of such results drag on for many years.

57. How should the creation of Skolkovo be regarded? The answer to this question can be found in our article “Skolkovo is a theoretical desert” [3].

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