Ballistic Theory of Light VS. the Dark Forces of the Cosmos (Published in the journal "Technology Youth" number 6, 2012)

Many observational facts stubbornly refuse to fit into the framework of the theory, dominant in cosmology today. In an attempt to combine all of the facts and theory, even in the imagination of serious scholars sometimes so played out, that gives rise to mythical monsters devouring the type of invisible stars and dark entities.

But there are simple explanations that do not require any introduction of new entities, or the assignment of new well-known properties. Continuing the story of the theory of Ritz launched in number 12 for the TM 2010 and TM number 6 in 2011, we will tell about the new clue to the "cosmic wonders."

Another Tsiolkovsky drew a parallel between mythology and relativistic cosmology in the article "The Bible and Academic Trends in the West". In his view, these myths come from the postulate of the constancy of the speed of light *C,* and the Doppler interpretation of redshifts of galaxies receding in accordance with the theory of relativity. Edwin Hubble discovered the red shift shows that it is not due to the Doppler effect and the effect of increase of the wavelength of light as it moves (see TM № 12, 2010).

This position was defended by many scholars, including A. Belopolsky, K. Tsiolkovsky, S. Vavilov and F. Zwicky. But the expansion has taken root hypothesis of galaxies, which spawned a lot of inconsistencies. To eliminate them, and came up with the dark matter and energy, however, they also have not decided all the issues about which we describe below.

The idea of the dark, or dark matter originated in the 1930s. When F. Zwicky, having studied a cluster of galaxies in Coma, showed that, whether the difference of redshifts of galaxies caused by the difference of their velocities, the latter will be so great that the visible mass of galaxies not be able to hold them together. That's come up with a lot of invisible surplus, does not itself outstanding, besides gravity.

At the same time, but due to another "need", originated the idea of dark energy, repulsive galaxy. Were discovered closely related to galaxies with redshifts so dissimilar that they could not be included in one group (Fig.1). Thus, the triplet Zwicky - a group of three galaxies, two of which are near the red shift, while the third, it corresponds to the removal from the group at a speed of 7,000 km/s. Stephan's Quintet - a group of five galaxies, one of which, judging by the difference of redshifts, from a group of flies at a speed of 5,000 km/s. Seyfert's Sextet - a group of six galaxies, and in one of them is much higher redshift than the other, as if she were ejected from the group at a speed of 16,000 km/s!

Astronomers have decided that every galaxy fleeing or accidentally projected on the group and is not connected with it, or pushed out of it with great speed and energy. Even then, the epithet "dark" described the mysterious nature of this repulsive force and energy.

But if the false interpretation of the Doppler redshift and the hypothesis of the constancy of the speed of light, then all the problems and flimsy hypothesis will disappear by themselves!

Рис. 1. Группы галактик и квазаров, где объекты с разными красными смещениями разлетались бы по Доплеру с разными скоростями. А если причина в эффекте Ритца, смещения в группах могут отличаться за счёт разных ускорений *a*.

Fig. 1. Groups of galaxies and quasars, where objects with different redshifts scattered would be Doppler with different speeds. And if the reason is the Ritz effect, the shift in the group may differ due to different accelerations *a*.

In the ballistic theory, the speed of light depends on the speed of the source, and the Hubble law redshift galaxies should be the effect of the Ritz, for which the redshift is not due to dispersal, and the rotation of galaxies. Then equidistant galaxies, in the case of varying the rotational speed *V,* can vary the redshift, which depends not only on the distance *L,* but also on the type and the radius *R* of the galaxy.

In effect, the Ritz, the Hubble parameter $H = V^2/RC$, and it is proportional to the redshift, i.e., the elongation of the light waves from λ to $\lambda' = \lambda (1 + LH/C)$, may significantly differ from the galaxies that form connected groups. More compact and untwisted galaxies at the same distance *L* will inevitably have higher *H* and redshifts. And exactly how to open an astrophysicist H. Arp (Hubble's successor as in astronomical research, and to fight against the idea of non-stationary universe), within the groups above redshifts of galaxies, satellites, weight and dimensions are smaller than galaxies, near which they circle. Then T. Jaakkola astronomer discovered that among equally distant spiral and elliptical galaxies are always smaller first redshifts (see Siegel, F.U., Vastness of Infinity, Moscow, 1984). This is understandable: the rotational speed *V* of elliptical galaxies is lower than that of the spiral.

It turns out that the effect on the Ritz redshifts of galaxies in groups and clusters can greatly differ, and with a small difference in the rate of removal, and the explanation goes without hypotheses about dark matter and dark energy.

As shown by astronomers, V.S. Popov, O. Melnikov, V.M. Deep , contradictions lie not in observations, and a false interpretation of the theory of relativity and the Doppler effect. The mystical nature of the type of dark matter and energy came up with just for joining the observations with the theory of relativity, forgetting banishing mysticism Board of Sherlock Holmes: Do not fit the facts under the theory. The scheme is simple: the equations of the theory of relativity, the matter density of the universe is ten times higher than the observed - and now scientists have formally adopted the dark mass. And when the red shift of distant galaxies was lower than the current, accepted, and dark energy, repulsive galaxy.

In other cases, the myth of the dark mass of only compose for docking with their interpretation of the observations on the theory of relativity.

Thus, many space objects have been seen "ghosts" - the extra images (Fig.2). They are usually explained by the deviation of light in gravitational lenses - Galaxies lying between the object and Earth observation. Astronomers have identified disputed this interpretation: first, the gravitational lens allows no more than two images (as they see three or four or more), and secondly, the mass of galaxies is not sufficient for a strong deviation of the rays.

Рис. 2. "Жемчужные ожерелья" из звёзд в двойных и кратных системах, где каждая звезда за счёт разной скорости лучей света одновременно видна в ряде точек орбиты.

Fig. 2. Pearl necklaces "from stars in double and n systems, where each star due to different speeds rays of light are simultaneously visible at a number of points in the orbit.

And once again called to the aid of dark forces and the masses: galaxies found dozens of times more massive and have adjusted the distribution of gravitational forces. The Ritz theory, before the hypothesis of gravitational lenses, predicted extra images without extra mass: light sent from the galaxy at different speeds, flying in orbit, can come together from different aspects and points of the orbit, where they can see "ghosts" of the galaxy, as if re-exposure photograph (see TM number 6 in 2011). The number of "ghosts" can be anything and everything they need to hover over an ellipse of the orbit, as is observed. The object, taken as a gravitational lens, is the central galaxy, which turns around a satellite galaxy, giving birth to ghosts, phantoms. Galaxies form a bound pair, and the excess redshift of the satellite is not due to a greater distance, and smaller size.

When a swarm of satellite galaxies, and their images are aligned along elliptical orbits. For stars, too, opened the extra images, like ghosts hovering around. Notable examples - and the supernova SN 1987A Nebula necklace - they have become a real conundrum for proponents of relativistic astrophysics. But the ballistic theory predicts, and the multiplication of images, and outbreaks of stars.

Observed effect was predicted by the theory of Ritz physicist, K.A. Khaidarov. Stars and galaxies rotate, and one of their sites are removed from us, and others - are approaching. These

speeds are transmitted to light, and it flies at different speeds, some of the lagging areas and coming before the others. As a result, the star, the galaxy is blurred along the flight path: as in the case of "ghosts" can be seen immediately and accelerated light came from the new provisions, and slow, which came out earlier. This is reminiscent of blurry pictures of fast moving objects. In such cases, the images of galaxies should have blurred contours, ghostly tails-tails, elongated along the flight path - again neither give nor take - a ghost in an English castle! And, indeed, superfluous images of galaxies often form arcs of the elliptical orbit at which the move (Fig.3)

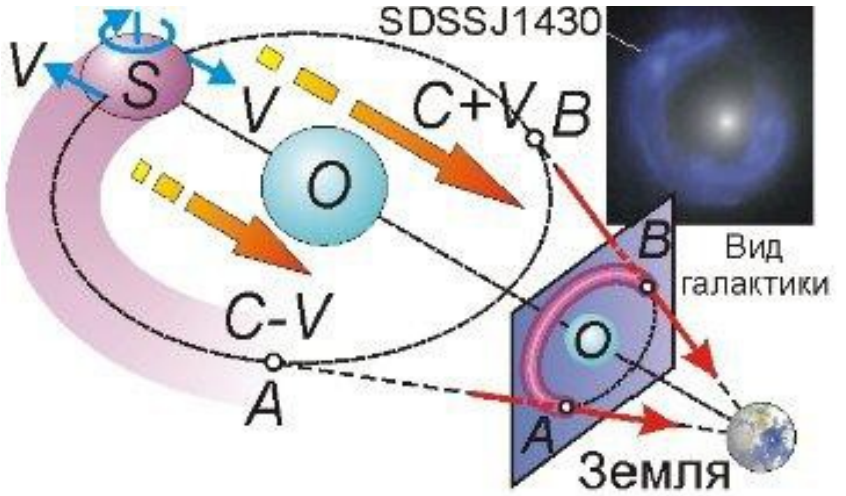

Рис. 3. Галактика *S*, испуская свет с разной скоростью, обретает вид кольца или дуги *AB* за счёт одновременного прихода лучей, испущенных в разные моменты на пути *AB*.

Fig, 3. Galaxy S, emitting light at different speeds, takes the form of a ring or arc AB due to the simultaneous the arrival of rays emitted at different times along the path AB.

The faster the galaxy is flying along the orbit, the stronger "smeared" its image, which can be stretched along the entire trajectory and form a closed ring or a smearing. Often called the Einstein ring, considering the image of the galaxy in a gravitational lens, which serves as another galaxy. Its gravitational field of the alleged causes light rays from distant galaxies to bend around "lens" on all sides, forming a luminous ring. But the likelihood of such events is low - because both galaxies have just hit on a line of sight. It was open and a double ring. But to create a galaxy-lens pairs of ring images should line up in a row for three galaxies and a "parade of galaxies" - already near the border incredible. It is recognized by the discoverers themselves, who have an artificial addition to pick up masses of galaxies, involving a dark mass that otherwise would have had different ring radii and would merge.

In theory, all of Ritz easier: double ring form two galaxies are flying around the third in a circular orbit, and visible diffuse along these orbits (Fig.4) And if the two galaxies with similar masses are turned about their common center of mass *O,* then created inside of a ring or double ring will generally be empty, as the object Arp 147.

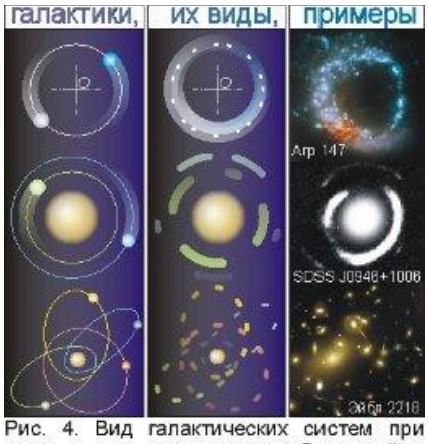

Рис. 4. Вид галактических систем при умножении и размытии изображений в зависимости от числа галактик и их орбит.

Fig. 4. View of galactic systems at image enlargement and blurring in depending on the number of galaxies and their orbits

Blur distorts the stars in our galaxy. Axial rotation of the star expands or compresses the disc along its visible trajectory, and the star looks like an oval. Calculations show that for stars of the effect small and not visible to ordinary telescopes. But telescopes, interferometers, with their high resolution, can detect and identify abnormal elongation of the real stars, which cannot be explained by even a large centrifugal force. For example, revolving like a top star Achernar (α Eridani) has the form of an ellipse: its equatorial radius and a half times more polar.

But such a star, according to calculations of astronomers, is unstable and must immediately break! The theory is easy to solve the riddle Ritz Achernar: the star is close to the ball and just think of the elliptical motion blur along the line.

The effect is found in other rapidly rotating stars, including Regulus and Altair (Fig. 5), the equatorial radius is 20-30% higher than the pole, which is also close to the limiting compression, rupture star. For astronomers, it became a mystery why Regulus flies exactly along the rotation axis (short axis), like a bullet from a rifle, the position of the axis of the star should be random, and the coincidence of the axis with the direction of motion - the case is extremely unlikely. A ballistic theory easily explains these "bullets", predicting the tensile and compressive stars just along the flight path.

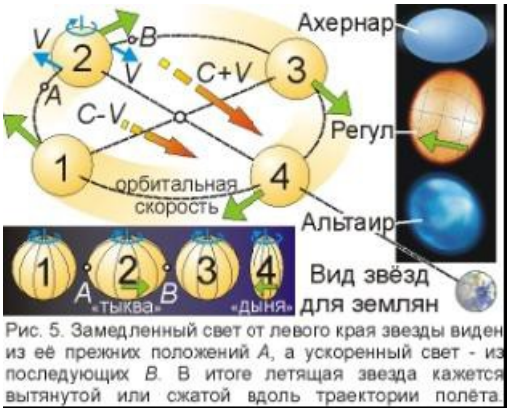

Рис. 5. Замедленный свет от левого края звезды виден из её прежних положений *A*, а ускоренный свет - из последующих *B*. В итоге летящая звезда кажется вытянутой или сжатой вдоль траектории полёта.

Fig. 5. Slow light from the left edge of the star is visible from its previous positions A, and the accelerated light – and subsequent in A as a result, the flying star seems elongated or compressed along the flight path.

The fact that the apparent contraction of stars does not reflect their true form, and confirm the deviation from the theorem Tsaypelya on which the pole star, located closer to the hot mineral resources, have to shine a lot brighter than the equator. However, the measured difference low temperatures, which greatly puzzled scientists. Solution to the riddle is that the star really spherical, and therefore, even though it looks elliptical, almost uniformly heated.

Strange forms of variation discovered the star Betelgeuse: Star, which had a circular shape, a few years along the polar axis has shrunk by 15% without changing the brightness and speed. According to the theory of Ritz reasoning - in variations of the visible form of stars, depends on the direction of its velocity in its orbit. "Stretch" and "compression" does not change the brightness, because it is only apparent, not real contraction. That's blinking stars - Cepheids and Miras, including the Pole, not open those changes shape, which prescribes the theory. According to the theory of pulsations of Cepheid brightness fluctuations caused by the Miras and their blow-deflation, but in fact it can be seen stretching, the rounding of the stars. This proves that the stars are not physically changing, but the brightness fluctuations caused by the effect of the Ritz accelerated motion of stars in orbit, which changes their apparent shape. Such variations are periodic and open forms in a binary star β Lyrae, flashing a long time it was associated with the orbital motion, rather than beat.

The rotation may well shrink the image of the star along the equator, it will resemble a melon, contrary to the usual compression of stars along the rotation axis, like a pumpkin. Similar effects have long been open galaxies: elliptical galaxies have many kind of "melon" and not "pumpkin", and this explanation in relativistic astrophysics was not. A Ritz metamorphosis "pumpkin" is caused by an optical effect, stretching the image of the galactic nucleus, the bulge along the polar axis or constricted along the equator (Fig.6).

Рис. 6. Искажение вида крутящихся галактик. Удаляющийся край галактики виден отстающим от приближающегося. Такие сюрреалистичные формы обычны у эллиптических галактик и галактик с полярными кольцами (справа).

Fig. 6. Distortion of the view of spinning galaxies. Receding the edge of the galaxy is seen lagging behind the approaching one. Such surreal shapes are common in elliptical galaxies and galaxies with polar rings (right).

It is interesting that such a deformation of the galaxy disk surrounding the nucleus, does not seem to located along the equator and along the short axis of the nucleus, mistaken for a polar. This would explain the polar ring spiral galaxies and elliptical galaxies gas-dust disks along their short axes and the puzzled astrophysicists. In addition, these disks and rings are often distorted at the edges, due to smearing along the line of flight. Such a picture of heaven with distorted galaxies, as if written off with the paintings of Salvador Dali, has long puzzled

astronomers (see Bolt, A.V., Dwarf Galaxies, Moscow, 1984). A clue is that watching a distorted picture.

Rotation, changing the speed of light, yet pulls duplicated images of galaxies along the trajectory of their flight, which is interpreted as an ejection (jet) of the galaxy, say the object Virgo A (Fig.7). These "outliers" are often observed in the radio in the form of double radio images. But they may well be retarded and advanced image of the same or two associated galaxies are visible in the optical range in the middle between his "radioportretami" (astronomer Kozyrev discovered similar leading and lagging image and the stars).

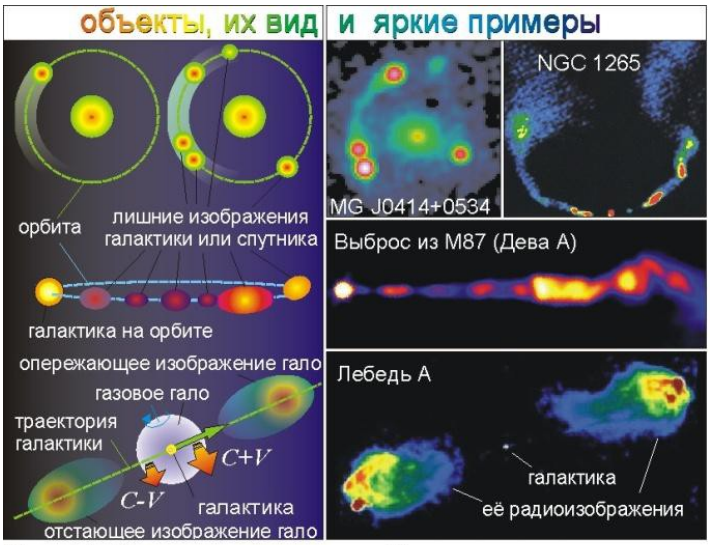

Рис. 7. Кратные радиоизображения, возникшие от одновременного прихода излучения из разных точек траектории летящей галактики.

Fig. 7. Multiple radio images arising from the simultaneous arrival of radiation from different points of the trajectory of the flying galaxy.

Some astrophysicists for the interpretation of the radio pictures again needed the hypothesis of latent energy, buoyancy stars, others prefer the hypothesis of a dark mass, holding the radio-emitting gas at the distance of galaxies. Finally, explaining the X-ray emission of gas in clusters of galaxies, astrophysics, dark matter called again - this time to keep the superhot gas, burning with X-rays. And on the effect of the Ritz X-rays may be a simple light of a thousand stars who grew up rate, which comes from clusters of galaxies and into the gaps between them when they are blurring.

So many of the problems of cosmology and astrophysics, space anomalies and inconsistencies stem from the desire to save at any cost the postulate of invariance of the speed of light. Treating the theory of relativity of space and events taking optical illusions and mirages of real objects, scientists have to invent ever new myths, mystical entity and supports the hypothesis of a dark-mass and energy to resolve contradictions.

A source of the problem lies in the theory of relativity, which, like the ghostly wisps seem to be science has got nowhere.

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