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# Gravitonic cosmology

***Abstract***

*In article new representations about Universe structure on a basis "gravitonic hypotheses" are offered. The hypothesis explains the form of galaxies, star evolution and so-called "a dark matter-energy" from positions which differ from accepted in the modern cosmogony.*

*This work is still very far from end. In article consequences from a hypothesis about existence of the smallest particles of a matter (gravitons) are considered. Now it seems to us that it is possible to speak about change of ours cosmologies representations and a new view on a peace arrangement.*

*Many theses of article do not correspond to modern cosmology representations, but logically follow from the unique assumption of existence gravitons.*

*(Article is translated into English by means of the automatic translator and the subsequent correction.)*

Substantive thesis of the gravitonic hypotheses are stated in articles [1-4]. According to this hypothesis the world space is filled by "graviton gas" - particles of exclusively small size and moving with rather big speeds (much more a velocity of light). These particles are capable to get through matter (similarly neutrino). Meeting atoms of matter they give them a some quantity of the energy (Fig.1).

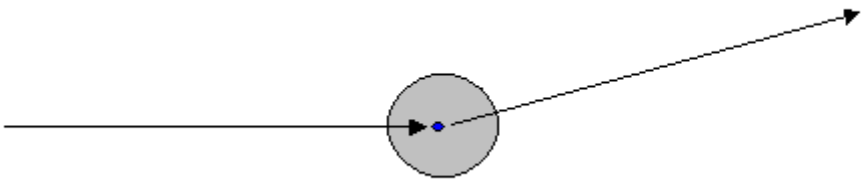


**Fig.1**

A gravitons come to separate atom (or to a separate body) from different directions (Fig.2) Any other body is the screen for a part of graviton which could get on atom (body) from all sphere of surrounding space. The gravitation phenomenon is result of occurrence "graviton's shades" (Fig.3).

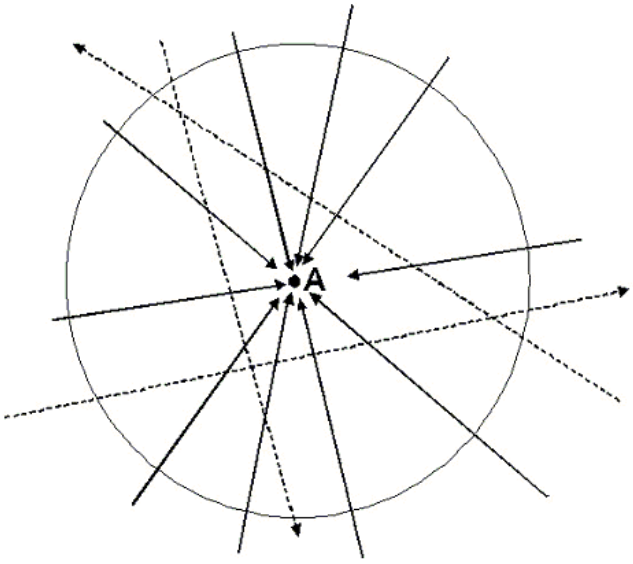



**Fig.2**

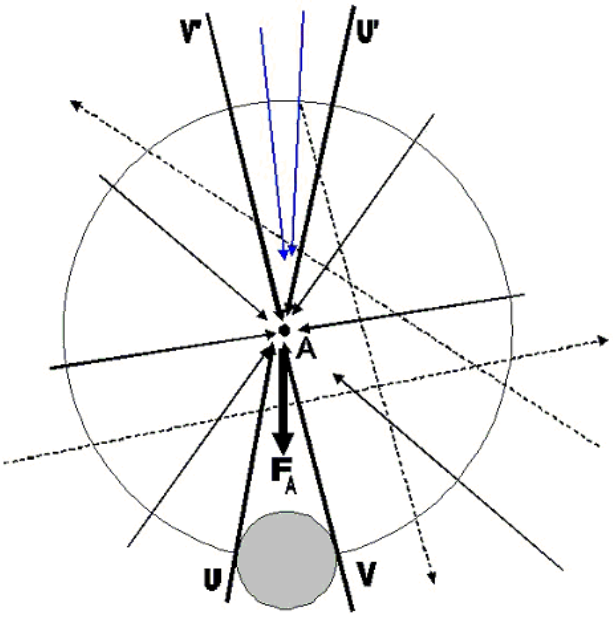



**Fig. 3**

Mathematical calculation shows full conformity of dependence of gravitational influence to Newton's formula. Full, but not absolutely … "Graviton's shade" steadily exists only on length of free run of gravitons. This distance corresponds approximately to the sizes of Solar system (approx. 0,5 parsec or 1,5 light years). It proves to be true change of trajectories of space vehicles "Pioneer" and "Vojager" on distance already 0,0005 parsec. From this it follows that the law of universal gravitation of Newton's is adequate only for the limited distances which correspond to length of free run of gravitons. Thus the sizes and mass of the star (Sun) do not influence almost on the sizes of planetary system - further some limit "graviton's shade" is gradually "washed away" as a result of chaotic movement of gravitons.

It is so unexpected conclusion that usual first reaction to it - "Nonsense! Cannot be!" But the second (correct) question: "That keeps in a visible structure forms much bigger objects, than Solar system?"

The answer to this question is simple enough – this is an usual laws of gas dynamics in application to "graviton gas". If graviton gas fills all Universe it is in constant movement. And in some areas of space there are the huge whirlwinds consisting of whirlwinds of the smaller size. Evident and very good known analogue are cyclones, typhoons and tornadoes in the earth atmosphere. We do not see a movement of the air molecules because of their small sizes and a transparency of gas. But we can judge their movement on movement of clouds and dust masses.

**Fig.4. Tornado in prairie**

**Fig.5 Tornado over the sea**

**Fig.6** ***Cyclone (a picture from space)***

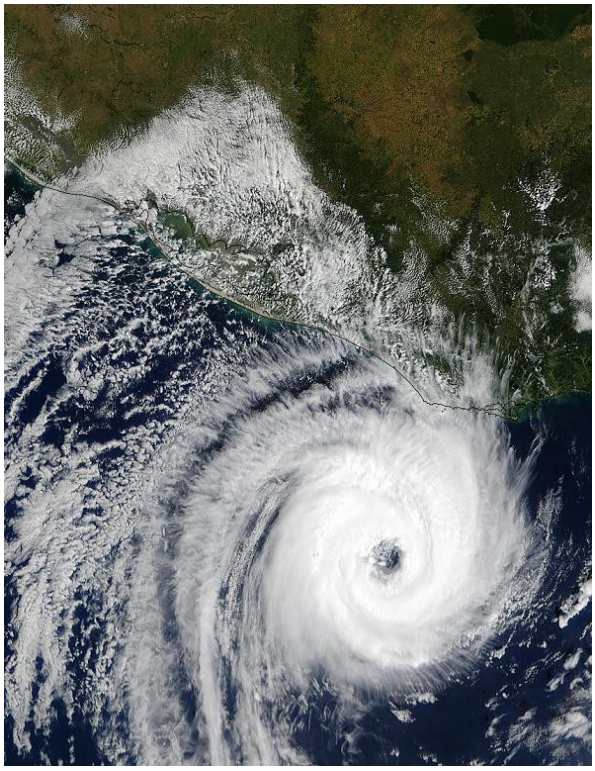


**Fig.7. Hurricane**

Enough one sight at any of spiral galaxies that to discover an analogy to hurricanes and cyclones:

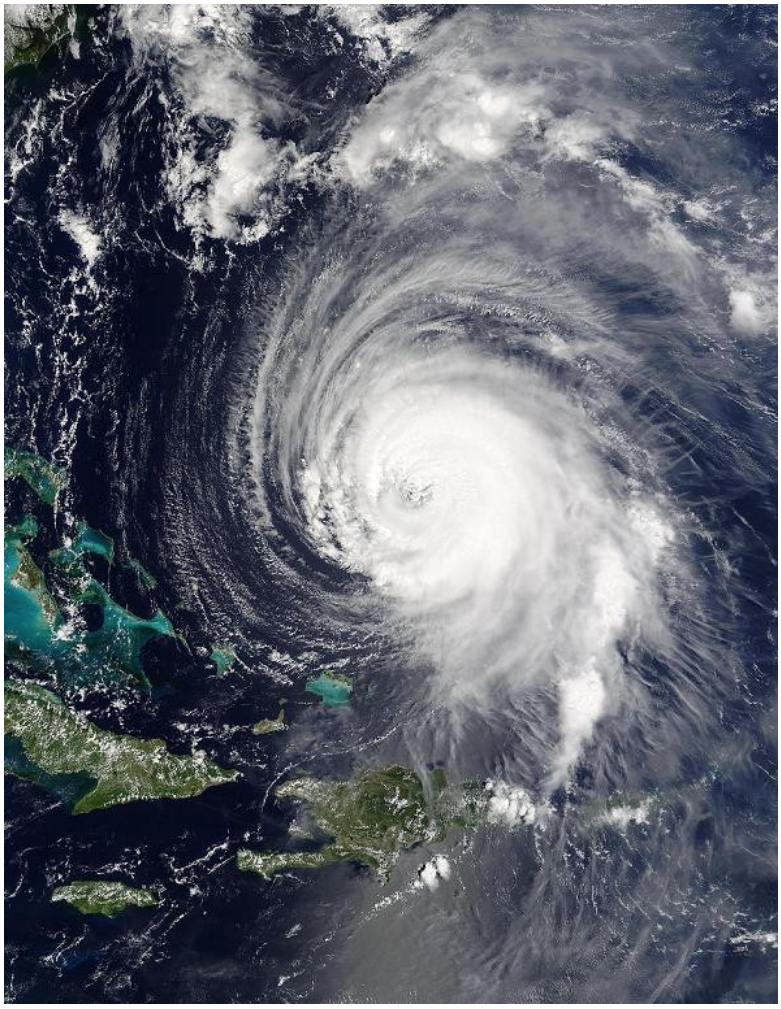


**Fig.8 Hurricane "Izabel"**


**Fig.9. Galaxy M100**

The sizes of gravitons at a rough guess approximately on 10 order of values smaller, than the size of a proton. Today we have not possibility to observe directly the particles of such sizes. Moreover, according to representations academician V.Ginzburg, exist as well larger particles - "preons" (their sizes approximately on 4-5 order of values of less sizes of a proton). But we cannot observe directly also them. However we can observe in our telescopes result of much bigger processes on scales - a light from stars and a dust clouds.

**Fig.10. Galaxy M104 ("Sombrero")**

The gravitonic hypothesis [1-4] assumes, what exactly gravitons creates the gravitation phenomenon, and “preon gas” is at the basis of the electromagnetic and light phenomena. Preons are much larger particles, moving with a velocity of light. Preons, probably, represent whirlwinds of gravitons. Elementary particles in turn represent whirlwinds of preons.

The density of the gravitonic gas can have various in divers places (areas) of Universe space. All "fundamental constants" (including "a gravitational constant") depends on the density of gravitonic gas.

Thus, the gravitational phenomena cannot be observed on distances more than 2 light years. On such distances movement of masses is not defined by "gravitation", but laws of gas dynamics, a laws of movement of a gravitonic gas.

**Galaxies**

Galaxies represent a visible part of moving gravitonic streams (whirlwinds). Stars and congestions of a space dust allow us to see galaxies, just as the dust and stones do for us visible tornadoes in atmosphere.

**Fig.11. Galaxy M74**

The sizes of galaxies essentially exceed length of free run of gravitons. So, the sun is close enough to edge our galaxies "Milky Way", and on distance approximately 30 thousand light years from its center. It in 10 000 times more lengths of free run of the graviton's.

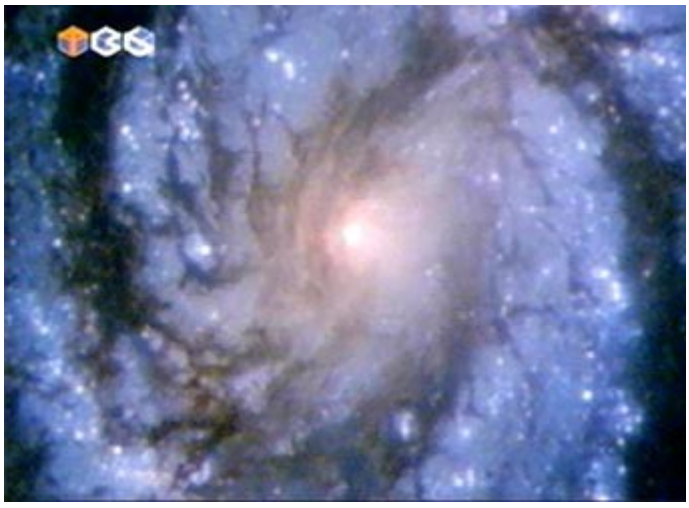


**Fig.12 Galaxy similar of our galaxy**

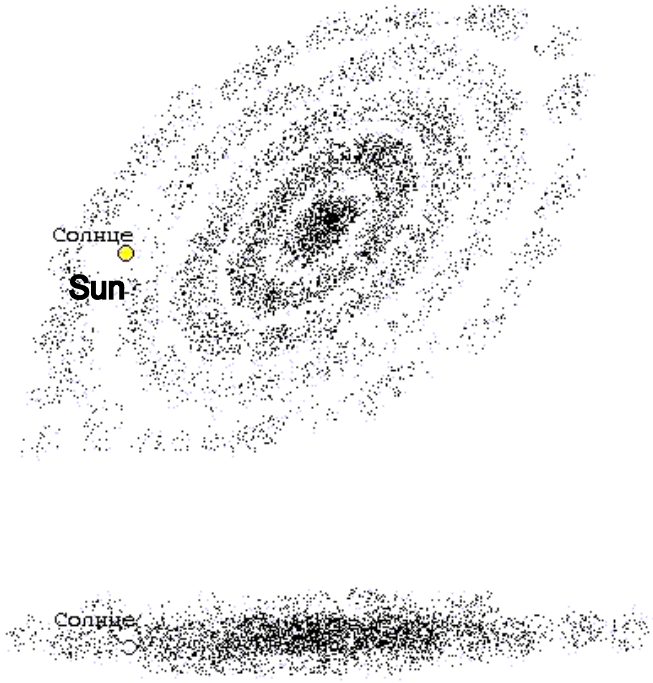



**Fig.13 Position of the Sun in our galaxy**

But the gravitonic hypothesis speaks about existence of the gravitation forces no farther than on distance of 2 light years. It is clear that "gravitational" interaction between stars in a galaxy and its hypothetical central mass can't be.

At the same time existence of galaxies in the form of graviton gas whirlwinds does not contradict observable effect.

**Fig.14 Galaxy n3344**

**Fig.15 Galaxy NGS4414**

Stars move with speeds of the local gravitonic streams, being formed and dying in these streams, and so there is no necessity for existence of the powerful center of gravity keeping stars in their orbits. The assumption of presence of a moving whirlwind gravitonic gas eliminates necessity for the assumption of existence of the big mass into the galaxy center. After all anybody does not demand, that in the typhoon center there was any mass forcing an air masses to move around it on a circle! On the contrary, in the typhoon center there is rather quiet zone of rarefied air which seamen name "a typhoon eye". This "eye" is well visible on a photo

**Fig.16**

and on its increased part

**Fig.17**

In a pfoto from space almost at any cyclone in the center "the black hole" is visible.

**Fig.18**

Occurrence of the graviton twist-tornado is similar to development tornado in atmosphere.

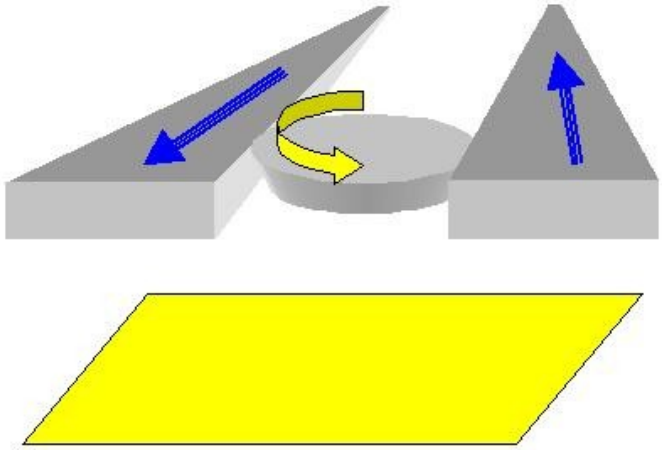


**Fig.19.** ***Occurrence of a gas tornado***

*Gas streams, moving in counter directions, are conditionally designated by grey rectangles*

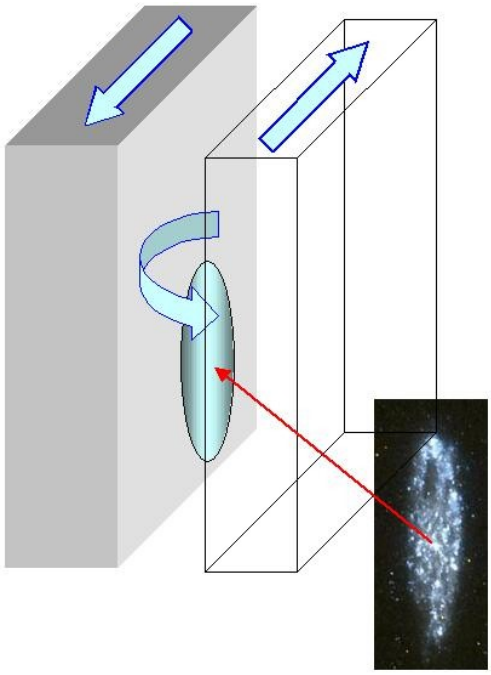


**Fig.20. Tornado in Space - an elliptic galaxy**
Such tornado arises at a considerable extent of streams of gas "in height"

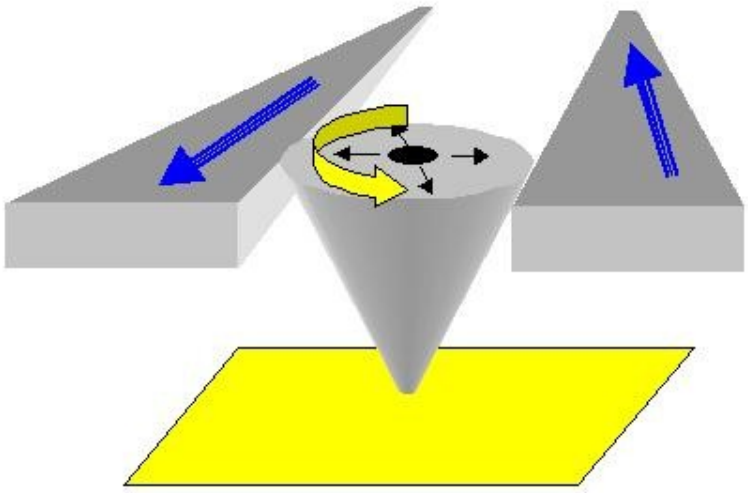


**Fig.21. Tornado development in atmosphere**

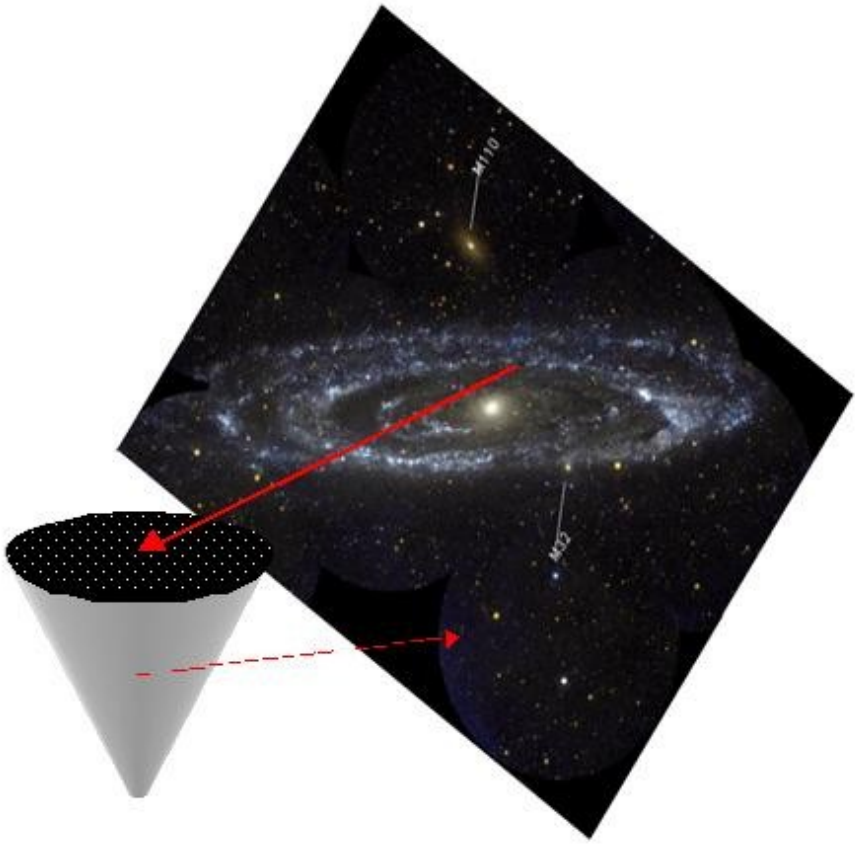



**Fig.22. Tornado in Space - a spiral galaxy**

The terrestrial observer does not see the cone of a space tornado (Fig.22), is similar to how we do not see a tornado as a whole (Fig.23).

**Fig.23.**
*The average part of a tornado is not too appreciable, as in it there is no dust and water drops.*

The terrestrial observer sees only stars and galaxies in places of their formation. However, if to look at a photo of a spiral galaxy on fig. 22 it is very attentive, it is possible to see a weak bluish trace of shone gas which is directed from a galaxy to the bottom and top parts of a photo. In tornadoes in eath atmosphere similar top parts are absent, as the atmosphere density very quickly decreases with height. In space the density gravitonic gas is more constant.

According to all available information almost in each galaxy in its center there is "a black hole". It rather easily speaks by the gravitonic hypothesis. This VISIBLE "a black hole" - not material formation with the big mass, but the rarefied matter like "a typhoon eye". It is area from which the matter is rejected (throw away ) to an external part of a rotating galaxy. Throw away not only large material parts like atoms, but even preonic gas which is a propagation medium of light and electromagnetic waves. It may be, for this reason we also do not see anything THROUGH "black hole". Into "black hole" there is no medium for distribution an "electromagnetic" wave. Freely flying photons (material formations) also are throw away to periphery of "typhoon" by streams gravitons.

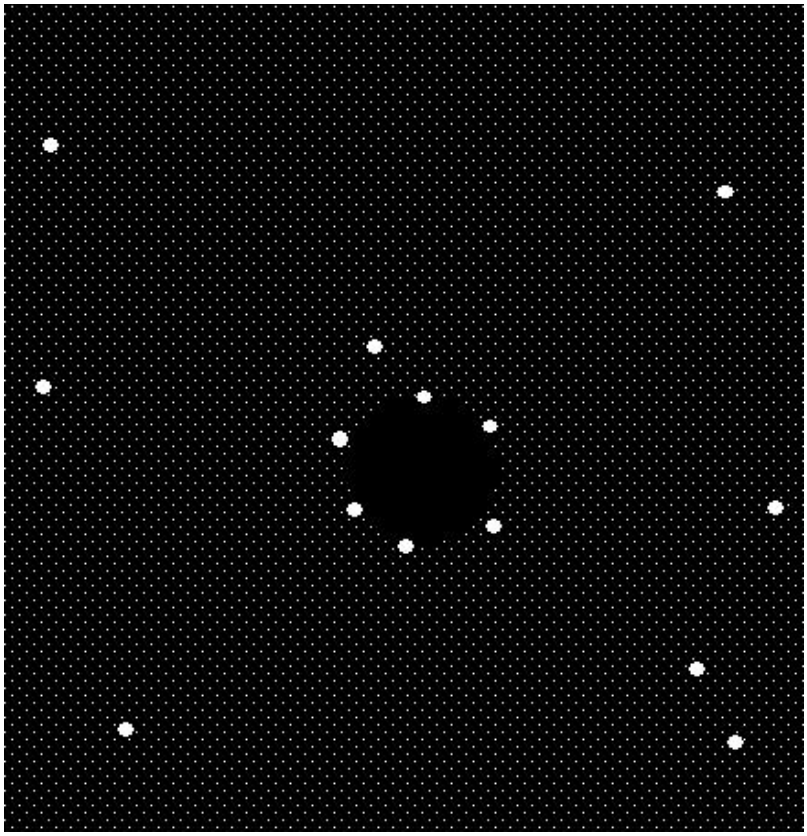


**Fig.24. Black hole in space**

On photo Fig.24 the “black hole” in a bordering enough bright stars has been fixed. About such photos usually say that they have nonplused astronomers - there is no suitable explanation to this phenomenon. After all according to the theory the “black hole" should "soak up" (absorbed) very long time ago in itself these stars. (A Fig. 24 is drawing from photo).

For a gravitonic hypothesis a riddle is absent. The “black hole" is "a typhoon Eye". These stars are formed in those parts of a space typhoon, which are throwed away from the center of rotation of this whirlwind.

The phenomenon of "a black hole", probably, can be accompanied "absorption matters", but it absorption most probably goes on a tornado body through a funnel of a "typhoon eye».

**Dark matter**

The idea about existence of a “dark matter" has arisen from supervision over movement of stars at edges of galaxies. Calculations have shown that force of a peripheral stars attraction to central regions of the galaxies (counted under Kepler's laws) does not correspond to that force which the general (estimated) mass of visible stars of these galaxies should create. These stars move as if they are kept on their orbits by much bigger force, than settlement. From this some scientists had been drew rather rectilinear conclusion that the real mass into center of these galaxies should be

more than the settlement. But we for any reasons (on what - it is not known) cannot observe this mass - it appears from us "latent" ("dark").

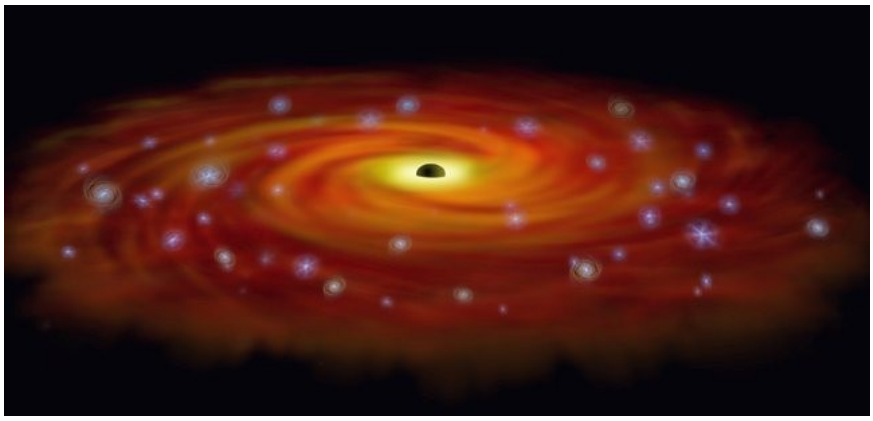


**Fig.25**

This hypothesis is in process of discussion in scientific circles. It cannot be accepted for definitive opinion of scientists though journalists give out it for "established fact".

But the gravitational hypothesis does not require the assumption of «the latent mass». Gravitonic gas is supposed existing and, simultaneously, invisible. Nevertheless, this gas cannot be considered as that "a dark matter" using which supporters of its existence explain movement of stars at edges of galaxies.

**Evolution of planets and stars**

It is not necessary to think that gravitons prove somewhere unimaginably far in space. They, as they say, "work" for us directly underfoot.

The gravitons is root into any material body, but behaves differently depending on the sizes and mass of this body. If the body has the small sizes a graviton passes through it, as a bullet through a tornado. Thus it meets on the way a maximum one of atoms of matter.

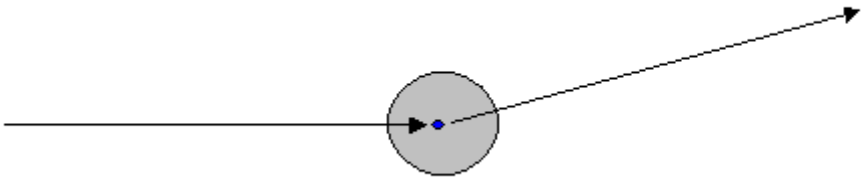


**Fig.26**

Interaction time of a graviton with atom (proton) is very shortest (smallest). Accordingly loss of speed of graviton is small also. Graviton gives up a part of the kinetic energy to atom of matter, and it causes effect of gravitation. If the body has the big sizes a graviton can meet on the way some atoms.

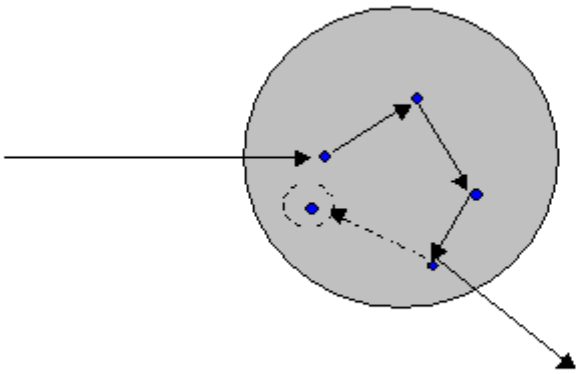


**Fig.27**

A speed of graviton's decreases after a number of collides (bumps), and the direction of its movement varies on the any. The speed of graviton less, the it is more probability of its deviation from an initial direction. The deviation it is chaotic, casual and as a result (dispersion) does not lead to movement occurrence in any one direction. At the big density and mass of matter there is "rocking" of atoms about a neutral condition. A matter is warms up. (It is necessary to mean that this process can occur only at the big density of matter).

A graviton can be grasped by atom (a dotted circle on fig. 27) at the further decrease of the graviton's speed. At that there are hypothetically predicted processes of formation and matter modification. The mass of the matter increase. These processes, evidently, are possible only in bowels of planets and stars.

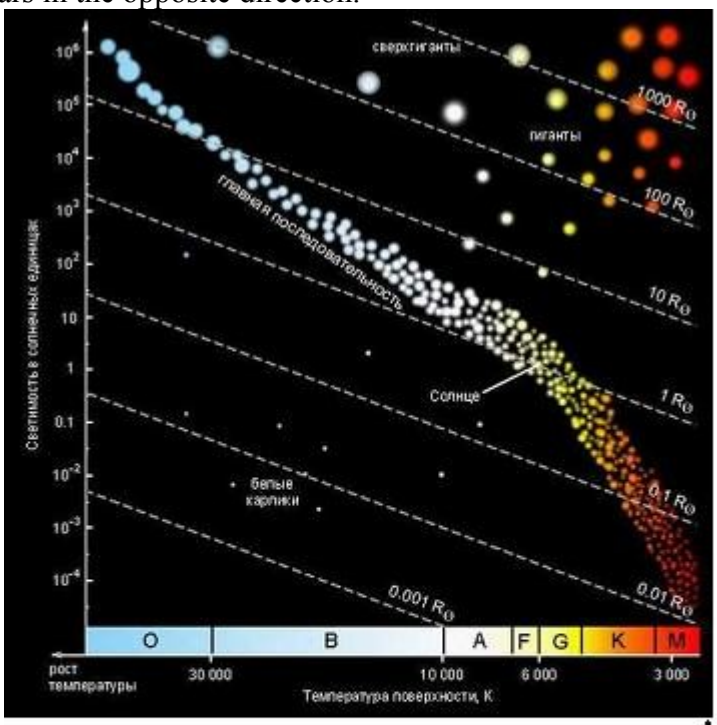
**Evolution of planets and their transformation into stars** from the point of view of the gravitonic hypotheses are in detail considered in the book V.Blinov "The growing Earth - from planets in stars" [5].

We have possibility to observe evolution of planets by means of studying planets and a planet's satellites of our Solar system. The gravitonic hypothesis of the planet's growth and transformation of their matter excludes representation about many from them as about the cooled down objects. (Such opinion occurred till now in the relation, for example, the Moon). Planets in process of accumulation in them of the matter mass are warmed up getting inside by the graviton's more and more, instead of lose the warmth saved up in them earlier. Accumulation of a mass into planets results from capture of the gravitons by an atoms of matter. According to Blinov, the gain of Earth mass is equal approx 1,7 million tons a second (!) while from surrounding space Earth grasp only approx 10 000 tons a year. The planet thus grows from within, instead of outside.

**Evolution of stars**

On a hypothesis of Blinov rather small pieces of a matter gradually grow on volume and mass, are modified, become planets, are warmed up from within, and gradually turn in "brown dwarfs". These bodies (on the size there is more than Jupiter) are warmed up to temperature on a surface in some hundreds degrees and radiating an infra-red waves. The further accumulation of mass leads still to a grater warming up, the star turns in the yellow dwarf (type of our Sun) and further grows to white and blue giants.

Thus (according to Blinov), evolution of stars occurs from an initial site at the very bottom of the diagram of Gerzshprung-Rassel upwards on "the Main sequence", while the accepted hypotheses about condensation of stars from interplanetary gas provide evolution of stars in the opposite direction.




ПЛАНЕТЫ

**Planets**

**Fig.28**

**"Critical gravitating mass"**

One of consequences gravitonic hypotheses - representation about so-called to "critical gravitating mass" [4]. At enough big mass into space body forms a kernel absolutely opaque for gravitons. (As a result of it around planets there are "rings" of different character). In process of the further accumulation of mass into star (or planets), there is a situation when gravitons not only cannot pass through a space (heavenly) body, but cannot reach its center at all (Fig. 29) It is possible, this condition is reached only at a “star stage”.

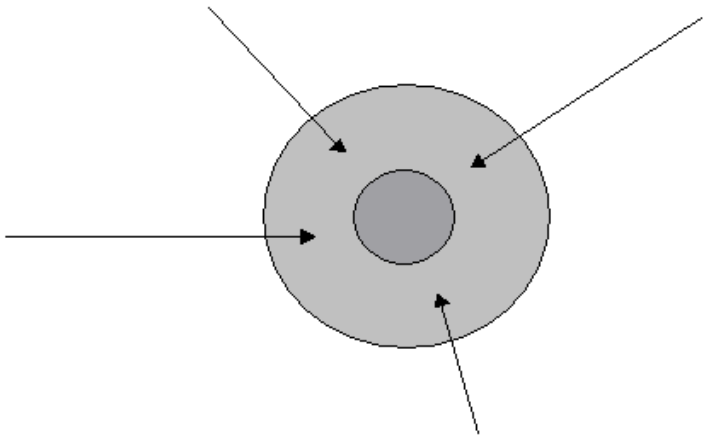


**Fig.29**

From this hence into star the mass (of any size and density) can arise - at a constancy of its external sizes it will not render any influence on its gravitating property. This mass arise from an external part of the formed sphere super-big mass, on that border which can reach rooting into body a gravitons. Since the certain moment the quantity of protons in this body can be as much as big. Thus it appears that in the nature there can be a mass "not possessing gravitating properties". It and is clear - a gravitation not is absolute property of mass in general, and there is only a result of a premise of mass on the gravitons media.

From this it follows that so-called "black holes" as them are represented today by some scientists, hardly can exist.

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***1. A.Vilshansky.*** About one model of gravitation interaction.

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**2. *А .Вильшанский.* About expense of energy for rotation of planets**
(only Russian)
**http://sciteclibrary.ru/rus/catalog/pages/8009.html**

**3.** ***А .Вильшанский.*** **Rotation of planets round the Sun from the point of view gravitonic hypotheses** (only Russian)

**http://sciteclibrary.ru/rus/catalog/pages/8072.html**

**4.** ***А .Вильшанский.*** **The "critical gravitational mass”** (only Russian)

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***5.*** V.Blinov. "The growing Earth - from planets in stars" (only Russian)
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