

In 2003, I was thinking about what would happen if we pushed two fundamental particles of matter into ourselves (in the same location in space, in the same point). My intuition told me that it could not be mass anymore and therefore gravity would cease to have an effect. After I developed this idea, I also found the cause for the expansion of the universe and, ultimately, its acceleration.

The basic idea of my hypothesis is: "Gravitational mass is being lost in black holes (Grey Objects)."

It is clear to me that the physical definition of the term "black hole" is something other than what I use in this hypothesis.

Black holes, or just "Grey Objects"? - hypothesis.

I think black holes, if we mean the collapse of matter into a single dimensionless (?) point, are possible, and I have no doubt at all about the existence of such formations.

But compared to what I have read so far, in my opinion mass that reaches this state completely loses the nature of matter, and so it no longer has weight and consequently no gravitational or inertial effects on other matter around them. It converts into something like "clean energy". But I think that it's not in "its very nature" to remain in this condition, and it tries to revert to standard matter.

I understand the term "clean energy" (CE) as matter that does not interact in any way with our material universe. This CE, however, has the permanent potential to transform into the original amount of standard matter which it originated from. Matter that changed to CE was mostly "old", "exhausted," i.e., containing heavy elements (a large percentage), but matter arising from the CE after the release will be "new", and thus contain light elements.

Now I would like to write something about how I think a black hole is formed. If we can somehow place two fundamental particles of matter at the same time to the same point in space, "push them into themselves" (I do not mean protons and neutrons, but really fundamental particles of matter), then a black hole is created and the mass of these two particles perishes and turns into energy, but it will try to get back from this state into its physical nature as soon as possible. The point in space in which the particles are compressed will have the same dimensions as one particle. If the fundamental particle of the matter has no dimensions, then the point which the two particles are pressed into will also be dimensionless.

In space practice, this would look as follows: If there is sufficient amount of matter in a particular space, this matter affects itself gravitationally, attracting itself, continuously thickening, and if there is more of it than a certain critical amount, and let's assume that it is sufficiently "exhausted" (I mean that I will not now consider the fact that at a given pressure and temperature, the fusion reactions will ignite, and eventually the entire thing will explode, then it will shrink and again further nuclear reactions will ignite), the matter will be pushed into a point with the dimensions of the basic particle of matter at the center of the matter due to centripetal gravity pressure. This point will further be referred to as the "POINT".

Now we come to what I think it is different as it is generally assumed. The matter that collapsed into the POINT is no longer affecting other surrounding matter with its gravity, and it does not participate

in further absorbing matter into the POINT. This absorption takes place only through the surrounding matter, which acts by the gravitational centripetal pressure until the amount of matter that is still "outside" falls below a critical level and the "pushing" of matter into the POINT stops. A certain "pressure" acts outwards from the POINT - the efforts of energy inside the POINT to turn into matter again. This "pressure" does not depend on the amount of matter that was pushed into the POINT; it is constant, but considerably large. We will call it the "POINT pressure".

Thus, a black hole is an object which, according to this hypothesis, consists of two parts: the material part (it is the "external" matter consisting substantially of degenerate matter), we will call it the "Armor", and the intangible part, being the point at the center of the material part, which the matter transformed into CE is pushed into. If there is no more supply of matter from the surrounding area (dormant black hole), the amount of matter in the material part of the black hole is constant (critical amount), and I assume that the average density of all such objects is also the same, and thus their size as well. All dormant black holes thus outwardly appear the same looking, also with the effects on the surroundings. However, the quantity of matter pushed into the POINT in the middle of each black hole is different and it is not limited in any way, does not show outwardly in any way, nor can it be determined before it falls apart. Should this hypothesis be true, black holes should rather be called "Grey Objects" (GO) because their gravitational effect on the surroundings would not be as drastic as envisaged for the black holes in which even the matter in singularity would have gravitational effects.

This would imply the following consequences:

1. All compact material objects in the universe that have a mass greater than or equal to the critical mass, have (or will have) a POINT at its center and become Grey Objects. For those who have critical mass exactly, the pushing of matter into the POINT does not occur.
2. There is nothing like a "mere" black hole (only a POINT) in the universe without the surrounding matter. Each POINT has an Armor around it, and together it forms a Grey Object.
3. In space there should be more objects that have critical mass exactly (other object mass is in fact pushed into the POINT). These are idle Grey Objects.
4. It should be possible to observe stellar or other systems in space, due to the decreasing gravity of its members, whose matter was absorbed into the Grey Objects.
5. An idle Grey Object is relatively stable. The mass enclosed in it will remain there until the Armor breaks due to the impact of an object of significant size. If such a collision occurs, the energy from the Grey Object is again released and changes first into radiation, then into sub-atomic particles, atoms, etc., as during a small "big bang."
6. If there is a sufficient quantity of matter converted into energy in such a Grey Object, its release can have the same effects as during the birth of our universe, during the "big bang".
7. The universe as a whole, and also its parts, is in a constant cycle of matter falling into Grey Objects, where it is as if the matter is being reborn when released from it.

Grey Objects and galaxies.

A galaxy is actually matter that the Grey Object located in its center is slowly getting hold of. It also causes its swirling motion.

Young galaxies do not have arms because they do not yet have a central Grey Object, but it's just a matter of time before they have them.

Middle-aged galaxies even have spiral arms, which means that matter is being absorbed by the central Grey Object, but the absorption and weight loss have not yet reached a level at which the arms would start to fall apart.

Old galaxies already have a bar (which is explained by the collision of two galaxies), but I think it is the effect of the weight loss, since the absorption of matter by the central Grey Object (and hence the mass loss) is already at an advanced stage, and so the centripetal gravitational pull is losing the battle with the centrifugal force of the galaxy's swirling mass movement.

There may be other satellite Grey Objects (SGO) inside the galaxy, besides the central Grey Object, which absorb matter from their surroundings.

Theoretically, collisions of satellite Grey Objects could occur, but this is unlikely as they must be at great distances from each other, which ensues from the nature of the Grey Object, namely the large amount of mass needed for the creation of this object. I suppose that only the crash of the Grey Objects into the central one occurs, that is if any satellite object has actually been formed in the galaxy, or the satellite object can detach from a galaxy and fly away.

The central Grey Object has a certain privileged position, as it is located in the middle of the galaxy and has the largest supply of matter here. Matter, which is not yet part of the central Grey Object (CGO), but is close (forms the central region of the galaxy), forms the CGO's protective shield. This shield protects the CGO from early breakdown due to the impact of another GO. In certain circumstances, if the protective shield is weak, matter may leak from the CGO's POINT, or it can completely fall apart. More likely, however, the SGO will fall apart in the protective shield area before impacting the CGO. In both cases, the galaxy actually begins to "rejuvenate" for a while. The "aging" of the galaxy is mass absorption by the CGO, "rejuvenation" an ejection of matter from the central region of the galaxy. Ultimately, however, the process of "aging" prevails.

By the above-mentioned I wanted to say only that the CGO "survives" a collision with the SGO much more likely than a SGO collision with a different GO. This actually implies that the galaxy will most likely cease to exist into its own CGO, or some part of its mass will "fly away" to space due to the loss of the galaxy's gravitational mass.

Grey Objects and space.

Grey Objects are essential for the functioning of the universe. I'm deliberately not saying that for the creation and development, because I rather think that the universe was not created and is not evolving, only changing round and about at all times.

In space, there are two basic changes, being the mass extinction in the POINTS of Grey Objects, and the creation of mass during the collision of two Grey Objects. According to my hypothesis, as I previously stated, all Grey Objects are equal partners on the outside (although CGO has a certain privileged position resulting from its location in the center of the galaxy), because regardless of how much mass was lost in the POINT, their external weight is the same, i.e. during their collision they both fall apart and release a mass from both POINTs in a huge explosion.

A new local universe may be created during this explosion, which can be considerably large, but at least two Grey Objects must always be present as paternal and maternal objects during such a creation.

Quasars are observed on the edge of our known universe, which are major sources of energy in a relatively small volume. This may be a collision between two central Grey Objects of formerly very old galaxies.

Grey Objects thus prevent the mass of the universe from growing old, because old (exhausted) matter will sooner or later get into the trap of the Grey Object and wait there for its rebirth, which will occur when two Grey Objects collide.

As I have mentioned, the main feature of the GO is the destruction of matter in the POINTS into clean energy. Thus, galaxy loses mass, both gravitational and inertial. I have already mentioned the consequences of the loss of gravitational mass (the decay of galaxy arms). The loss of inertial mass can have a very interesting result. The galaxy as a whole is moving through space with some speed, thus it has a certain momentum. Assuming that the momentum is maintained even after the reduction of the inertial mass, the movement speed must increase. Furthermore, the reduction of attractive forces between galaxies as a result of the gravitational mass reduction is added to it. This could explain the increase in the speed of our universe's expansion.

Finally, I would like to point out that the origin of the universe as a whole or its parts is not possible from one singularity, but at least from two Grey Objects, and the cessation of the universe into one singularity or one Grey Object is unlikely.

Thank you for your attention.

Author : riki1 - Richard Pálkováč