Gravitational Catastrophe and Dark Matter

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I have been working for a long time about basic laws of physics [1, 2]. During this time I noticed, that gravity does not work as Newtonian [1]. Distance and gravitational force relation changes over distance. The attraction properties change for each point of free space, and have some limits. The attraction changes due to some values between $1/r$ and $1/r^2$ even for the existent furthest distance. This work aims to analyze and discuss this phenomenon.

1 Introduction

As we know, outer orbital objects rotate faster than inner orbital objects relatively in galaxies according to our observations. Namely an orbital object must take place in space according to $v = \sqrt{\frac{mG}{r}}$; but it was detected, that v and r are not related in this manner. Almost there is no exponential relation like this in galaxy size heavenly bodies.

2 Attraction properties of gravity

To say something, firstly I must tell something about nature of gravity as I discovered.

Matter emerges as a density over time by increasing acceleration as waves over free space being has time differences between any point of its free space. Space turns into particles and particles turn into space continual manner. Matter gains its mass by collecting space in a limited volume at light speed. During its emergence it constantly experiences potential difference since there are time differences in the other name emergence priority. There is a single work to create all the universe, and the work is done one by one for each point of free space and thus particles. By this way any point of the universe gets the same speed since the single work is done by the same speed as work-done is equal to kinetic energy. Total energy of matter is according to this creation work.

While matter experiences the potential differences, naturally there emerge some denser and low density and thus disordered or more ordered points. Disordered points want to be distributed on lower density or more ordered space points since have more stress. Matter gains its total energy because of the work done against this resistance of free space, that otherwise it would not be created since the existent smallest force can move the existent bigger mass magnitude at infinite speed.

The sliding space from disorder to more ordered point also takes the particles together with itself since the particles emerge over this sliding free space. Actual reason of gravity is this, and gravity is only distributed as waves over time along space.

2.1 Attraction magnitude and distance relation

If non-flexible collisions are handled, for two objects which move towards each other at light speed, (1) can be written after the collision.

$$m_1c - m_2c = mc \quad (1)$$

Here, if it becomes $m_1 > m_2$, then the motion is going to be in + direction; otherwise it is going to be in - direction. For $m_1 = m_2$, no motion can occur.

There are a few parts of some gravitational waves which are emitted by m_1 and m_2 masses placed at B and D points in Figure 1. The attraction emerges at A_1 and A_2 points for

Fig. 1: Gravitational waves

this 2 dimensional wave section; therefore over the equality of $m_a c \cdot \cos(\alpha) - m_b c \cdot \cos(\beta) = mc$, it becomes (2),

$$m = \left(\frac{m_a r_1}{k_1} - \frac{m_b r_2}{k_2} \right) j \quad (2)$$

where $\cos(\alpha) = \frac{r_1}{k_1}$, $\cos(\beta) = \frac{r_2}{k_2}$, $k_1 = A_1B$, $k_2 = A_1D$, $r_1 = BC$, $r_2 = CD$, m_a and m_b are reduced mass magnitudes at k_1 and k_2 distances, j is a constant provides average particle collision amounts of waves since the smallest space parts can collide by different angles or do not collide that can change due to formation speed of light and can take 1 value, smaller or greater values than 1 but 0.

Assume, that 0 dimensional densities of m_1 and m_2 over 3 dimensional densities are $m_a = \sqrt[3]{d_1}/k_1$ and $m_b = \sqrt[3]{d_2}/k_2$ where $\sqrt[3]{d_n}$ is 1 dimensional density over 3 dimensional d_n density for k_1 and k_2 lengths. For total m in 3D, over $2\pi h m$, (2) turns into (3),

$$\Delta m = \left(r_1 \sqrt[3]{d_1} \sqrt{k_1^2 - \frac{r_1^2}{k_1^4}} - r_2 \sqrt[3]{d_2} \sqrt{k_2^2 - \frac{r_2^2}{k_2^4}} \right) 2\pi j \quad (3)$$

where $h = \sqrt{k_1^2 - r_1^2} = \sqrt{k_2^2 - r_2^2}$. This is for a single wave. I am not calculating gravity yet. Just analyzing attraction properties. Already at that point, there would emerge no attraction for the same magnitude two waves if you ignore time differences but a motion by gravitational torque; but this is not important. Here over Eq. (4),

$$Ft = \Delta mc \quad (4)$$

you can calculate the attraction force and its way as (+), (-) or 0 being t here is the time which the attraction emerges along

over this [1] by natural holding capacity of free space; but to make a calculation for the time difference we must know how many space turned into particle.

We must add the extra slowing for the objects like Pioneer since gravitational torque is going to increase; so some of total momentum turns into angular momentum, and so it decelerates in linear way. Otherwise linear deceleration can be calculated over $-ma = V_s \cdot 1.35 \cdot 10^{-13} \cdot s$ as I derived [1] where V_s is volume of the object, m is mass of the object, s is speed of the object and $-a$ is negative acceleration or deceleration.

Warning

Even if all particles get lost, the total mass, energy and frequency is conserved and thus can be used for such a calculation of the opposite force which is applied by free space; but like this calculation of time difference in galaxies, it is so hard. Actually for free space has no particle, the time difference between each cubic meter of the space becomes $1/V$ being V is the volume of the universe; but if a particle emerges, the density and thus the volume changes. And the amounts are so big. For example for 1 ton object, you need almost 10^{30} cubic meters free space according to my calculations; so think that $1/V$ is disturbed by this value. You cannot say nothing changes by thinking observational distances that distance does not specify time. It does not work in that way. Space-time is flexible. We must determine some suitable ratios.

Actually it is good, that by the observation, we can calculate the total matter amount of the universe by calculating the deviation in speed and thus by calculating the time difference over this; but even so also we should find a different theoretical method. I do not know yet; but it seems almost at the amount of the distance between two object like Eq. (8),

$$F_G(r_1 t_1 - r_2 t_2) = mv^2/r \quad (8)$$

where F_G is Newtonian gravitational attraction, $r_1 t_1 - r_2 t_2 = r_0$, and $F_G r_0$ is gravitational torque, $r_0 = EF$ over Fig. 2. Here $F r_0$ is not work-done. You can also write like $F t_0$ since is a multiplier. This equation is only representation to show why is like without exponential relation.

Gravity moves at light speed; thus also the gravitational latency must be included. Namely, actually outer orbital object store potential. If enough time has not passed yet, the acceleration changes. Otherwise it had gotten the maximum acceleration already. Namely for the life time graph of the galaxies in accordance with chaos, the upper and lower limits had already been determined. It cannot be so misleading.

Warning

3 Conclusion

These show us again, that the phenomenon is also chaotic, emerges in an interval in many different kind. These show us, that nothing can move away from each other after a point. There is a limit for this. They constantly wander around in a limited area. Just there is a flexible interval.

Space objects cannot move away from each other until infinity. This also explains why electrons do not fall into nucleus or fly off; because the phenomenon is not boosting. It is a transformation. Rotating effect of force increases; but this is for protecting the energy which the system holds.

Inference

Actually the relation between gravity and centrifugal force is $F_G \approx F_C$ since $F_C = -F_G$ requires zero energy and thus zero speed. One of them is bigger then the other one to emerge of matter as it was proven [3]. This requires Riemann surfaces and complex analysis since they cannot exist on the same axis together. Namely even if they are two main different variation of the same force, they must get different axis; but seems is not possible if you do not include complex plane. Complex plane allows it.

References

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