The Theory of Gravity

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Abstract

Here I am about to create a new theory of gravity. In this theory I am trying to explain the range of gravity and the gravitational field. With this theory, one can calculate the range of gravitational field of an independent object. Here gravity is not depending upon the mass of a second object. Here gravity is related to the energy of the object. I am not going to replace any previous theories of gravity. Sir Isaac Newton and Albert Einstein were made wonderful theories. I am also working with those theories. Inside these theories I have been found a road to explain gravity with my thoughts. So mainly I am using their equations and adding my works with them. And now I can find the range of gravity. I can clearly say that, it is a simple theory with logics and everybody can understand it easily.

Introduction

As I wrote above, now I can find the range of gravity and I can clearly say that, gravity has a finite range. Gravity will not lead to infinity. I am here treating gravity as a form of energy. So we can find the distribution of energy at different distances. I was started thinking about gravity, when I was writing my paper "Structure of Relatively Accelerating Universe". That was a theory about the expansion and acceleration of universe. In there the universe was accelerating under a gravitational frame. After that I have started thinking more seriously about gravity and I had some interesting leads. The findings which got that time were written as an article in my online pages. There I had found an interesting constant which I called it as "**A**". It can be written as $\mathbf{C^2/G}$. Here "C" stands for the velocity of light and "G" stands for the universal gravitational constant. According to this constant, I have developed my ideas and find the range of the gravitational constant.

Theory

Now here we will try to find the gravitational field of an independent object. Gravitational field is related to the energy of the object. All we know that gravity is related to the mass of an object. I am also taking mass as the source of energy to calculate the gravitational field. According to Sir Isaac Newton

Gravitational force between two objects is described as ***$F = G.M1M2/r^2$.*** Here I am ignoring this equation because it is stating gravity as a force between two objects. My intention is to state gravity as a form of energy and find the strength of gravitational field in each levels.

Gravity in Newtonian Physics is

$$g = GM/r^2 \qquad (1)$$

Albert Einstein in his theory states Energy of an object as

$$E = Mc^2 \qquad (2)$$

As I wrote above I had find a constant in my works and that constant ***A*** is explain as

$$A = C^2/G \quad \text{explained in reff: [2]} \qquad (3)$$

So the Gravitational field we have to describe now. Here we have gravity "g" of an object, mass "m" of the object, Energy "E" of the object and constant "A" with us. By describing gravity as energy, we can describe gravitational energy at different levels.

So here I am intended to say the gravitational field of an independent object, we can explain as

$$GE = MA/g \qquad (4)$$

This equation gives us the total gravitational field of an independent object. According to this equation we can find the gravitational field which can create a mass at different levels. Once we increase the distance the energy in the field will decrease. It can be diminish up to zero. When the energy level becomes zero, there the gravity of the particular mass ends.

So the equation we can write as

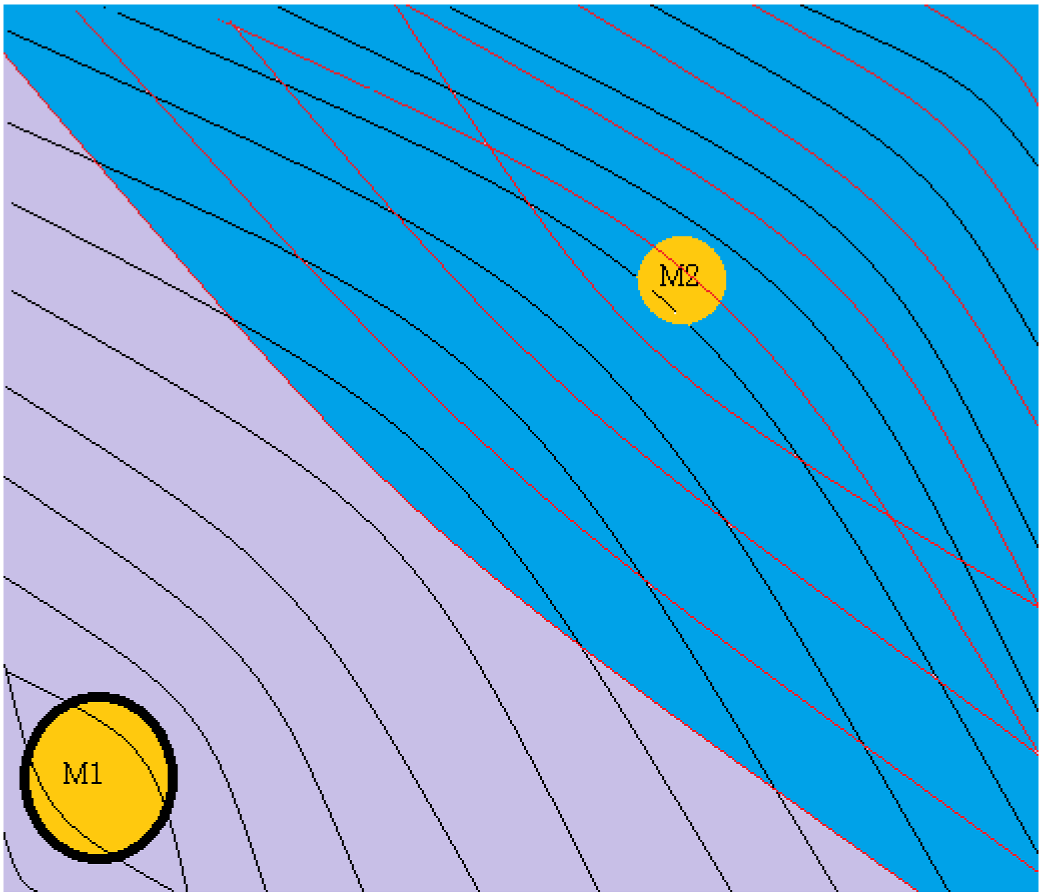
$$GE = MA/gd \qquad (5)$$

Here "GE" represents the Gravitational Energy, "M" is the mass, "A" is the constant, "g" is the gravity of that mass and "d" represents for the distance.

I would like to state again that, this equation is not mentioning the gravitational force. It is for calculate the gravitational fields, where the gravitational energy is distributed. With the help of this equation we can calculate the amount of gravitational energy distributed in any distance.

Gravitational field of a companied system

Now we can have a look at a companied system like two objects or a complex system like our solar system. So if it is a two body system, these two bodies have its own gravitational fields. So these two can interact together and may be able to create a common gravitational field. The picture 1 (Gravitational field of two masses.



Picture 1: Gravitational field of two masses.

Gravitational field of a complex system

Gravitational field of a complex system like solar system or a galaxy is also like this way. There enter multiple masses multiple range of gravitational fields.

Conclusion

Here we can describe gravitational field on the basis of the total energy of an object. If we are working with a complex system, there gravitational fields will gather together and may can act as a uniform for the total system. I am working more against with this article and will be update as soon as possible.

$$F = \frac{Gm1m2}{r^2} \quad g = \frac{Gm}{r^2} \quad m = \frac{g r^2}{G} \quad E = mc^2 \quad E = \frac{g r^2}{G} c^2 \quad f = \frac{E}{h} \quad f = \frac{\gamma m_0 c^2}{h} = \frac{m_0 c^2}{h} \Big/ \sqrt{1 - \frac{v^2}{c^2}}$$

$$f = \frac{\frac{g r^2}{G} c^2}{h} \Big/ \sqrt{1 - \frac{v^2}{c^2}} \quad f = \frac{g r^2}{G} c^2 \Big/ h \quad \frac{E}{Ar^2} = g \quad A = \frac{E}{g r^2} \text{ or } \frac{c^2}{G} \quad Ag r^2 = mc^2 \quad E = hf$$

$$Agr^2 = hf \quad E = m_0 c^2 + m_1 c^2 \quad n(hf) = m_1 c^2 \quad \frac{n(hf)}{Ar^2} = g = \frac{m_1 c^2}{Ar^2} \quad \frac{n(hf)}{Ar^2} = \frac{Gm}{r^2} = \frac{m_1 c^2}{Ar^2}$$

$$\frac{n(hf)}{Ar^2} = \frac{mc^2}{Ar^2} = g \quad n(hf) = mc^2 \quad \rho = \frac{m}{V}, \; m = \rho V \quad n(hf) = mc^2 = \rho V c^2 \quad g = \frac{\rho V c^2}{Ar^2}$$

$$\frac{n(hf)}{Ar^2} = \frac{mc^2}{Ar^2} = \frac{\rho V c^2}{Ar^2} \quad \frac{Gm}{r^2} = \frac{\rho V c^2}{Ar^2} \quad A = \frac{\rho V c^2 r^2}{Gm r^2} = \frac{c^2}{G} \quad m = \frac{Ag r^2}{c^2} = \frac{\frac{c^2}{G} g r^2}{c^2} = \frac{g r^2}{G}$$

$$F = \frac{(m1m2)\, c^2}{Ar^2} = \frac{Gm1m2}{r^2}$$

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This work leads me to think more about gravity and the concepts of gravity to relate with the energy.

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