Mass and Massiton

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Abstract

In the text "Mass and Massiton", I propose a hypothesis that there is one kind of the elementary particle that can produce gravitational force, and it is the minimum component that make up of mass, and I give it a name called "Massiton". Both electrons and protons are composite particles, wherein the positive and negative charges are located at the center and the outer spherical shells wrapping the central electric charges are made up of Massitons. And the most convincing evidence for the existence of Massitons is the neutrinos that have mass, and have no charges.

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Keywords

Mass; neutrino; positron; proton;

1. Introduction

What is mass? It is the substance that can produce gravitational force. The term "Massiton" is a word I created myself to refer to the elementary unit of mass. So I believe that there a single massiton to emit gravitons, just as electrons and protons can emit photons, electrostatons, and magnetons? That is to say, every force has its corresponding elementary entity particles. In this way, we can only use the massiton and positive charge and negative charge to form all the particles that discovered so far.

2. Evidences

In order for the Massiton to exist, we must have found the particles that have nothing but mass. And actually, we have found such a kind of particle that satisfies the above criterions, which is a neutrino, because:

1. The life span of a neutrino is long enough. Although we don't know how long, but at least we know that it is not a short-lived particle;
2. It should only have mass, without any other properties, such as electric charge, magnetic charge or other characteristics;
3. It only comes from the nucleus and should not come from other sources.

Therefore, neutrinos not only meet the requirements of such massiton, but are also the evidence of their existence.

3. Hypothesis

The specific hypothesis is as follows: First, the electron and proton are regarded as particles with charge at the center and a mass shell wrapped around the central charge. As shown in Figure 1 below, each square represents a massiton, and the dot at the center represents one electric charge. The mass of the proton is about 1837 times that of the electron, it means that the proton has 1837 times the number of massitons of the electron. One Massiton occupies one position in space, as electric charge. Similar to the electric charges that emit the omnidirectionally-propagated electrostatic force and magnetic force, the Massiton emits the omnidirectionally-propagated gravitational force, so it gives the protons and electrons mass. Or in other words, are attracted by the gravitational force. Neutrino should be the shell fragment composed of many Massitons that are knocked off from the proton, or the central charge (positron) of proton is knocked out of the proton, leaving only the whole shell. Some experiments have shown that near the atomic nucleus, gamma ray can produce positron and electron pairs, which should actually be considered that it is the gamma photon that hits the central positive charge of the proton out of the proton. Different from electric charge and magnetic charge that there are positive and negative charges and north and south magnetic charges, there is only one kind of Massiton, so there is only one kind of interaction between all Massitons, namely the mutual attraction, or universal gravitational force. It is impossible to know how big the Massiton is and how they form the shell around electric charges. And any other guesses will have no basis at all.

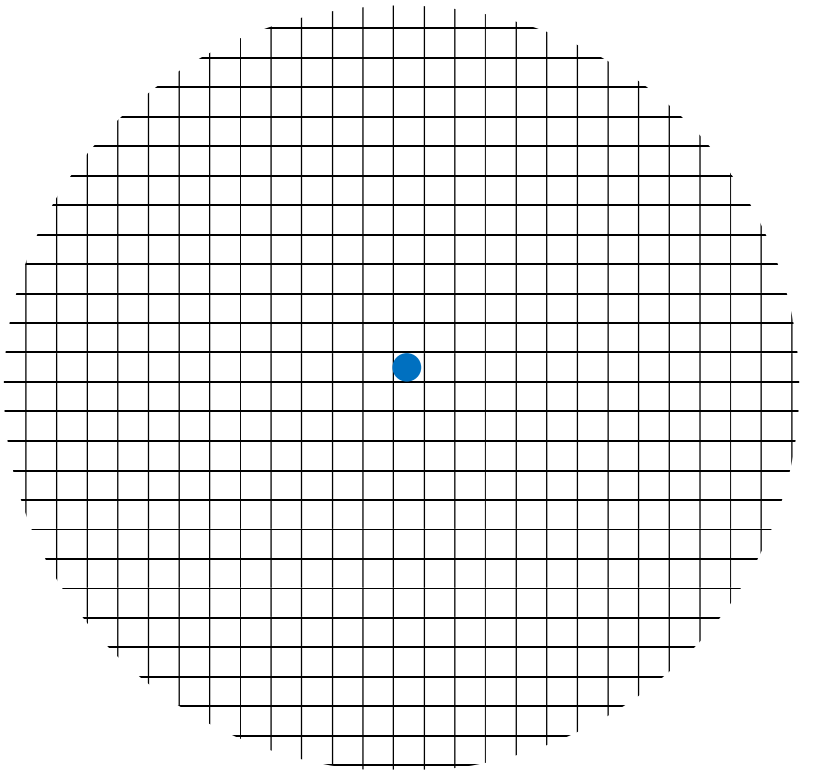

Figure 1: Electron or Proton with electric charge at the center

4. Further Discussions

Regarding the evidence for this hypothesis, in addition to the above-mentioned neutrinos, there are many phenomena that can support this hypothesis:

1. We found that only protons and electrons are stable, even neutrons will decay, not to mention other short-lived particles. Except protons, electrons and neutrons, all other particles discovered so far can be constructed with different combinations of the two properties, namely mass and electric charges. The cause for their short-life without exception is that they are just a certain number of Massitons and electric charges that are very close to each other in a very short time. And then the distance between them becomes larger, so that they are eventually separated.
2. After protons collide at a high speed, the outer shell structure composed of massitons is crushed, and the central positive charge will be separated from the outer shell. The fragments of the outer shell are neutrinos, and different collisions will produce different fragments, that is, different neutrinos. The massitons still with the positive charge at the center is the positron. In a nuclear reaction, the final decay products are either protons, or electrons or a positrons (not including photons), and such result just proves my hypothesis.

3. Experiments on antimatter also provide evidence for the existence of Massitons. Of course, there is no antimatter in the real world, but the experiments on finding and capturing antimatter show that Massitons and electric charge can be manipulated to achieve new combination, even though such a combination is equally short-lived. This further proves that the charged part and the uncharged part of the protons can be separated.

4. Although the gravitational force is very weak as compared with the electromagnetic force, the Massitons only attract each other, and there is no repulsive effect. Therefore, a huge number of neutrinos scattered in the space may gradually cluster and aggregate due to the gravity, and eventually accumulate more and more, forming a mysterious celestial body, which may be the black hole we observed.

5. Conclusions

Although the hypothesis is very premature without convincing evidences, it is actually a promising direction of thinking about the formation of nucleus because all the entity particles we discovered or created or imagined can be constructed with only electric charges and mass. This is to say that, in every entity particles, there are always an integer number of electric charges and a certain amount of mass.

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Huan Liang wrote the original draft and final version of above paper.

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All data, models, and code generated or used during the study appear in the submitted article.

References
[1] https://baike.baidu.com/item/%E4%B8%AD%E5%BE%AE%E5%AD%90/243111?fr=aladdin