QUANTIVITY

The Unified Theory of Everything

I:

Vacuum Mass/Energy, and Redefining *G* as the source of Negative energy as the counterpart of *h*

By Dr. Sam Nassiri
quantivity@yahoo.com

Abstract:

This article is first of our multi-part articles covering our *Unified Theory of Quantivity*, which addresses the non-classical theoretical physics concepts studied in *Quantum Mechanics*, *Relativity*, and *String Theory*. This article has comprehensive coverage of the *vacuum mass/energy* We postulate that *Planck mass* refers to the *neutral* (i.e., with no charge) *positive vacuum mass*. This is the large *mass* unit (before being shared based on a sharing scheme to be covered in our future articles). This mass is combination of mass from h and G constants, which are sources of small units of positive and negative mass, respectively. For the first time here, we are referring to *G* as the counterpart of *h*, as the smallest unit of negative energy. We will show, while the Planck constant *h* is the source of *positive mass with negative charge*, while G is the source of *negative mass with positive charge*. We postulate that *G* could be behind the Dark energy/mass.

I. INTRODUCTION

The title of our theory, *Quantivity* is a combination of Quantum Mechanics (QM) and Relativity, since it is a bridge between the two theories.

It might also be considered as a set of fancy new made-up terminologies out of *Quantum* to make them grammatically look like the Relativity's terminologies as follows.

The Quantive vs Relative, Quantivity vs Relativity, and Quantivistic vs Relativistic.

II. VACUUM MASS

We have the Planck mass as follows:

$$Um = P_m = \sqrt{(hc)/G} \qquad (1)$$

Wherein U_m and P_m refer to the vacuum's large unit of mass, and Planck mass, respectively, while h, G, c represent the constants h, G and Light's speed, respectively.

We introduce the energy equivalent of Pm as follows:

$$U_E = P_m . c^2 = (\sqrt{(hc)/G}) . c^2 \qquad (2)$$

Now lets divide *h* and *G* by this energy:

$$h / U_E = \sqrt{(hG)/c^5} = P_t \qquad (3)$$

Now lets also calculate the energy due to negative Planck mass:

$$U_{E-} = (P_m)^{-1} . c^2 = (\sqrt{G/(hc)}) . c^2 \qquad (4)$$

And if we divide G by this energy we have

$$G / U_{E-} = \sqrt{(hG)/c^3} = P_l \qquad (5)$$

From (3) and (5) we hve:

$$h = U_E . P_t \qquad (6)$$

$$G = U_{E-} . P_l \qquad (7)$$

Let's rearrange Pt and Pl to separate a constant that we refer to it as qmin and which will be discussed in our next upcoming article:

$$P_t = \sqrt{(hG)/c^4} * (1/\sqrt{c}) \qquad (8)$$

$$P_l = \sqrt{(hG)/c^4} * (\sqrt{c}) \qquad (9)$$

$$qmin = \sqrt{(hG)/c^4} \qquad (10)$$

In (8) and (9) as can be seen, the P_t and P_l and consequently *h* and *G* carry the $1/\sqrt{c}$ and $\sqrt{c}$ values, causing negative and positive charges respectively.

III. CONCLUSION / SUMMARY

It is postulated that Planck mass is the large unit of mass (positive) mass with no charge (i.e., the vacuum mass).

As could be seen from (1) that this mass is the combination of h and G masses adjusted by c to remove the charges present in h and G.

We calculated the energy equivalent of Planck mass and negative Planck mass then divided h and G by them respectively.

What really remained after such divisions were just P_t and P_l respectively.

Then separated a famous constant qmin from the Pt and Pl to expose the $1/\sqrt{c}$ and $\sqrt{c}$ as the sources of negative and positive charges in P_t and P_l, respectively.

Here for the first time, we showed that G is not only the known *gravitational constant* in *Newton's gravity equations*, but it has an equally important role, as source of negative energy and negative mass.

We postulate that *G* could be behind the Dark energy/mass.