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# The Unification of Gavitational and Electrical Fields

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#### Abstract

My paper "The Quatization of Space-time" explains matter and its aspects can unify gravitation and electicity. I will explain this

#### **Quantized Space-Time**

Space is filled with an infinite ocean of virtual pairs of points, one going forward in time and the other going backward in the elementary unit of time, which I have calculated to be  $t_0 = e^2 \mu_0$ , the elementary unit of time determines the elementary unit of charge, it works out to be 3/5 the Planck time. The distance between points is  $x_0 = ct_0$  where c is a constant of space-time.

#### A mistake was made by quantized space-time

Two pairs appear simultaneously and one point tries to share its time with two other points with opposite timed, in the same elementary unit of time but cannot and become frozen in time and become permanent along with the extra point, later to be called an electron. Being permanent the space-time pairs polarized around them and mimic them creating a group of permanent particles every  $t_{\rm o}$ .

No Big Bang just space-time duplicating its mistake. This could still be going on, and would be the center of the Universe which many will be disappointed that its not them

#### Permanent points become the matter wave

#### The Micro Field

When a new singleton point becomes real , it bumps an opposite point and react a micro field line which governs the electrical reaction. This bump carries a bit of energy which I calculated to be  $4\pi h \ (\pi/.3) x_{_0}$  its interesting that all the constants in the Universe integrate to make sure the points do not closer than  $x_{_0}$ .

# All matter is made of charged particles both + and - and emit micro field lines both + and - ones

When a singleton point skips a distance  $x_0$ , it creates an  $I_{\min}$ , a field line which the both the positive and negative field lines, joined, when coming from a neutral mass. These field lines have an extra  $\pi/3$ , 600 to keep all points from getting closer than the elementary unit of distance,  $ct_0$  to all points., if all points must be a distance  $ct_0$  than the only angular distance that is allowable is 600 and  $cos 60 = \frac{1}{2}$  that is spin.

The volume by a pair (0ne from a + and one from a -) would be  $(\pi/3)^2 x_0^2 (2\pi x 0)$  since there would be two sides to one circumference

These larger elementary volumes would be occurring on a basis of the Mass and at the distance from it, you could say it bends space time.

The number of  $I_{min}$  micro field lines emitted by a massive object is:

C= #field lines at  $r = (t_0/c)(M/m_0)N$ where t/c = #fields lines by one charged particle.  $T_0$ , is the elementary unit of time and  $m_0$  is the average mass of a nucleon., N = number of field lines emitted per nucleon.

$$\mbox{Volume ratios} = \begin{array}{ccc} (M9x_0) & & & M \\ \hline R^2(8\pi^4m_0) & & & r^2 \end{array} \eqno(6.68 \ x \ 10^{\text{-}11}) \ \ (2)$$

There may be some errors in the judgement of the numbers, but its pretty damn close

The gravitational constant that I calculated is the ratio of the volume created by the micro field lines compared to regular space time and can show the bending of space and time dilation.

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## Perpendicular "magnetic style" component of gravity

When the electric micro field lines appear to be traveling faster or slower than c, a perpendicular magnetic field line appears to prevent this from happening.

Currents in the same direction repel and when in opposite directions attract.

Since gravity is made of micro-field line, it must also have this perpendicular component.

It is small at low velocities, but could be detected in satellites over a long period of time.

When massive galaxies are moving in the same direction at high speeds the anti-gravity could expand the universe out.

When massive galaxies in spirals of a galaxies moving in the same direction could attract enough to make galaxy formation quicker.

The LHC is colliding negative charged particles with positive ones. This could create a very strong perpendicular gravity field which could draw in dark matter. I think they reached the threshold where dark matter interacts with ordinary matter. The electric magnetic field lines made up of micro field lines is:

$$\mathbf{F} = \begin{array}{cccc} .q_1q_2 \ (\mathbf{v}_1\mathbf{x}\mathbf{v}_2) & q_1q_2 \ (\mathbf{v}_1\mathbf{x}\mathbf{v}_2) \\ 4\pi\epsilon_0\mathbf{r}^2 \ \mathbf{c}^2 & 4\pi\epsilon_0\mathbf{r}^2 \end{array} \qquad (\epsilon_0\mu_0) \\ .\mu_0 \ q_1q_2 \ \mathbf{v}_1 \ \mathbf{x} \ \mathbf{v}_2 \end{array}$$
(3)

Then 
$$\mathbf{F} = \dots$$

The gravitational field, since its also made of the + and - microfield lines must also have a perpendicular component to made sure that the microfields line cannot exceed the speed of light.

$$F = G - \frac{M_1 M_2}{R^2} - \frac{(v_1 v_2)}{c^2}$$
 (4)

This is the force we see from massive objects traveling at velocities that we see, With both + and - microfield lines, the gravitational field is neutral and can only be repulsive, explaining the expansion of the universe, along with the extra volume of the microfield line pairs which will expand the volume of space when they get there.

For small massive objects orbiting the Earth, we can use the gravitational field, the gravitational acceleration.

$$F = G - C$$

$$R^{2} c$$

$$(5)$$

A rough calculation shows that this would amount to a satellite's orbit would be off by 10 meters per year *t* this can easily show how the perpendicular gravitational field can be derived.

#### Macro time and dilation of time

The macro time interval  $\delta t$  is related to the universal time unit t0, depending on how many micro field lines encompass it, I see this equation as:

$$\Delta t = 4\pi - \frac{(M) (\pi/3)^4 t_0}{(m_0) r^2}$$
(6)

The longer the  $\delta t$  is the slower the time cause it takes more time to travel the  $\delta t$ . The time dilation between the GPS satellites is well known, time dilation between objects is the difference in their  $\delta t$ 's

Dilation = 
$$4\pi$$
  $(M_E) (\pi/3)^4 t_0 (M_E) (\pi/3)^4 t_0 
 $(m_0) \text{ rs}^2 (m_0) \text{ rs}^2$  (7)$ 

Dilation is 43.924 microseconds – 1.03889 microseconds 42 microseconds dilation between the Earth's surface and the GPS satellites, not far from the 45 microseconds that has been measured. Maybe the Moon has something to do with it.

#### **Bibliography**

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