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Extending Concept of Dark Matter and Potential Energy Acts Virtual Mass to Strong and Weak Force

Shriprakash V Pendse

Mumbai University, Mumbai, India

***Corresponding author:** Shriprakash V. Pendse, Mumbai University, Mumbai, India. E-Mail: svpendse1234@rediffmail.com

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Abstract

Strong and weak equation can be derived through GR and energy mass equivalence -Exchange particle is nothing but gravitational force between particles, so force becomes particle. This is happening because confinement of per tube one particle. Mathematically we say weak and strong force acts through particle exchange. Weak force equation Gravitational constant and Q charge is square function. So weak force will create matter and antimatter with different charges and gravitational charges this solves strong cp problem as inertial constant is R linear function , it do not violate cp or cpt symmetry , only weak force violates CPT symmetry So inertial constants for weak $=\mathbf{R}^{1/2}$ for strong $=\mathbf{R}$ In special relativity gives mass energy equivalence, GR with principal any energy field curves space time by $\mathbf{E}=\mathbf{Mc}^2$ gives mass charge equivalence principal $\mathbf{M}=\dfrac{\mathbf{RQ}}{\mathbf{C}^2}$ but this mass is virtual mass And this virtual mass is dependent on geometry of area so $\mathbf{M}=\dfrac{\mathbf{R}^{1/2}\mathbf{Q}^{1/2}}{\mathbf{c}^2}$ for side of square With this model hierarchy problem can be solved Strong force same as EM force changes time arrow. Weak force creates two time arrows. So at Big bang $\mathbf{T}=\mathbf{0}=\mathbf{1}-\mathbf{1}$ two time arrows So except gravity all forces changes time arrow or creates two tie arrows. As clock wise fan which is perpetually in motion without friction in vacuum with zero gravity to move anticlockwise you require energy same is true about time arrow, as gravity is weak it can not do so, But in singularity gravity also changes time arrow. As I shown in first paper –K creates uncertainty principal, Yukwa model is achieved but weak force equation creates mathematical probability of –k or different gravitational fields. 16Strong force inertial equation is $\mathbf{F}=\dfrac{\left(\mathbf{c}^2\mathbf{Rqm2}\right)}{\left(\mathbf{ks}^2\right)}$, and weak force inertial equation is $\mathbf{F}=\dfrac{\left(\mathbf{c}^2\mathbf{R}^{1/2}\mathbf{q}^{1/2}\mathbf{m2}\right)}{\left(\mathbf{ks}^2\right)}$.

***Keywords:** Pion and W Boson, Gravitational Force, Inertial Weak Equation, Square Function, Weak Force Antimatter, Gravitational Field, Strong CP.*

Introduction

Pion and w bosons are gravitational force between proton neutron in square area and side.

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Objective

- To find out inertial equation for weak and strong force
- To check force ratios
- To find out exchange particle mass

Method used

law of gravity, energy mass equivalence, force as particle concept, quantum tubes are square shaped.

Data source

Data used is constants as per standard :

Gravitational constant- $G = 6.67 \times [10]^{(-11)}$

Velocity of light- $3 \times 10^{8}\, m/sec$

Coulomb constant- $-8.988 \times [10]^{9}\, kg.m^{3}.s^{-2}.C^{-2}$

Assumptions

- In getting weak and strong force calculation of gravitational force between proton and neutron where proton positive charge creates virtual mass.
- Proton neutron oscillates and merges to create pion at $10^{-9.5}$ and separate at $10^{(-15)}$ neutron proton
- Proton and neutron merge where unbalanced neutron is a $10^{(-13.5)}$ to create w-boson through side of square field and separate at $10^{(-18)}$ as beta decay
- This w boson does beta minus decay
- From mathematic view strong force exchange particle is pion and weak force particle is w boson
- As strong force overpowers coulomb repulsion of proton it acts on square area so weak force acts through edge of side strong force constant is R and weak force constant under root R and charge also acts through edge it is also under root q
- This is happening as space tube are square shape, there is confinement per tube one particle
- So beta decay happens to conserve square symmetry so particle becomes stable

Ladder shape atom

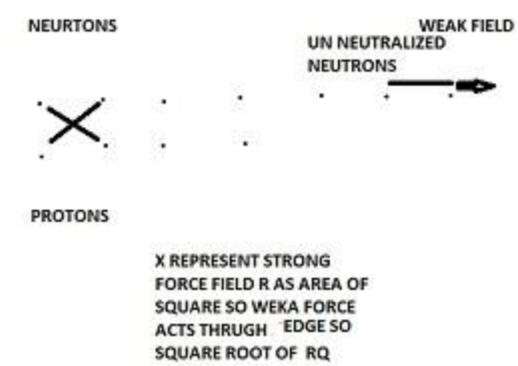

FIG 1.**Ladder shape arrangement of neutron and proton in atoms**

As in my first paper I shown potential energy can create virtual mass force of gravity between proton and neutron will be equal to mass of neutron and virtual mass of proton **FIG 1**[1].

So gravitational force $F = \frac{Gm1m2}{s^2}$

m1=virtual mass of proton $\frac{Rq}{c^2}$ q=charge on proton, R=energy inertia constant

m2=mass of neurons

$$F = \frac{(GRq / c^2 m2)}{s^2}$$

Now $G = \frac{c^4}{k}$ k k=elasticity of dark matter, S=distance

$$\text{So } F = \frac{(c^4 Rqm2)}{(kc^2 s^2)}$$

$$F = \frac{(c^2 Rqm2)}{(ks^2)}$$

Now substituting

$$C = 3 \times [10]^8$$

Mass of neutron $= 1.6 \times [10]^{(-26)}$

S=distance at proton neutron merge $= [10]^{(-9.5)}$

$$R = 10.39 \times [10]^{26}$$

Q=charge on proton $= 1.6 \times [10]^{(-26)}$

k=elasticity of dark matter $= 12.143 \times [10]^{43}$

So $F = 1.97 \times [10]^{(-27)}$

Approximating binding energy per nucleon $= [10]^{(-1)}$

Force of gravity $= 1.97 \times [10]^{(-28)}$

This is rest mass , if particle traveling at 0.6 *C

C=velocity of light

Mass becomes $= \frac{1.97}{0.8} [10]^{(-28)}$ = mass of pion

Mass $= 2.46 \times [10]^{(-28)}$ kg pion mass

So quantum level force becomes particle

For weak force force acts on side of square field. As strong force overpowers coulomb force it acts on on entire square field. So weak force acts on sides , so only change I strong force equation is $R^{(1/2)}$ and $q^{(1/2)}$

so weak force equation becomes

F weak= $F = \frac{(c^2 R^{(1/2)} q^{(1/2)} m2)}{(ks^2)}$

So substituting

$$C = 3 \times [10]^8$$

Mass of neutron $= 1.6 \times [10]^{(-26)}$

S=distance at proton neutron merge $= [10]^{(-13.5)}$

$$R = 10.39 \times [10]^{26}$$

Q=charge on proton $= 1.6 \times [10]^{(-26)}$

k=elasticity of dark matter $= 12.143[10]^{43}$

So $F = 1.528 \times [10]^{(-27)}$

Approximating binding energy per nucleon $= [10]^{(-1)}$

Force of gravity $= 1.528 \times [10]^{(-24)} \times [10]^{(-1)}$ binding energy adjustment

By doing binding energy adjustment $= 1.528 \times [10]^{(-25)}$ kg w-boson

If you solve above equation for G, G wil become square functions, so matter and antimatter will have different gravitational field and different electrical charges..As mass can not be negative only option to interpret it as k negative hence G negative

So gravitational force becomes particle. Here as w boson is heavy particle relativistic mass is not consider.

For + beta decay same equation will hold only changes will be in as proton becomes neutron, positron is emitted

For pair creation $Q = \frac{hf}{c^2}$, and $m2 = mass$ of charged nuclei, here there is no charge hence z-boson will be created will decay into pair , with different gravitational fields and electrical field [2].

Now strong force inertia change is

$-G + -G+$ exchange particle $= + G$ time arrow reversal.

Weak force inertia change is

$-G + -G+$ exchange particle= $+G + -G$ two time arrows crated

As I shown in first paper –K creates uncertainty principal, Yukwa model is achieved but weak force equation creates mathematical probability of –k or different gravitational fields [3].

Comparing ratios of different forces:

As converted weak and strong force in gravitation model we can compare constant directly;

Strong force to gravity $= \frac{R}{(c^4 / k)}$

$$= R \times \frac{k}{c^4}$$

$$= \frac{10.39\times[10]^{26}\times 12.143\times[10]^{43}}{81\times[10]^{32}}$$

$$=1.55\times[10]^{37}\times[10]^{1} \text{ Binding energy adjustment}$$

$$=1.55\times[10]^{38}$$

Now weak force to gravity $= \dfrac{R^{(1/2)}}{(c^4/k)}$

$$= \frac{\sqrt{\left(10.39\times\left[10^{39}\right]\right)}\times\ 12.143\times[10]^{43}}{81\times[10]^{32}}$$

$$= 0.48\times[10]^{24}\times[10]^{1} \text{ binding energy adjustment}$$

$$= 0.48\times[10]^{25}$$

Strong force to coulomb constant, here we take strong force em component i.e $\dfrac{R}{c^2}$

$$= \frac{R}{c^2} \text{ divided by } \frac{R^2}{k}$$

$$= \frac{R}{c^2}\times\frac{k}{R^2}$$

$$= \frac{k}{Rc^2}$$

$$= \frac{(12.143\times[10]^{43})}{\left(10.39[10]^{26}\times 9\times[10]^{16}\right)}$$

$$=1.34\times 10\times[10]^{1} \text{ binding energy adjustment}$$

$$=134$$

So strong force s 134 times stronger than coulomb force

So strong force to weak force ratio

$$\frac{10.39\times[10]^{26}}{3.22\times[10]^{13}}$$

Strong force to weak force $= 3.22\times[10]^{13}$

Here as both forces are nuclear forces binding energy adjustment not required as it cancels out

And coulomb force constant to gravitational constant $= \dfrac{R^2}{k}$ divided by $\left(\dfrac{c^4}{k}\right)$

$$= \frac{R^2}{c^4}$$

$$= \frac{[10]^{52} \times 107.9}{81 \times [10]^{32}}$$

$$= 1.33 \times [10]^{20}$$

This solves all hierarchy problem in physics[4]. Minor difference in nuclear forces is coming due to binding energy

Force becomes particle: As I said in first paper quantum level discrete tubes structure postulated. So in tube only one particle can stay hence force becomes particle. And tubes are square shaped [5].

Results

- Pion and w Boson are gravitational force between proton and neutron in square area and side
- Inertial weak equation shows gravity is square function
- Weak force will create matter antimatter with different gravitational field and charge field.
- Strong cp problem is solved as inertial constant of linear order while weak force constant is under root function. Strong force will never violate cp or cpt symmetry
- Strong force is super strong gravity , weak force is strong gravity, weak force can be attractive or repulsive, strong force is attractive

Conclusions

- Strong and weak equation can be derived through GR and energy mass equivalence
- Exchange particle is nothing but gravitational force between particles, so force becomes particle.
- This is happening because confinement of per tube one particle.
- Mathematically we say weak and strong force acts through particle exchange.
- Weak force equation Gravitational constant and Q charge is square function.
- So weak force will create matter and antimatter with different charges and gravitational charges
- this solves strong cp problem as inertial constant is R linear function , it do not violate cp or cpt symmetry , only weak force violates CPT symmetry
- So inertial constants for weak $= R^{(1/2)}$ for strong $= R$
- In special relativity gives mass energy equivalence, GR with principal any energy field curves space time by $E = Mc^2$ gives mass charge equivalence principal $M = \frac{RQ}{C^2}$ but this mass is virtual mass
- And this virtual mass is dependent on geometry of area so $M = \frac{R^{(1/2)}Q^{(1/2)}}{c^2}$ for side of square
- With this model hierarchy problem can be solved
- Strong force same as EM force changes time arrow.
- Weak force creates two time arrows. So at Big bang $T = 0 = 1 - 1$ two time arrows
- So except gravity all forces changes time arrow or creates two tie arrows.
- As clock wise fan which is perpetually in motion without friction in vacuum with zero gravity to move anticlockwise you require energy same is true about time arrow, as gravity is weak it can not do so,
    - But in singularity gravity also changes time arrow. As I shown in first paper –K creates uncertainty
    - principal, Yukwa model is achieved but weak force equation creates mathematical probability of –k
    - or different gravitational fields.
- Strong force inertial equation is $F = \frac{(c^2 Rqm2)}{(ks^2)}$, and weak force inertial equation is $F = \frac{(c^2 R^{(1/2)} q^{(1/2)} m2)}{(ks^2)}$

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