

## Unification of Gravity and Electromagnetism

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**Abstract.** A new beginning of this paper is the ideas on unified field theory ‘ which is 9inspired by ideas on Quantum gravity. This is the formula :  $\delta\pi$  is the Gamma at (5) dimensions  $ik$  tensor notation to  $\phi$  which is the metric tensor and  $\bar{\phi}$  which is the covariant tensor using the partial derivative and it’s chain rule for both  $\phi$  and  $\bar{\phi}$  . the first metric  $\phi$  has the 2 order  $ik$  and the  $\bar{\phi}$   $jk$  ; this equals  $\Gamma(5)$  dimensions for both  $\phi$ ’s which is containing the  $\phi$  tensor  $ij$  and  $\bar{\phi}$   $jk$  order 2 Each one.  $\_$  minus  $\Gamma(5)$  dimensions  $ik$  metric  $\phi$   $jk$  divided by 2. This part now is developed from a paper in the bulliten journal and I have given the footnotes later on in the paper. L have been inspired (but not copied exactly ) einsteins unified theory and General Relativities main equations for it has inspired me and a hve a proof of it in my notes .

**Keywords.** Unification, gravity, electromagnetism

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Now I write :

Given  $f(x)' = G r/l,r$   $f(x)' G v/u,v$   $g il/gjk = 1$   $Gr/s$  gravity attraction  $Gr/r,s$  electromagnetism force attraction

$Gr/r,sgil/r + gjk/s =$  by scaling the vectors of force to equal  $= 0$   $Du,v = gil$

$\Gamma k/ijk + \Gamma k/(5)$  divided total by  $3\pi$  ;  $3\pi$  minus  $5 - \pi + 5$  gives 10 dimensions

Gravity Integrals ; integral  $J_{ab/a}$  minus integral  $J_{ab/2} = g_{ab}$  minus  $gabR/2$  ; with R being a Metric space in rubber sheet distortion of gravity . also  $G_{ab/a} + \text{Del } J_{ab/a} + 0$  scaling vector force until equality of both forces.  $\text{Del } J_{ab} = 4\pi J_{ba/a}$  ; Gamma Spaces of Gravity curvature discrete subgroups of  $G_{uv}$   
 $f(x) \pi : G_{uv} \_ \text{Gamma}/G_{uv}$  ; U contained  $\text{Gamma}/G$  is homogenous everywhere in gravity.  
 $(G, G_{aa})^{x-1} (G, \text{Gamma}) X/U = xH, vH)U$  .  $4\pi$  times  $(U/-U) \text{del } H = Hx$  G is a Lie group U is unipotent subgroup of G ; there is a U-invariant gravity attraction probability of graviton subgroup of G. also a graviton probability on  $\text{Gamma}/G$  is algebraic.  
 Proof of part of the equation of General Relativity ;  $J_{ab} 8\pi J_{ab/2} : \text{del } J_{ab/a}$  taking an integral  
 $J_{ab} \text{del } /2 = 2 \text{del } Rab - 2 \text{del } \text{del} Rab/2$  The formulas cancels the  $2 \text{del}$  from the right ;  
 Again I state clearer ;  $Rab - \text{Del } abR/2 - (R gab)/2$ . Which equals the right side of the General equation of Relativity . My proof of the right side of Einsteins field equation of General Relativity.  
 Here it is :  $\text{Gamma } u/uv + \text{Gamma } uv/u$  ; which is v being 2 and previous lower indice  $u = 1$   
 Therefore  $\text{Gamma } ik/1$  minus  $\text{Gamma } ik/2$   $u=1$   $v=2$  ; Again  $\text{Gamma } 1k/u$  minus  $\text{Gamma } ikv$   
 With  $\text{Gamma } ik$  minus  $\text{Gamma } ik/a$  therefore the right side of the field equations Einstein  
 A aspect of Unified Field Theory using tensor calculus  
 Given ;  $X/D$  is a metric space with coordinate summation system .  $D(u,v)$  greater than or equal to.  $N(x,p)$  is an intersection not equal to empty space. The  $d/dx$  of Dir equals  $G r/i, r$  Eg of  $Xg_{ik}$  equals  $g_{il} / g_{jk}$  equals 1.  $G r/r, s$   $g_{il}/r$  plus  $g_{jk}/s$  equals 1.  
 $D_{9a,b}$  equals  $D_{u,v}$  equals  $D_{uv}$  equals  $g_{il}$ .  $\text{Gamma } k/ijk$  plus  $\text{Gamma } k/(5)$  divided by  $3\pi$ .  
 $3\pi$  plus  $(5)$  equals  $14.42$  minus  $3\pi - (5)$  equals  $(10)$  Dimensions.  
 The equation of Electromagnetism  $\text{Gamma } ik$  times  $\text{Gamma } k/j - \text{Gravity warp}$  of  $\text{Gamma } ij$   $\text{Gamma } k/(11)kk$ .  
 Using scaling of electromagnetism potential and gravity warp to follow the scaling of the 2  
 Forces. Finally  $\text{Gamma } pq = \text{Gamma } 13$  is gravity warp and  $\text{Gamma } rs = \text{Gamma } 24$  Electromagnetic potential , this is curvature scaling of the 2 forces ,  
 $G_{12}g_{34} - g_{14}g_{32} = 0$  QED

Reference: Footnotes: Marina Ratner ; distribution rigidity for unipotent actions of homogenous spaces ; ferenpublication; Bulliton 1991 AMS. Subtle ios the Lord ; author Abraham Pais; pg 331 chapter; unified field theory . Clarendon Press; oxford university press ; NY 1982 .Yuval Ne'eman ; Quantum Gravity and Supergravity 1980 pg 232 ; Graviton Scattering and Supergravity ; Marco Fabbrichesi ' Italy . Einstein the Principle of Relativity Lorentz; Weyl and Minkowski.