Abstract Submitted
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Gauss Divergence Theorem and Wave-Particle Duality GREGORY LIGHT, Providence Coll — By the relation F(c, h, G, hydrogen mass) = 1 (no unit), one can set: (1) c = 1 = radius of an electromagnetic wave ball B, (2) M = mass(B) = vol(B) by adjusting h, (3) the mean divergence of the gravitational field f over B = -3 by altering G. Then by Divergence Theorem, avg(divf) (1/4) vol(B) = "pi" r-sqd f (altered J s) = the angular momentum of mass (3/4) M along the spin axis. I.e., M leaves (1/4) M as wave and (3/4) M as photon. Take the complex conjugates of Shell Equation; then the real part in linear motion must be for particle and carries (3/4) M; thus for any particle of rest mass, gamma-inv must equal (3/4), implying c/v = 1.5 (app.) and the possibility of the electromagnetic wave spinning along 2 perpendicular semi-circles with the 2 intersection points for stop for (1/2) cycle. The above wave motion can be fixed by 3 linear momentum vectors: Y and X of spin axis –Z, and Z of spin axis X. Then (X,-Z) = Pauli matrix z, thus an electron, of wave (-/+) *i* mcv (Y, X, -Z) adj(Y, X, -Z) = (-/+) *i* mcv I-(3 x 3), sharing (1/4)M. The ratio 3:1, from the factor 4/3 in ball volume, also showed in Feynman's electromagnetic mass.

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