## Abstract Submitted for the APR08 Meeting of The American Physical Society

A Quantum Theory of Gravity FRANK KEENEY, Particle Physics Research Co. — Research unexpectedly uncovered a single vector cross product potentially unifying gravity with the electromagnetic field. It has been long established the Poynting vector cross products S = EXH was responsible for inertial mass in early eras from the high-intensity cosmic radiant density background, and photons of the EH field intensities mediate the electromagnetic force. However, pursuing further, Frank Keeney, president of Particle Physics Research Co., recalled that D and B fields were also carried by photons, being uniquely inseparably connected with E and H by proportionality coefficients eo and  $\mu o$ , permittivity and permeability of space respectively, governing the speed of light equated as  $c = 1/(\epsilon o \mu o) 1/2$ . However, incorporating these factors yields a second Poynting vector cross product S = c2DXB producing matter in which D represents the electric flux density and B the magnetic flux density of the photon. Of significance, he found inspection of the cross product DXB possesses units of momentum density per unit volume filling the immensity of space. Being a non-electrostatic field, embedded in all matter and filling space as a scalar boson, Keeney postulates this long-sought governing field of gravitation, in effect unifying these two force fields. Newton's universal constant G is shown to comprise the identical momentum flux density filling space. The field structure of the spin-2 graviton is unveiled, and taking advantage of an Einstein suggestion, theorizes our cosmic background to be a vector-displacement-tensor field which defines what is "curved" in relativity's "curvature of spatial geometry" are matter displacement volumes to this specific density.

> Frank Keeney Particle Physics Research Co.

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