

Abstract Submitted  
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**Geometry + 4-potentials = Unified Field Theory** DOUG SWEETSER, non — Geometry without a potential is like a bed without a lover. The Riemann curvature tensor is only about the change in moving around the manifold, the geometry of the bed sheet. The exterior derivative of the EM field strength tensor is only about changes in the potential, isolated from geometry. In my work, changes in the potential lay on top of changes in the manifold. A covariant 4D wave equation can describe both gravity and light. The metric solution passes weak field tests of gravity and tests of the equivalence principle. At higher resolution, 0.8 microarcseconds more bending of light around the Sun is predicted than GR. Quantize using the Gupta/Bleuler method, but the scalar and longitudinal modes are the spin 2 graviton.

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non

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