

Abstract Submitted
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Lambda-renormalized Einstein-Schrodinger theory - an alternative to Einstein-Maxwell theory¹ JAMES SHIFFLETT, Washington University in St. Louis — The Einstein-Schrodinger theory is modified by including a quantization effect. The resulting theory closely approximates Einstein-Maxwell theory. In particular, the field equations match the ordinary Einstein and Maxwell equations except for additional terms which are $< 10^{-16}$ of the usual terms for worst-case field strengths and rates-of-change accessible to measurement. The theory predicts the exact Lorentz-force equation and avoids ghosts. Predictions of periastron advance, deflection of light, and time delay of light show fractional differences of $< 10^{-56}$ compared to Einstein-Maxwell theory. Other fields can be added to the Lagrangian density in a matter term which may involve the symmetric metric and electromagnetic potential, just as in Einstein-Maxwell theory. When a spin-1/2 field is added we calculate fractional differences in Hydrogen atom energy levels of $< 10^{-40}$ compared to Einstein-Maxwell theory.

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