

Abstract Submitted
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A Multiple Particle System Equation Underlying the Klein-Gordon-Dirac-Schrödinger Equations D.T. FROEDGE, Formerly Auburn University — The purpose of this paper is to illustrate a fundamental, multiple particle, system equation for which the Klein-Gordon-Dirac-Schrödinger equations are single particle special cases. The basic concept is that there is a broader picture, based on a more general equation that includes the entire system of particles. The first part will be to postulate an equation, and then, by modifying the methods of Path Integrals, develop a solution which describes the internal dynamics as well as particle interactions of quantum particles. The complete function has both real and imaginary, as well as timelike and spacelike parts, each of which are separable into independent expressions that define particle properties. In the same manner that eigenvalues of the Schrödinger equation represents energy levels of an atomic system, particle are eigenvalues in an interacting universe of particles. The Dirac massive and massless equation and solution will be shown as factorable independent components. A clear distinction between the classical and quantum properties of particles is made, increasing the scope of QM. Located at <http://www.arxdtf.org/css/system.pdf>

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