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On the Rational Continuum Mechanics of the Unified Field

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In recent author's works the argument has been made that a viscoelastic absolute medium (called the *metacontinuum*) exists and it was shown that Maxwell-Hertz equations are a straightforward corollary from the governing equations of the *metacontinuum*. Here we assume that the *metacontinuum* is actually a thin 3D hypershell in the 4D space. The “master” equation for the deflection ζ of very thin but very stiff shells is a nonlinear equation of Boussinesq type. As mentioned by Schrödinger himself the wave equation written for the real or imaginary part of the wave function is a linearized shell/plate equation. Thus the wave function in our model has a clear non-probabilistic interpretation as the *actual* amplitude of the flexural deformation. A dispersive nonlinear equation admits solitary wave solutions (solitons) that behave as particles upon collisions (called quasi-particles or QPs). We stipulate here that the material particles are our perception (*schaumkommen* in Schrödinger's own words) of the QPs of the “master” equation. We show the passage from the continuous to the discrete Lagrangian of the centers of QPs and introduce the concept of (pseudo)mass. The membrane tension results into an attractive (gravitational?) force acting between the QPs.