

# Proton Dynamics, Inside and Out

## Functions of the Degree of Quantized Spacetime Curvature

JAMES E. BEICHLER

jebco1st@aol.com

**Abstract.** Science does not progress by proposing new theories to replace old theories that are successful unless there is some compelling reason to replace the older theories. Today, the best of all reasons is unification, but then quantum theory is also failing to live up to the hype that the Standard Model provide a ‘theory of everything’ which implies that physics must look elsewhere for unification. The Standard Model cannot just be thrown away because it still has, despite its many failures, far too many successes to be entirely wrong. Then again everyone knows that new theories must incorporate and explain the successes of older theories before they can replace those older theories. In the early twentieth century, the reason for developing the newer quantum and relativity theories only became obvious after the new theories were developed. They were not obvious before or during the time that they were being developed, and then they seemed to, but did not actually, emerge as answers to specific crises in physics. Within this context, the failures of the Standard Model imply that relativity theory merge with quantum mechanics and the Standard Model, but then quark particles and dynamics as well as other large parts of the Standard Model would become a casualty of a new quantum conundrum, *i.e.*, the inability of physicists, scientists in general and philosophers to pinpoint the true meaning of the quantum. Instead, physicists must find the true meaning of the quantum to unify physics under one single paradigmatic theory, which has been accomplished with the single field theory (SOFT). Given the SOFT model of particle creation, protons are not made of quarks as is claimed in the Standard Model of quantum theory. Quarks are not particles at all, but rather the internal three-dimensional stress-structure of protons and neutrons as well as some temporary pseudo-particles. Other particles predicted by the Standard Model are just mathematical artifacts of an over-rigorized mathematical systems used to make calculations and others that have been detected are just intermediate three-dimensional energy states or four-dimensional single field density resonances that occur during real particle creation that fulfill at least one or more, but not all, of the geometrical and quantum conditions for real particle creation. Therefore, they destabilize rapidly and decay into real particles and/or gamma rays. Quarks are another question altogether. The misinterpreted evidence supporting the reality of quarks is only detected during high energy collisions because specific geometric and quantum conditions have been reached for their detection, but they are not real particles which can exist independently outside of the real particles that they constitute and can be easily explained by SOFT. The rest of the internal dynamics of the proton, including how they interact with neutrons within nuclei, is just as simple to explain, including an explanation of Newton’s gravitational constant and the calculation of its value from fundamental principles, while the external dynamics, including both pair production and mutual annihilation, are just as easily explained. When all of this is done, a complete model of the atom based on the quantized curvature of space-time, including both the external electronic shells and internal structure of the nucleus, logically follows.