Critical Empirical Validation of the 'Computational Unified Field Theory' (CUFT) vs. Quantum & Relativistic Models

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Abstract. The principle contradiction that exists between Quantum Mechanics and Relativity Theory constitutes (most likely) the biggest unresolved enigma in modern Science; Hence, the quest for an appropriate "Theory of Everything" (Brumfiel, 2006; Ellis, 1986; Greene, 2003)has become one of the "hottest" topics in 21st Physics, but none of the candidate 'TOE' models (including: String Theory, Quantum Gravity and others) received any satisfactory empirical validation. In contrast, a new hypothetical 'Computational Unified Field Theory' (CUFT) was discovered over the past three years (Bentwich: 2012 a & b, 2013 a & b, 2014 a & b) shown capable of resolving the key theoretical inconsistencies between quantum and relativistic models. Moreover, the CUFT has identified three "differential critical predictions" which differentiate it from both Quantum and Relativistic models (Bentwich 2012b). In the current chapter, an empirical validation of the one of these three 'differential critical predictions', namely: findings associated with the "Proton Radius Problem" (Bernauer & Pohl, 2014) gives unequivocal support for the CUFT - i.e., as opposed to both Quantum and Relativistic models! As such, the empirical validation of the CUFT differential critical prediction may point at a 'Paradigmatic Shift' in Science from the current Quantum-Relativistic ('Self-Referential Ontological Computational', 'SROCS') computational structure to a higher-ordered CUFT theoretical framework (based on the operation of a singular 'Universal Computational Principle').