Geometric Clifford Algebra and Quantum Interpretation of the Proton's Anomalous Magnetic Moment

Michaele Suisse and Peter Cameron*
Strongarm Studios
Mattituck, NY USA 11952

(Dated: July 1, 2016)

The role of the anomalous moment in the geometric Clifford algebra of proton topological mass generation suggests that the anomaly is not an intrinsic property of the free space proton, but rather a topological effect of applying the electromagnetic bias field required to define the eigenstates probed by the magnetic moment measurement [1]. Quantum Interpretations try to explain emergence of the world we observe from formal quantum theory. This variant on the canonical measurement problem [2] is examined in the larger context of Quantum Interpretations [3].

submitted to Spin '16, http://www.indiana.edu/~spin2016/

[1] P. Cameron, "Impedance Representation of the S-matrix: Proton Structure and Spin from an Electron Model", submitted to SPIN16. Also available at http://vixra.org/abs/1605.0150

[2] P. Busch and P. Lahti, "Measurement Theory", Compendium of Quantum Physics: Concepts, Experiments, History, and Philosophy, p.374-379, Springer (2009)

[3] M. Suisse and P. Cameron, "Quantum Interpretation of the Impedance Model", accepted for presentation at the 2014 Berlin Conference on Quantum Information and Measurement. Available at http://vixra.org/abs/1311.0143