

Abstract Submitted
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The Calculated Value of the Fine Structure Constant From Gravitational Potential D.T. FROEDGE, Formerly Auburn University — In previous presented papers, we have postulated a relation between the gravitational potential and the Fine Structure Constant, (α) necessary for the validity of those papers. In this paper will explore the absolute magnitude of α in regard to the cosmological induced potential generated by the total mass in the system. Although the value of the Fine Structure Constant is known to a very high precision, current QM and GR do not offer an explanation for the value, and it must be determined experimentally. Extremely precise relations between α and the Gyromagnetic ratio make this possible. (.7ppb) This paper offers an explanation of, and calculates the value, within the error bars, of current of experimental data. Since there is a temporal variability predicted in α , and because of the current precision of measurements of α , a test of the change predicted by this conjecture is possible.. <http://www.arxdtf.org/css/alpha.pdf>

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