

Abstract Submitted  
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**Boundary Conditions of Gravity** SHANTILAL GORADIA, Retired —

Our quantum mechanical derivation of the strong coupling using modified Newtonian inverse square logic in (1) and the fine structure constant (ALPHA) using Boltzmann expression in our book (2) come close to Einstein's 1919 paper merging nuclear force with gravitation and retracting his cosmological constant. Its conflict with the inflationary aspect of the universe can be reconciled with the possibility that the light coming from the receding galaxies follow a curvilinear path increasing in length due to its ever increasing curvature without receding only in the radial direction. In (1), we implicitly show gravity as nothing but the cumulative effect of quantum mechanical forces, making  $G$  vary at different locations in the universe. The subsequent effects of gravitational variation would be on the curvature of the paths of the geodesics they create. Further investigation along these lines is warranted as we do not have unification, evidence of graviton, quantum gravity or anything else very concrete after a century of hard work. Strong coupling and ALPHA may be the boundary conditions of gravitational constants.

[1] Newtonian Gravity in Natural Units, Journal of Physical Science and Application 2 (7) (2012)265-268.

[2] Quantum Consciousness - The Road to Reality.

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