



SDI EDITORIAL COMMENTS FORM

EDITORIAL COMMENT'S on revised paper (if any)	Authors' response to editor's comments
<p>The authors have just presented equations!!!. To value the work the authors must:</p> <ul style="list-style-type: none"> - Abstract: to be revised according to the results obtained in the field. - Introduction: clarify the context and problems of work. - Equations: based on diagrams, specify the basic equations and contribution of the authors in the field, - Results: no results are presented. Authors must present results, curves, data, tables.... Then, analyze them by specifying their contributions. - Conclusion: from the results, present just the contribution of the authors. 	<p>Respected sirs,</p> <p>Modified Abstract:</p> <p>When heavenly bodies are made up of tiny atoms, it is imperative to find the correlations that might exist among 'atoms' and 'heavenly body' as whole. In this context, by considering three virtual gravitational constants assumed to be associated with the three atomic interactions i.e. (electromagnetic, strong and weak interactions) and by considering four basic semi empirical reference relations pertaining to the four gravitational constants, a bold attempt is made to estimate the Newtonian gravitational constant (G_N). Its fitted and recommended values are $6.679855 \times 10^{-11} \text{ m}^3/\text{kg}/\text{sec}^2$ and $6.67408 \times 10^{-11} \text{ m}^3/\text{kg}/\text{sec}^2$ respectively and error is - 0.08653%. As current unification paradigm is failing in estimating (G_N) from atomic and nuclear physical constants, our work can be recommended for further study.</p> <p>Modified Introduction:</p> <p>To estimate the value of G_N in a theoretical approach, we would like to suggest the following points.</p> <ol style="list-style-type: none"> (1) As there is a large gap in between nuclear and Planck scales, with currently believed notion of unification paradigm, it seems impossible to implement gravity in atomic, nuclear and particle physics [1]. (2) In a unified approach, one can see a great initiative taken by J. E. Brandenburg [8]. (3) G_N is a man created empirical constant and is having no physical existence. Clearly speaking, it is not real but virtual. For understanding the secrets of large scale gravitational effects, scientists consider it as a physical constant. (4) In the same way, each atomic interaction can be allowed to have its own gravitational constant [9-15]. (5) With further study, their magnitudes can be refined for a better fit and understanding of the nature. <p>Equations: We want this paper to be a SHORT COMUNICATION. For further details, we sincerely request to see our detailed paper to be appeared in Mapna Journal of Sciences, Christ University, Bangalore, India. (Title: On the role of four gravitational constants in nuclear structure).</p> <p>Modified Conclusion:</p> <p>Current unification paradigm is failing in developing a 'practical unification procedure' [1]. Even though our approach is speculative, role played by</p>



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	<p>the four gravitational constants seems to be fairly natural. This kind of approach may help in producing a variety of such relations by using which in near future, an absolute set of relations can be developed. Proceeding further, estimated absolute theoretical value of G_w can be considered as a standard reference for future experiments. By implementing the four such gravitational constants in String theory models, it may be possible to explore the hidden unified physics. With further study, a practical model of materialistic quantum gravity can be developed and magnitude of the Newtonian gravitational constant can be estimated in a theoretical approach bound to Fermi scale.</p>
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