

Review of: "Quantized Newton and General Relativity Theory"

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Potential competing interests: No potential competing interests to declare.

Report on Manuscript "Quantized Newton and General Relativity Theory"

By: Espen Gaarder Haug

After historical and dimensional arguments, the author connected G and M with some composite forms by solving the Planck length formula for G and the Compton wavelength formula for M . The author put them in the gravitational equations and write those equations in terms of Planck units. He then concluded that this leads to quantum gravity, "...so this can indeed be seen as the quantization of gravity." or "Our approach has led to a quantized theory of gravity that is consistent with both Newton's theory and general relativity."

The paper is interesting, relatively well motivated and therefore it deserves publication after the following points are addressed:

1. In my view, quantization of gravity is far from being just a dimensional analysis. The author should clarify that what is quantum gravity in his view. How his approach is connected to, for instance, quantization of spacetime.
2. In equation (21), the constants G and M in the Schwarzschild metric are replace by their composite forms. How this approach is related to the singularity problem in the Schwarzschild metric. Can this approach resolve the problem?
3. How this approach is applied to the Robertson-Walker metric? Can this methodology remove the initial singularity in the standard cosmology.