

Review of: "Quantized Newton and General Relativity Theory"

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Potential competing interests: No potential competing interests to declare.

A significant paper. Analyzing this paper using a quantity (defined by Maxwell [on page 1 of ref 7] as the product of a numerical value and a unit) to represent any parameter is helpful to this reviewer. This paper develops that the product of Compton frequency (c/lambda) of a specific mass and Planck time is the gravitational quantity, where the Compton frequency is one quantity and the Planck time is another quantity. This emphasizes Planck time as an independent reference quantity which is a slightly different interpretation than the author provides. The author identifies G is a conversion factor that converts the numerical value of a mass quantity when different mass units are applied. The author then identifies (Table 2) that the Compton frequency and Planck time also applies in general relativity theory. As one reviewer has already noted, this approach appears to be new.

In support of Planck time as the quantification of gravity which appears to unify Newton's theory and general relativity, another paper on Qeios (my own) develops that the quantification of the unit of a measurement result quantity (in theory or empirical) is the calibration state of a measurement apparatus (the smallest possible state of the measurement apparatus) relative to a reference quantity. This new measurement paradigm is shown to unify metrology and quantum measurements.

One interpretation of the two papers: The units of any quantity are fundamentally (ignoring noise and distortion) quantified by the smallest possible state. Then a Planck quantity (with the base units: time, mass, length, temperature) is the limit of the precision of a unit (which may be a product of multiple base units) of a parameter defined relative (in theory or empirical calibration) to a reference quantity (i.e., standard) or factor thereof. This basic understanding of the quantification of a unit of a quantity appears to be a way to unify all of known physics.

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