

1.0 Abstract

In “The Aether Found, Discrete Calculations of Charge and Gravity with Planck Spinning Spheres and Kaluza Spinning Spheres” (1), it was shown that spinning spheres can unite the gravitational and electromagnetic force with spinning spheres. The equation 2, developed in “The Aether Found, Discrete Calculations of Charge and Gravity with Planck Spinning Spheres and Kaluza Spinning Spheres” can be used to predict a potentially more accurate value of Planck's constant. The following paper shows a predicted range of Planck's constant at one sigma for Planck's constant using the Codata values for the fundamental physical constants at each publication since 1969.

2.0 The Equation for Charge

$$\text{Equation 2.0 (1)} \quad q^2 = T\pi^3hc\varepsilon(Me) / 2Mn$$

Where q=elementary charge, h=Planck's constant, ε =dielectric permittivity, c=speed of light, Me=Mass of the Electron, Mp=Mass of Proton, and Mn=Mass of Neutron, and T is defined below.

$$\text{Equation 2.1} \quad T^2 = \frac{((Mp - Me)^2 + Mn^2 + Mn^2)}{Mn^2} \quad (1)$$

Equation 2.0 can be solved for Planck's constant “h”

$$\text{Equation 2.2} \quad h = \frac{2Mnq^2}{T\pi^3c\varepsilon(Me)}$$

3.0 Calculation of Planck's Constant

Codata year	Planck Constant Equation 2.2	Planck Constant Codata (2)
2014	$6.6260701589(876) \times 10^{-34}$	$6.626070040(81) \times 10^{-34} \text{ J s}$
2010	$6.626069694(294) \times 10^{-34}$	$6.62606957(29) \times 10^{-34} \text{ J s}$
2006	$6.626069048(335) \times 10^{-34}$	$6.62606896(33) \times 10^{-34} \text{ J s}$
2002	$6.62606940(116) \times 10^{-34}$	$6.6260693(11) \times 10^{-34} \text{ J s}$
1998	$6.626068833(699) \times 10^{-34}$	$6.62606876(52) \times 10^{-34} \text{ J s}$
1986	$6.62607758(254) \times 10^{-34}$	$6.6260755(40) \times 10^{-34} \text{ J s}$
1973	$6.6261578(441) \times 10^{-34}$	$6.626167(38) \times 10^{-34} \text{ J s}$
1969	$6.626026(108) \times 10^{-34}$	$6.626186(57) \times 10^{-34} \text{ J s}$

Note☺ All values calculated above for Planck Constant Equation 2.2 are taken from (2) Codata.

4.0 Discussion

The predicted values of Planck's constant using equation 2.2 always predict a value that is within one sigma of the 2014 value and within 3 sigma, or better, of the codata value. Although this does not prove that equation 2.2 is correct, the values predicted leave open the possibility that the equation could be correct. It does seem that the values for Planck's constant calculated from equation 2.2 leads the way to the next more accurate number for Planck's constant.

5.0 References

- 1 <http://vixra.org/pdf/1403.0502v6.pdf>
- 2 <http://physics.nist.gov/cuu/Constants/index.html>