Nested Spinning Spheres Theory of the Cuboctahedron Aether Prediction of the Planck's Constant using the Fundamental Physical Constants including the Rydberg Constant
Author Michael John Sarnowski

1.0   Abstract

In "Calculation of the Planck Constant" (1), an alternative method for calculating the Planck constant was derived using the Rydberg constant. In table 2, the Planck Constant is calculated for each year of the Codata publication of the fundamental physical constants.

2.0   The Equation for Planck's Constant

The equation for Planck's Constant, developed in "Calculation of the Planck Constant"(1)

Equation 4.0 (1) $h = \dfrac{T^2 \pi^6 c Me^3}{32 Mn^2 R}$

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

Equation 2.1

$$T^2 = \left(\frac{1}{\sqrt{1-\left(\frac{\pi Me}{3*3Mn}\right)^2}}\frac{Mp-Me}{Mn}\right)^2 + \left(\frac{1}{\sqrt{1-\left(\frac{\pi Me}{3*3Mn}\right)^2}}Mn/Mn\right)^2 + \left(\frac{1}{\sqrt{1-\left(\frac{\pi Me}{3*3Mn}\right)^2}}Mn/Mn\right)^2 \quad (2)$$

3.0   Calculation of Fine Structure Constant

Codata year	Planck Constant Equation 4.0	Planck Constant Codata(3)	Ratio of Equation 4.0 to Codata value
1969	6.6265067686E-34	6.62618600000E-34	1.00004840924.E+00
1973	6.6261855655E-34	6.62617600000E-34	1.00000144360.E+00
1986	6.6260747234E-34	6.62607550000E-34	9.99999882796.E-01
1998	6.6260688660E-34	6.62606876000E-34	1.00000001600.E+00
2002	6.6260693566E-34	6.62606930000E-34	1.00000000855.E+00
2006	6.6260690218E-34	6.62606896000E-34	1.00000000933.E+00
2010	6.6260695752E-34	6.62606957000E-34	1.00000000079.E+00
2014	6.6260700408E-34	**6.62607004000E-34**	1.00000000012.E+00

Table 2.0 Planck constant table.

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4.0   Discussion

The predicted values of Planck's Constant close are close to the limits of the Codata value. Although this does not prove that equation 4.0 is correct, the values predicted leave open the possibility that the equation could be correct.

5.0 References

1 http://vixra.org/pdf/1407.0148v2.pdf
2 http://vixra.org/abs/1507.0128
3 http://physics.nist.gov/cuu/Constants/index.html
4 http://vixra.org/pdf/1502.0193v2.pdf