Only Planck constant is fundamental constant?

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Abstract

Arguments in favor of the uniqueness of Planck's constant are presented.

There is a discussion between L. B. Okun, G. Veneziano and M. J. Duff, concerning the number of fundamental dimensionful constants in physics (physics/0110060). They advocated correspondingly 3, 2 and 0 fundamental constants. Here we consider this problem on example of the effective relativistic quantum field theory, which emerges in the low energy corner of quantum liquids and which reproduces many features of our physics including chiral fermions, gauge fields and dynamical gravity.

Own point of view on this problem.

Only one fundamental constant is Planck constant $h=6.626\times10^{-27}\text{erg sec}=6.626\times10^g\text{sm}^2\text{sec}^{-2}$

Its dimension is change synchronously

Arguments:

1. Only 2 constant $G$ and $h$ included in Triade $M\;L\;T$ dimensions, because $c$ speed of light not contain $M$.

2. Doubts about Planck units

We doesn't now $G$ depend from $c$ and vice versa

Imagine that $G$ and $c$ changed synchronously.

But we calculating

1. Schwarshild radius formula $G/c^2$

2. Planck unit of length $G/c^3$

3. Planck unit of time $G/c^5$

4. Planck unit of mass $G/c$

What is right ratio? .

Only #4 linear link between $G$ and $c$ is real....

And #1,2,3 are fake that only teasing physicist

3. Comparing $h$ an $G$ dimensions.
G = 6.672 \times 10^{-8} \text{ sm}^3 \text{g}^{-1}\text{sec}^{-2}

G = M^{-1} L^3 T^{-2}.

h = 6.626 \times 10^{-2} \text{ gsm}^2 \text{sec}^{-1}

h = M L^2 T^{-1}

h more simple  h = M L^2 T^{-1} because contain only 1. 2D vs 3D 2. sec^{-2} vs sec^{-1}

h appears more simple.

The final cautious conclusion that there is Planck's constant is a 2-dimensional surface of positive curvature in the case of fermions and a 2-dimensional surface of negative curvature in the case of bosons.[1]

This is consistent with Pauli's principle. This is consistent with Pauli's principle.

Reference

1. https://vixra.org/abs/2107.0114