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THE VOLUME OF PLANCK'S MASS

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(54) see paper two : $\rho_m = 8{,}928.10^{-4}\ .T^2/l_c$

and

(55) : $m = 8{,}928.10^{-4}\ .V.T^2/l_c$

ρ_m : density of mater under pressure of gravity m/V , V: volume

T : temperature , l_c : some radius of the body(?) , electromagnetic length , length in Coulomb law

I test the GUT constants

$m_{plank} = 2.17671x10^{-8}.kg$, $\lambda_{planck} = 1.61605x10^{-35}.m$, $T_{plank} = 1.416x10^{32}.Kelvin$

$V= \theta_v.\ \lambda_{planck}^3$, θ_v : coefficient of Volume , in sphere $\theta_v=(4/3)\pi = 4.1888$

Result : $\theta_v=4.656$

1. As we can see planck's mass has a volume close to the sphere , but the coefficient is bigger , like planets and stars caused by angular momentum .

2. The next very important result is that we have an answer to the question of the radius of the body. The radius of the body is l_c

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In the first paper , paper one , I used in the density of mater and density of electric charge , a volume with the simple form l^3 .

The form of volume as a cube is used in a differential. After all metrical analysis, we see that the constants and functions are in force in the macro cosmos like the sun and the micro cosmos like the atom. So we must replace the symbol ρ_c with $\theta_v^{-1}\rho_c$.

For the sphere $\theta_v^{-1}\rho_c = Q / (4/3)\pi.\ l_c^3$, Q is the electric charge .

So

We must start with function (25) and in (30) ρ_m must replace with $\theta_v^{-1}\rho_m$.

Very important is 31 function, which must be $t_c = K_e.m.\ \theta_v^{-1}\rho_c$

(38) we already wrote in another article that we must change $\rho_{c\lambda}=Q/\ \lambda.l_c^2$ with ρ_c and now with $\theta_v^{-1}\rho_c$.

also (55)-(56),(59)-(63) : $G = 2\pi.K_e^3.(E_c^2/\ l_c^2).\alpha^2.\beta^2.\ \theta_v^{-2}$ and we continue until (73)

$2\pi.\alpha^2.\beta^2\ .\ \theta_v^{-2} = (\ h^2.c^2.G\ /\ K_e^3.\ k_{bl}^{\ 4}).(\ (n_1/n_2)^{-6}.N^{-6}/T^4)$
and (77) ,(78) : $2\pi.\alpha^2.\beta^2\ .\theta_v^{-2} = (n_1/n_2)^{-6}.N^{-6}.\pi^{*4}/\ T^4$

5.1.b) $\alpha^2.\beta^2\ .\theta_v^{-2} = (\ h^2.c^2.G\ /\ K_e^3.\ k_{bl}^{\ 4}).(\ (n_1/n_2)^{-6}.N^{-6}/T^4)$

(86) is the same with (78) and (93) ,(94) we replace $\rho_{c\lambda}$ with $\theta_v^{-1}\rho_c$ and (96) we can delete θ_v^{-1}

$2\pi.\beta^2\ \theta_v^{-2} = (G\ /\ K_e^{\ 3}.m^{\ 2}).(l_c^{\ 6}/\ \theta_v^{-2}\ Q^{\ 2})$

(97)-(104) are the same , so 102 will be

$T = (n_1/n_2)^{-3/2}.\ N^{-3/2}.1{,}085\times10^{16}.Q/l_c$ (102) new

Paper two, paragraph 6, density of mass

(44) must be : $\beta\ \theta_v^{-1} = (n_1/n_2)^{-3}.N^{-3}.\pi^{*2}.k.l_c/(2\pi)^{\ 1/2}.\varepsilon_0.T^2$

(45) – (47) must change and (50) , (51) must be :

5.1a $t_c = k/\beta = 1{,}285.10^{-12}\ .\ T^2/l_c$ and $t_c = 3{,}222.10^{-12}\ .\ \theta_v^{-1}\ T^2/l_g$

5.1b $t_c = k/\beta = 0{,}512.10^{-12}\ .\ T^2/l_c$

$t_c=K_e.m.\rho_c\ \theta_v^{-1} = K_e.\rho_m\ \theta_v^{-1}.e$

in (52) function θ_v^{-1} modify ρ_m to $\rho_m\ \theta_v^{-1}$ so (54) (55) ρ_m is the real density of mater m/V , $V= \theta_v.l^3$.

END