## GENESIS COMPLETED! THE STEADY STATE QUBIT UNIVERSES

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#### Abstract

Genesis, the creation of our cosmos in six times 24 hours with one day rest by super massive black holes, white radiators having a crossing time for the light speed over the event horizon of about 24 hours, can be derived by group symmetric considerations based on Monster symmetry. The age of our cosmos seems to be 13.7 billion years as a representation of the omega condition breaks down in:

as observed  $(24^3 \text{ x} \sqrt{2 \text{ x6}})^2 = (1.173005 \ 10^5)^2 = 1.375941 \ 10^{10}/1.002453^2 = 1.3692 \ 10^{10} \text{ yrs or:}$  $1.375941 \ 10^{10} \text{ x} \ 1.002453^2 = 1.383 \ 10^{10} \text{ yrs}$ 

The cubic power of 24 hrs represents two dark matter black holes accelerated in opposing directions to an end velocity of  $\sqrt[1]{2}$  c in a time sequence cycle of six of those cubes. The ratio 1.002453 is a genuine deviation derived from the symmetry number of the Monster. The time sequence cycle is repeated till the overall mass of the universes has been reached.

The day of rest represents the formation of a super massive white radiator, black hole as remnant in present-day galaxies. Given by:  $24 \times 6 = 144 \times \sqrt{4/3} = 166.2768$  hrs or  $7 \times 24 = 168$  hrs. The  $24 \times \sqrt{4/3} = 27.7128$  hrs is the expansion time needed for the formation of the ultra fast and ultra light mediating medium having an maximum momentum of (½ c) effective due to acceleration to the end velocity to ½  $\sqrt{2}$  c.

The alpha condition or the inflationary period of our cosmos, the onset in opposing time symmetries confirms the initial state of the Big Bang for the group symmetry Monster number, a compacted state for neutrons having an imaginary macro mass in the order of Jupiter with event horizon of one metre. The so-called inflationary period, alpha initial condition, lasted for 768 yrs times 2 due to the fast mediation medium. All massive white radiators as macro quantum states were released during that period. See <u>final scaling of Genesis</u>

### Par 1 Summary

The general conclusion is that the universes are in a steady state with time going to infinity due to the dark matter contained between the begin and end condition of the steady state for mass energy of the universes. Further the universes are solely subjected to the *weak gravity condition* for the proton and electron or the anti matter state, both consisting of a normal and conjugated states. The binary string of the electron in qubits per metre as the reciprocal of the Compton length corresponds to the number of super massive black holes at the onset of our cosmos. This final scaling exercise confirms the validity for the dynamic steady state of the universe. *See overview par 6*.

In this article it has been shown that our cosmos is the absolute dynamic steady state having a begin and end condition for its Creation. In the reality of the laws of physics one can expect only to analyse along the line of two extreme hypotheses. Either the mass points and /or the electric charge are static objects or these objects have internal dynamics. Consequently, one may come to the conclusion that our cosmos should be in a steady state having an initial, alpha, and an end condition, omega. No other combination between these two extreme hypotheses seems to be possible.

Obviously the approach for 'static matter' is currently accepted in present day theoretical physics based on general relativity theory and quantum mechanics with still electric charge as a static state. The dynamic physics having no static states for the electric charge and the determination of rest mass for matter as an internal dynamics, is treated in this article.

In short one finds the following paragraphs:

- Par 1 For those who are not familiar with the discussion in *ref 4*, the paragraph is repeated.
- Par 2 The end or omega condition of the dynamic steady state universes.
- Par 3 The genuine deviations for the Monster symmetry

Par 4 The initial or alpha condition for the dynamic steady state universes.

Par5 The super massive WR /BH are to be possible under the weak gravity condition based on Lamb's shift of the hydrogen atom. This paragraph is finally complete with respect to the same one in *ref 4*.

# Par 1 Introduction and discussion, the flywheel universes

In *ref 2*, for the derivation of the cosmic energy balance by dark matter in our cosmos an important final conclusion was not made, mainly for reasons of oversight by not understanding all implications. Namely the question: can Lorentz' space observed by Hubble's red shift between galaxies, still be based on the simultaneous condition of events between these galaxies? In other words is time in our cosmos absolute? The answer is, if no mediating medium between atoms exists then empty space complies to Lorentz space as a final state of our cosmos because of the existence of the Big Bang as the onset for the universe. In case of a mediating medium for exchange between atoms especially attuned to gravity generation then by maintaining the onset of the Big Bang as initial condition, then the gravity generation should be weak never exceeding Lamb shift magnetic string conditions for baron cluster coherence for the state of dark matter rigid rotor in any macro mass. The utmost weak gravity generation is by the 21 cm magnetic strings, quanta of Lamb shift per atom, put in series forming the coherence cluster cells as the momentary state of the rigid rotor. While Lamb shifts put in parallel represent most likely degenerated coherent dark matter of two dark matter states in conjugation, most likely the magnetic coherence of extreme magnitude close to a black hole condition of a macro mass. See *ref 4* 

The weak gravity condition for the Big Bang determines that Newton's Law of gravity is always valid and that our cosmos knows the creation of absolute time as a consequence of a zero point in time. Returning to ref 2, the mediating dark matter energy balance shows the radial distribution of ½ c<sup>2</sup> and <sup>3</sup>/<sub>4</sub> c<sup>2</sup> rotation by dark matter distribution, blind energy, for the mediating medium suggesting the universe behaves as a flywheel. Then again, the idea of a flywheel universe by the mediating medium determines that Hubble's red shift between galaxies is not a 'Lorentz' space condition but a consequence of mediating dark matter expansion driving the galaxies in a time direction due to gravity attuned solely by one kind of barons, while the anti barons or anti protons and positrons as antimatter accelerate in an opposite time direction. Note, the pseudo vector theory also allows the conjugated condition of matter and antimatter, the electric charge swap, because there are four independent pseudo  $\tau$ - neutrinos for the protons, and four pseudo  $\mu$ -neutrinos, for the electrons while with the neutrons a mixture of both, the four independent e-pseudos neutrinos are for the mediating medium. See ref 2 and ref 4. So as a conclusion, Hubble's red shift is a consequence of the driving mediating medium by dark matter and not a consequence of extreme 4D time space contraction resulting in a Lorentz space history of empty space. In other words "Lorentz space" is absolute in time in the distribution of baron matter but in a steady state, dark matter cannot disappear from the Hubble's event horizon, the time history of the universe is absolute and eternal and perhaps changing ever so slowly. An extreme far away galaxy has the same present-day evolutions of stars and planets as the ones in our own Milky-way.

The concept of absolute time already appeared in  $ref\ 1$  for the derivation with Planck's parameters,  $\lambda_{pl}$  and  $m_{pl}$  as consequence that both values do not agree to the cycle time of Monster group symmetry for dark matter solely. Planck's parameters are photon states, not adhering to any dark matter events, due to quantum mechanics interactions between atoms or subatomic particles and a consequence of the above mentioned extreme pseudo vector neutrino interactions. Therefore these Planck deviations determine the distinction between the exact cycle time by the Monster symmetry, of 13.7 billion light years or 13.8 billion as observed and the infinite time due to the deviation of Planck's length. So as the outcome of the derivation in  $ref\ 1$ : if time is absolute then the number of Monster cycles will be forever unknown to us which seems to confirm the flywheel state as the absolute steady rotation state of our cosmos.

Indirectly ref 1 and ref 2 carry already the inkling of information for the inflationary period of the universe. In ref 2 the substitution angle between radial and rotational energy of the dark matter medium is derived as close to  $60^{\circ}$  or  $58^{\circ}$  giving  $\cos 60^{\circ} = \frac{1}{2}\sqrt{3}$  while relativistic mass parameter m/m<sub>o</sub> = 2 for  $\beta = \frac{1}{2}\sqrt{3}$  is pointing to the neutron state of decomposition of about two with respect to the hydrogen atom. The neutron is 1838.684 and the proton is 1836.153 times the electron mass. The mediating medium of ultra fast and light pseudo neutrinos never exceeds m/m<sub>o</sub> =  $\sqrt{4/3} = 1.157400$  for  $\beta = \frac{1}{2}$  at maximum effective momentum ( $\frac{1}{2}c_{eff}$ ). It determines the angle of  $60^{\circ}$  by the neutron decomposition over the entire period of inflation or dark matter generation shown up in the final state of the steady rotation given by the cosmic energy balance of our cosmos. Further the weak gravity condition confirms the article of M.A. Thomas for conformal gravities as the initial state for the universe better known as the inflationary period. Ref Thomas. See ref 5 for the explanation of the substitution angle.

Par 2 The omega condition or end condition of the steady state universes

The end condition of the universes is the same and determined by the line density given by the quotient of Planck's mass over Planck length:  $m_{pl}/\lambda_{pl} = c^2/G = 1.346685 \ 10^{27} \ kg/m$  The quotient also determines the overall mass of the universes of  $M_{tot} = L_{coh}^2$  with  $L_{coh}$  the coherence length of the universes.

Namely: 
$$M_{\text{tot}}/L_{\text{coh}} = m_{\text{pl}}/\lambda_{\text{pl}}$$
  $M_{\text{tot}} = L_{\text{coh}}^2 = (1.346685 \ 10^{27})^2 = 1.813560 \ 10^{54} \ \text{kg}$ 

Simultaneously  $L_{coh}$  of the universes is composed of an imaginary Jupiter mass with an event horizon of 1 metre giving  $M_{tot}$  and consisting of the same number for the 1.35  $10^{27}$  J- masses. Divide the J-mass by the neurons rest mass. The J-mass =  $L_{coh}$  = 1.346685  $10^{27}$  kg.

The J-mass in kg has the same number as  $L_{\text{coh}}$  in metres given as work for reasons that the neurons are all accelerated in one direction, the direction of time with respect to one kind of barons, the neutron.

So  $1.346685 \ 10^{27} / (1838.684 \ m_e) = 8.0405 \ 10^{53} \ neutrons$   $m_e = 9.109 \ 10^{-31} \ kg$ . Compare to the Monster symmetry number of  $M_o = 8.0801735 \ 10^{53}$  giving deviation of

 $1.004922 = 1.002458^2$ . The deviation should be the genuine monster deviation of 1.002453, see the following paragraph, par 3.

*Definition:* There are four kinds of baron neutrons: normal conjugated and normal and conjugated anti neutrons for three perpendicular crossing paired time axes. One pair has normal matter to antimatter and the crossed time pair should also have matter and antimatter. A paired time axis in opposition comprises two universes of opposing states of matter. At first it was thought a crossing paired was the conjugated state of matter to us but the jump or line transformation determines an initial conjugated state of matter which due to inverted group symmetry decomposes into the well known state of baron matter for any of the universes. See Par 5.1

Next the overall mass is related to the Monster symmetry number  $M_o$  as a ratio with  $M_o$  'seen' as mass:

$$M_{tot}/M_o = 1.81356 \ 10^{54}/8.080174 \ 10^{53} = 2.244456$$

Meaning  $M_o$  as a group symmetry number and has to be a number for the classes of symmetry, being one time a mass and otherwise belonging to a length as  $L_{coh}$ .

The other end condition is Hubble's distance  $R_{\rm H}$  of 13.7 billion light years. This distance also determines the travelling of light, electromagnetic waves to 'cross' our cosmos.

1 lyr = 9.45859 
$$10^{15}$$
 m  $R_H = 1.295826 10^{26}$  m with  $L_{coh}/R_H = 10.39248$   
Both  $L_{coh}$  and  $R_H$  are event scaling according to Einstein's BH rule:  $\lambda$  c<sup>2</sup> = G M

The factor 10.39230 or 10.38248 suggests that at least ten paired universes are involved for the group symmetry puzzle with 10 as group symmetry integers. So the mass of our universe is:

 $M_{univ} = M_{tot} / 10 = 1.813560 \ 10^{53} / 1.039230 = 1.7451 \ 10^{53} \ kg. \ 1.039271 \ instead of 1.039248 \ due to previous calculation. More exact seems:$ 

$$\sqrt{48} = 6.928203$$
 and  $1.5 \times 6.928203 = 10.39230 = (\sqrt{1728})/4$ .

In case of taking the age of universe as the end condition, the 13.7 billion years are related to the begin or alpha condition for the universes:

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(24^3 \text{ x } \sqrt{2} \text{ x6})^2 = (1.17300 \ 10^5)^2 = 1.375941 \ 10^{10} / 1.002453^2 = 1.3692 \ 10^{10} \text{ yrs or}
And as observed 1.375941 \ 10^{10} \text{ x } 1.002453^2 = 1.383 \ 10^{10} \text{ yrs}
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One year converted into hours is:  $24 \times 365.25 = 8766$  hrs. It represents the orbital location of Earth based on the velocity of light of c, while  $360 \times 24 = 8640 = 5 \times 1728$  with 1728 the ratio of the quark complex for barons, protons or neutrons to the rest mass of the electron. The electron is the unit rest mass for any particle or sub particle state. Treated in the following paragraph is the deviation of 8766 / 8640 = 1.014583 as the genuine metric deviation.

Par 3 Group symmetric barriers scaled as genuine deviations normalised to about 4%

The symmetry exercises with the Monster symmetry number reveal the genuine ratios, these are: The monster deviation itself, the metric deviation and the pyramid deviation between equilateral and cubic pyramid. To begin the derivation with the last:

The pyramid deviation

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5/1.020621 = 4.898978 with the reciprocal 0.241242 Of which the height of the equilateral pyramid is 4 \times 0.24122 = 0.8164968 while 2 \times 0.241242 = 0.4082484 is the height of the cubic pyramid. The 4% deviation is 1.020621^2 = 1.041667 then 1.020621^3 = 1.063147 1.063147 \times 1728 = 1837.113 to be compared to the H atom rest mass 1837.153 m<sub>e</sub>
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The metric deviation is easiest to define.

Already shown above:

8766 the metric transformation of years to hours and vice versa based on the orbital Earth. 8640 the dark matter mass to electron ratio of 5 x 1728

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The deviation 1.014583 then with 4\% 1.014583<sup>3</sup> = 1.044391 1.014583<sup>4</sup> = 1.059620
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The metric deviation suggests to be a consequence of the separation of the electromagnetic laws of Maxwell based on Einstein's relativity concept and dark matter energy conservation based on group symmetric considerations controlled by the Monster symmetry integer number. Both the 8766 and 8640 can be 'seen' as line transformations due to acceleration in one time direction.

The metric deviation has to be codetermined by Planck length of  $\lambda_{pl}$  as the fundamental smallest wavelength between Monster number considered as perceptual cycling and enclosed in itself. Planck's length of about  $10^{-35}$  m as the most contracted photon state prevents closure for the 4D electromagnetic empty space resulting in the infinite progress of quantum time. See *ref I* for the derivation and discussion.

The Monster deviation given as  $D_{Mo}$ 

*In ref 1* the relation between Planck length and electron Compton length is:

 $\lambda_{pl} = 1.002490 \text{ x } 2\sqrt{2} \quad \lambda_e^3$  of which  $\sqrt{2}$  constant for  $\lambda_e$  should show three times the volume of two electron cubes moving in opposite directions with an end velocity of  $\frac{1}{2}\sqrt{2}$  c for a Cartesian coordinate system..

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The 4<sup>th</sup> root of the Monster is: (2.998162 \ 10^{13})^4 = 8.080174 \ 10^{53}
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The deviation from 3  $10^{13}$  as integer is: 1.000612making 1.000612<sup>4</sup> = 1.002453

Which should be the genuine deviation between Planck and electron and not 1.0024 90 or 1.002383

So the 4% deviation becomes  $1.002453^6 = 1.014812$ . Take  $1.014812^3 = 1.045099$ 

While  $1.014812^4$  = 1.060579 Giving  $1.060579 \times 1728$  =  $1832 681 m_e$ . Compared to the generalised state of the H atom for Helium is  $1825.063 m_e$ . May 1833 is the H-state of Tritium. (Haven't checked it and  $D_{Mo}$  = 1.014812)

Compare the two genuine deviations Metric to Monster: 1.014812/1.014583 = 1.000222.

The value  $1.014812^3 = 1.045099$  suggests the 4.5% existence of baryonic matter with a dark matter intermediate medium of 95.5% in our cosmos.

In conclusion, how the pyramid symmetry mathematically compares to the monster symmetry is still not resolved. The alpha condition for the onset of the twelve universes is perturbed by the metric and the Monster deviation of a factor of 1.000222. The line transformation of hours to years and vice versa confuses the symmetry scaling of the super massive black holes at the onset for the alpha condition. It seems ridiculous to relate the dark matter states of mass energy to be depending on the metric of Earth orbit parameters. So in the following the choice was made for the transformation of 5x 1728 = 8640

Error assessment to  $D_{Mo}$ : The above scaling is more direct but still more detailed analyses are needed. First calculation deriving the numeric equality derived from  $\sqrt{3}$  and  $\sqrt{2}$ .

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(\sqrt{3})^{1/12} = 1.046839 \quad \text{while } (1.047199)^{12} = 1.739204
1.739204 / \sqrt{3} = 1.004130 \qquad (1.004130)^{1/10} = 1.000412
(1.050818)^7 = 1.414798 \qquad 1.414798 / \sqrt{2} = 1.000413
Second calculation, symmetry breaking of the factor two: (144 / 137.036 = 1.050818)
2^{1/14} = 1.050756 \qquad 2^{1/15} = 1.047294
1.050756 / 1.047294 = 1.003306 \qquad (1.003306)^{3/4} = 1.002478
(1.047207)^{15} = 1.997505 \qquad 2.0 / 1.997505 = 1.001248
(1.001248)^2 = 1.002498
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Numerically this may be correct but the existence of ultra fast and light dark matter medium suggests to act as some kind of filter with preference to the Monster number as an asymmetry object.

Par 4 The alpha condition, the initial condition of the steady state universes by super massive white radiators

The well known concept of the inflationary period for the early universe is replaced by the initial condition of the universes. The initial condition constitutes the time symmetry separation between the universes. It involves breaking down the Monster symmetry number. This condition can consist of two parts:

- 1. The cubic time interval for the entire mass energy dump given in years.
- 2. The formation time of the biggest super massive white radiator having the option to expel or convert a great part of its mass energy into the super light and fast mediating medium of dark matter. Then given into hours.

Both are controlled in the sequential cycle of six between the six time axes for coherent electromagnetic energy contained in a phase space of time. These super massive white radiators, later the remnants as black holes for the galaxies, are subjected to dice throwing of equal changes which should be the only valid available option for group symmetry considerations.

The overall number needed for the galaxies is given by the line transformation from hours to years:

One year is  $24 \times 365.25 = 8677$  hrs and vice versa. Here we use  $5 \times 1728 = 8640$ .

This overall number is the cube of the  $3^{rd}$  power of opposing states representing momentum. With the  $6^{th}$  power as mass energy times the transformation converted into mass energy of the ultra fast mediating medium. Conform the square root of  $L_{coh} = 3.669720 \ 10^{13}$  deviates about 9.4 times:

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(27.71281)^6 \ x \ 8640 = 3.913778 \ 10^{12} \quad \text{with} \quad 24 \ x \ \sqrt{4/3} = 27.71281 \qquad (4.1) The number of galaxies: N_{gal} = N_{BH} = 3.913778 \ 10^{12} \ / 27.71281 = 1.412266 \ 10^{11} Further, see for the 2<sup>nd</sup> meaning of relation 4.1 in paragraph 4.2.
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The biggest white radiator mass will be  $M_{40}$  by taking  $M_{univ} = 1.74503 \ 10^{53}$  kg divided by rel 4.1:  $M_{40} = 4.458686 \ 10^{40}$  kg (division by 3.913778  $10^{12}$ )

The range is the square root of  $1.412266\ 10^{11} = 3.75\ 8012\ 10^5$  making the smallest WR:

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M_{35} = M_{40}/3.758012 \ 10^5 = 1.18645 \ 10^{35} \ \text{kg}
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The range number  $3.758012\ 10^5$  represents also the limit as smallest WR (BH), namely:  $217.4775 \times 1728 = 3.758012\ 10^5$ 

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In which 220.6808 /217.4775 = 1.014728 Compare to : D_{Mo} = 1.014812 The Monster deviation, with the substitution inversion for the H atom:
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1/1837.153 + 1/250.8082 = 1/220.6808 mediating mass of 250.8082 m<sub>e</sub>

The conjugated swap of the electric charge exchange between proton and electron. It is the momentary maximum quantum resonance mode in which the proton and electron are in conjugation without changing their dark matter triplet states as for pseudo  $\tau$ -neutrino (proton) and as for pseudo  $\mu$ -neutrino (electron). The formula for the mediating mass:  $m_m^2 = m_{prot} (137.036/4)$ . Due to reciprocal fine structure constant and four due to Fermi spin of both the electron and the generalised proton.

A check on the choice of  $D_{Mo}$  with respect to the metric deviation of 1.014583 comes from repeating the calculation of rel 4.1 for the metric transformation of 8766 giving 3.85752  $10^{12}$  by dividing 1.014583. The metric deviation works in reverse making 217.4775 smaller and closer to  $216 = 1.5 \times 144$ . With this remark it shows that the correct choice is for the dark matter transformation of  $8640 = 10 \times \frac{1}{2} 1728$ .

Par 4.1 The cube time interval.

Adapted from hours to years. See rel 4.1 above (27.7128<sup>6</sup> x 8460)

 $27.71281^2 = 767.9998 = 768$  years giving a cube of time space of  $768^3$  which also gives the size light years of the 3D space contracted dark matter of the overall mass of  $M_{univ}$  for our own universe.

 $M_{tot}/(10 M_{univ}) = 1.039271$  Now without line transformation in hours.

The following calculation shows the constant 1.039271 or 1.039230

 $768 = \sqrt{2} \times 543.0578 \text{ hrs}$  with  $1.346685 \times 10^{27} \times 1/x = 7.425641 \times 10^{-28} \text{ error: } 1.000227$ 

Divide 543.0578 by 36 = 15.08494 x 2 = 30.16988 hrs somehow (2x) due to medium Event of  $M_{40}$  with  $G/c^2 = 4.458686 \ 10^{40} \text{ x } 7.42733 \ 10^{-28} = 3.311613 \ 10^{13} \text{ m}$  (recalibrated) Convert into hours:  $3600 \text{ x } 2.9972458 \ 10^8 = 1.079008 \ 10^{12} \text{ gives } 30.69126 \text{ (times. So in hrs)}$ 

Compare to 30.69126 / 30.16988 = 1.017281 / 1.014812 = 1.002433 Making  $1.002433^7 = 1.017155$   $D_{Mo} = 1.002453^6 = 1.014812$ 

Secondly take  $(30.16988 \times 8640)^2 = 6.794768 \times 10^{10} \text{ yrs}$ 

Line transformation to the present- day situation of our cosmos.

Compare to  $N_{BH}$ :  $1.412271 \ 10^{11} / 6.79768 \ 10^{10} = 2.07846 / 2 = 1.039234$ 

The group symmetric correction should be used:

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\sqrt{48} = 6.928203 1.5 x 6.928203 = 10.39230 = (\sqrt{1728}) /4
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The quadrate of six seems to be the consequence of the six paired opposing time axes. The number 36 is thought to involve perpendicular time axes only in geometric arrangement for an equilateral pyramid frame. Paired opposing BH/WR emitting simultaneously coherent opposing nullified electromagnetic fluxes to time released due to gravity for one kind of baron (H atoms) per universe. The cube block of 583 hrs projects the end velocity of  $\frac{1}{2}\sqrt{2}$  c in the opposing directions.

By common sense, a physicist finds a discrepancy between the mass energy of one universe of  $4.4\ 10^{40}\ x\ 1.412\ 10^{11} = 6.21\ 10^{51}\ kg$  and the one given due to  $\{M_{tot}/10\ M_{univ}\}$  of  $1.816\ 10^{53}\ kg$ . This gives a factor of about ten too small. See for factor ten, the final scaling of Genesis.

Par4.2 The expansion coefficient due to the Monster symmetry number

The uncertainty relation for particle momentum is:

The ratio:

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m \lambda = h/c with h/c = 2.21072 \cdot 10^{-42} \text{ kg m/sec}
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This condition is directly related to the Monster symmetry number:

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M_{BH} \lambda_{BH} = M_o \text{ with } M_o = 8.080174 \ 10^{53} \text{ kg m}
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The product of h/c times  $M_o$ :  $C_{BH} = 1.7360 \ 10^{12}$  determined by c or reciprocal of c. Apart from the dimension  $C_{BH}$  can be compared to with the line transformation of 8640:

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27.7128^6 \times 8640 = 3.913778 \times 10^{12} being rel 4.1 3.913778 / 1.7360 \times 10^{12} = 2.194313 / 2 = 1.097156
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 $(1.097156)^{2/3} = 1.063765$ . Close to the neutron ratio 1838.684/1728 = 1.064053 The deviation is 1.000228 then confirming the omega condition for neutrons in par 2 which shows the correct conjecture of an steady state universe driven by dark matter subjected to group symmetric considerations and eternally controlled by the dynamics of pseudo vector cells (pseudo neutrinos) of dark matter.

Ratio to  $1.7360\ 10^{12}=1.51347\ /1.5=1.008980=1.002237^4$   $1.002237\ x\ 1.000222=1.002460$  To check the validity of  $C_{BH}$  take the light velocity  $c=2.9972458\ 10^8$  and multiply with the metric transformation of 8766 hrs giving  $2.627385\ 10^{12}$  lyrs. With 1.000222 the genuine quotient between  $D_{Mo}$  and the metric one. So apparently  $C_{BH}$  is intrinsically linked to the linear or jump transformation.

Par 5 Determination of the interior of a massive white radiator due to the Lamb condition for weak gravity generation

The range of massive white radiators from which the galaxies originate. An initial white radiator of  $M_{40}$  should be thought of as not expelling any matter. It seems all matter converted from within is needed to maintain the integrity of the state of this black hole. For all smaller initial massive radiators the initial mass transforms also externally into matter to the surrounding 3D-space supposedly controlled by the  $C_{BH}$  constant of the mediating medium.

In *ref chap* 7 the existence of the hollow black holes consisting of coherent (degenerated) condensed dark matter was derived. The coherent condensed state is the alternation of protons to conjugated protons with the corresponding electrons. The alternation of the electric charge is between proton as positive and electron as negative and in the conjugation state of the protons as negative and the electron as positive and not to be confused with the antimatter state such as anti proton and the positron having equivalent electric charges. The anti time universe consists of anti-matter.

The absolute constant of the Lamb shift of 5.1 10<sup>-7</sup> m or 0.5 micrometre is valid for gravity generation in general, so also for the hollow black hole. Further both states of the atoms, conjugated or normal, are subjected to Sacharov's square root rule of dark matter induction by the mediating medium. One square root state is exact for the conjugate and the other square root state is exact for the normal atoms, protons /electrons. Both generate the alternation of the dark matter rigid rotor due to magnetic field synchronisation determined by the product rule of exchange for the coherence condition. In the black hole state the atomic and Lamb state are matched exactly because of optimal coherent synchronisation or better every atom is used in the alternation, no 'waste' atoms as redundancy, the exact group symmetry condition for dark matter.

For the biggest super massive black hole of  $M_{40}$  it is valid that the hollow geometry is contained in a surface probably slightly greater than the event diameter. All atomic matter resides in a surface layer. For the smaller massive black holes the atomic layers are thicker and compressed against the event diameter. Always greater than the event due to the limit of  $\frac{1}{2}$  c<sub>eff</sub> of the mediating medium. To guarantee the integrity of these surfaces both atomic layers are parted. One for if a state is subjected to the 21 cm condition of magnetic strings while the other state adheres to the 5.1  $10^{-7}$  m Lamb shift as the parallel magnetic synchronisation. For gravity generation then the magnetic synchronisation of parallel 0.51 micrometres is directed perpendicular to the surface. For the 21 cm magnetisation of the atomic layers along the surface, tangentially oriented.

The Lamb state in the interior of the black hole can be expressed in a volume taking the reciprocal of the cubic power of Lamb and similarly the reciprocal of the surface requires the square power of Lamb of  $0.21^2$  m<sup>2</sup>. The product of both is the criterion to determine the range for the initial states of the white radiators.

 $1/(5.1 \ 10^{-7})^3 = 7.5386 \ 10^{18} \ cells/m^3$   $1/0.21^2 = 22.676 \ cells/m^2$ 

Giving:  $1.7094 \ 10^{20}$  cells, the criterion somewhat overestimating the atomic integrity of the coherent condensed atomic layers for maximum gravity generation. Then this criterion can be compared with square root of the number of atoms calculated from the macro mass of the black hole.

Always the event horizon 
$$\lambda$$
 to Einstein's law of BH:  $\lambda$  c<sup>2</sup> = G M G /c<sup>2</sup> = 7.427330 10<sup>-28</sup> G = 6.672329 10<sup>-11</sup> m<sup>3</sup>/kg sec<sup>2</sup> c = 2.9972459 10<sup>8</sup> m/sec

In par 4 the range for the galaxies and the number of these were derived. The two extremes for the range by scaling to the event of  $\lambda$  are:

The square root due to Sacharov's law.

Compared to the criterion of  $1.7094 \ 10^{20}$ .

 $M_{40}$ : 1.5587 /1.7094 = 1 / 1.0967 about 10% less atoms which can be remedied by taking the mediating mass of 250.8082 m<sub>e</sub> of the H atom. Ratio:  $\sqrt{7.235}$  = 2.7 enhancement for the atomic state with respect to Lamb's cells. So, the maximum limit with hardly any expulsions of atoms from the surface.

Secondly, show that the smallest BH of M<sub>35</sub> gives the other limit.

 $M_{35}$ : 7.538  $10^{18}$  / 3.219  $10^{17}$  = 23.42 surplus of cells than needed However proton electron conjugation, the flip over of the H atom state with mediating mass of 220.6808 m<sub>e</sub> gives  $\sqrt{8.325}$  = 2.8853 x (3.219  $10^{17}$ ) = 9.287  $10^{17}$  with ratio to the cell number

ratio 75.38 /9.287 = 8.17 square root of 8.325 due to Sacharov's law The ratio of neutron /proton = 2.531 or 8.17 / 2.531 $^2$  = 1.275 2.531 /2 = 1.266 With relativity mass m/m<sub>0</sub> = 2= 1/ $\sqrt{(1-\beta^2)}$  and  $\beta = \frac{1}{2}\sqrt{3}$  c

The lower limit allows the expelled neutrons till the equilibrium is reached. The flip over of the H atom is from mediating masses of normal of 250.8082 to 220.6808 m<sub>e</sub> as conjugation state in compressed alternation for gravity generation.

The square root as the range and the square power of the number of WR gives the smallest black hole of  $M_{35}$  having the range between N=1 and N(max) = 3.73  $10^5$  to  $M_{40}$ . The quanta are  $\Delta$  M = 3.76  $10^5$  kg. The quadrate or root follows the rule of  $M_{tot} = L_{coh}^2$  also based on Sacharov's rule for dark matter induction. Dice throwing of equal changes is between the numbers from  $M_{35}$  to  $M_{40}$  in steps of 3.76 hundred thousand. With a Poisson statistical distribution of the deviation  $\sqrt{3.76}$   $10^5$  = 613 kg and mean  $M_{37}$  = 7.273  $10^{37}$  kg.

Note, the gravity at the event surface of  $M_{40}$  is about 6000 kg/sec<sup>2</sup>, far less than gravity for  $M_{35}$ . The mass density within  $M_{40}$  is about the air density of Earth:  $4.46\ 10^{40}\ /(3.312\ 10^{13})^3 = 1.23\ kg\ /m^3$ 

In conclusion: The onset of the smallest super massive black hole of  $M_{35}$  is the mass energy of  $M_{40...}$  So the difference between  $(M_{40}-M_{35})$  is the energy in ablation from the event surface of  $M_{35}$  which is the maximum to be released and about 3.76 hundred thousand times  $M_{35}$ , with  $M_{35}$  of sixty thousand times the solar mass of 2  $10^{30}$  kg. The mean  $M_{37}$  with deviation 613 kg releases only six hundred thirteen times less than  $M_{35}$  against  $M_{40}$  hardly none.

#### References:

Ref 1: <a href="https://vixra.org/abs/2302.0135">https://vixra.org/abs/2302.0135</a> Provisional proof between Planck's parameters to the giant groups symmetries of Monster, Baby monster and Fischer 24. *Please overlook the two stupidities; one a cursor error in the first formula and 2<sup>nd</sup> the light velocity being factor thousand due to km to metres.* 

Ref Thomas: <a href="https://vixra.org/pdf/2109.0211v2.pdf">https://vixra.org/pdf/2109.0211v2.pdf</a> "Monster symmetry and scalar theory, conformal gravities" by M.A. Thomas

Ref 2: <a href="https://vixra.org/abs/2304.0227">https://vixra.org/abs/2304.0227</a> Derivation of the cosmic energy balance for an ultra light and fast pseudo vector medium for dark matter

Ref 3: <a href="https://vixra/abs/2305.0078">https://vixra/abs/2305.0078</a> Exercises on dark matter mediation for the solar parameters

Ref 4: <a href="https://vixra.org/abs/2308.0088">https://vixra.org/abs/2308.0088</a> Genesis explained! reasoned scientifically due to monster symmetry. *Precursor article as an approach for the better improved Genesis understanding.* 

Ref 5: Website: <a href="https://gravitation-levitation-physics.org/">https://gravitation-levitation-physics.org/</a> articles on quark complexes of dark matter for atoms and sub atomic states and articles on dynamic gravity generation by Lamb shift quanta up to degenerated coherent black hole conditions. Also ref chap 7:<a href="https://gravitation-levitation-physics.org/">https://gravitation-levitation-physics.org/</a> articles on quark complexes of dark matter for atoms and sub atomic states and articles on dynamic gravity generation by Lamb shift quanta up to degenerated coherent black hole conditions. Also ref chap 7:<a href="https://gravitation-levitation-physics.org/">https://gravitation-levitation-physics.org/</a> articles on quark complexes of dark matter for atoms and sub atomic states and articles on dynamic gravity generation by Lamb shift quanta up to degenerated coherent black hole conditions. Also ref chap 7:<a href="https://gravitation-physics.org/">https://gravitation-levitation-physics.org/</a> articles on quark complexes of dark matter for atoms and sub atomic states are proportionally as a sub-physics.

For definitions and background::

Ref 6: <a href="https://vixra.org/abs/2305.0061/">https://vixra.org/abs/2305.0061/</a> Sakharov's induction law for the dark matter mediation medium

Ref 7: <a href="https://vixra.org/abs/2305.67/">https://vixra.org/abs/2305.67/</a> Coherent induction of Coulomb charge for magnetic flux strings by the ultra fast and light dark matter medium

Ref 8: <a href="https://universal-creation.org/">https://universal-creation.org/</a> Theory of life