DISCUSSION OF THE INDUCTION LAW OF DARK MATTER

Sacharov's law for spherical entanglement

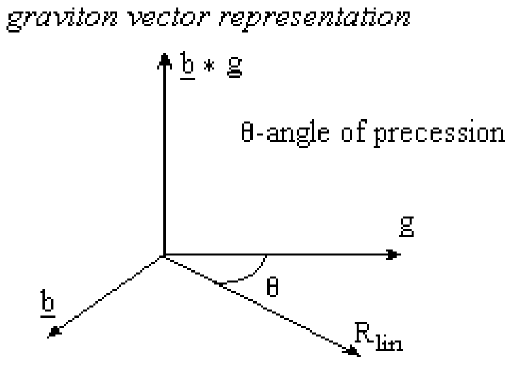
dark matter induction law explanation home

The induction law for ultra light dark matter:

$m_\lambda M = m_{pl}^2$

Where M is a macroscopic mass and m_λ the dark matter energy is complying to the uncertainty momentum $m_\lambda = h/(c\,\lambda)$.

Imagine a sphere of dark matter subjected to Newton's law of gravity. R is the radial distance to centre of the sphere, M macro mass and G the universal constant of gravity with λ the event horizon of M. The event horizon is playing a role because the dm medium is ultra fast, g(R) is gravity at radius R.



Newton's law $g(R) = G M / R^2$

Einstein's event horizon for light $\lambda c^2 = G M$

Normalise to c velocity $g(R) R_{lin} = ½ c^2$ and eliminate g(R)

Resulting: $(G M / R^2) R_{lin} = ½ c^2$

Eliminate M then the1[st] *entanglement transformation*:

$R^2 = 2\lambda R_{lin}$

Define R_{lin} as a spherical radius vector which distinguishes radial and tangential uncertainty length

$R_{lin} = R_b + R_g$ in substitution

$1 / R_{sub} = 1 / R_g + 1 / R_b$

R_{sub} is the conversion of momentum in angular b and radial momentum g as a supposition.

The 2[nd] *entanglement transformation*:

$\lambda^2 = R_{sub} R_{lin}$

At every radius R then R_{lin} as energy is converted in angular momentum and radial momentum due to the substitution distribution in momentum.

What one has to show is that under these constraints the spherical entanglement of the induction law is correct. So find this induction law expressed in R_{lin} R_{sub} R_b and R_g . The substitution algebra is elaborate but straight forward. Further realise that R_b is a momentum vector acting tangentially Therefore a constant for the spherical surface R. So the factor 4π for surface integration comes not in the algebra derivation. More for physicists/ derivation Sacharov's law

The substitution algebra results in a non trivial equality converting Sacharov's law somewhat:

The different appearance of Sacharov's law: $\sqrt{m_\lambda}\, M = m_{pl}^2 / \sqrt{m_\lambda}$

The square root is the breakthrough.

$\sqrt{m_\lambda} = \sqrt{\{h / (c\,\lambda)\}}$ has to convert into $m_{\sqrt{\lambda}} = h/(c \sqrt{\lambda})$

Obviously Sacharov's induction law is also valid as: $m_{\sqrt{\lambda}} \sqrt{M} = m_{pl}^2$ the square root mass of M.

The discovery of the square root law with respect to the macro mass M gives the new approach how to distribute the dark matter internally in the macro mass with the square root of the event wavelength generating as alternating exchange for radial gravity propagation internally. Consequently the ultra fast and ultra light medium has to ablate from the surface with the escape velocity as a reaction to the internal acceleration.

There is a second solution to the square root law. By using $m_{sq} = m_{\sqrt{\lambda}} = h/(c \sqrt{\lambda})$ one complies also by taking $M_{sq} = M / \sqrt{\lambda}$ then: $m_{sq} M_{sq} = m_\lambda M = m_{pl}^2$

The meaning M_{sq} is a mirror mass condition with respect to M as a line density due to the division of $\sqrt{\lambda}$. giving a classification condition for masses. $\sqrt{\lambda} = \lambda = 1$ m giving a Jupiter mass 0.001 M_{sun} .

$M_{sq} < M$ for planets and moons and $M_{sq} > M$ for galaxies and stars

Both square root conditions of the macro mass have implications in physics. precession shift Earth rotation axis

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