THE NEW SOLUTION OF SPACE TIME THEORY AND QUANTUM GRAVITY SOLUTION AND THE UNIVERSE

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Bangladeshi and Bengali,.

The big bang theory is the leading explanation for how the universe began.simply put it says the universe as we known it started with an infinitely hot and dense single point that inflated and stretched first.

unimaginable role over the next 13.8 billion years to the still expanding cosmos that we know today.

Existing technology doesn't yet allow astronomical to literally peer back at the universe birth , much of what we understand about the big bang comes from mathematical formulas and models.

Astronomers can, however, see the echo of the expansion through a phenomenon know as the cosmic microwave background while the majority of astronomical community accepts the theory ,there are some theorists accepts around 13.7 billion years age everthing in the entrire universe was a in an infinitestimally small simgularity a point of infinitely and heat.

Suddently an explosive expansion began ,ballooning our universe outwards faster than the speed of light .this was a period of cosmic inflation that lasted mere fraction of a second –about $10^{-32} second$of a second according to physicist alan gusts 1980 theory that changed the way think about the big bang forever.

When cosmic inflantion came to a sudden and still-mysterious end the more classic descriptions of the big bang took hold .A flood of matter and radiation, known as reheating began populating ,our universe with the stuff we know today ,particles atoms the stuff that would become

Stars and galaxies and so on.

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This all happened just the first second after the universe began when the temperature of everything was still insanely hotat about 10 billion Celsius according to NASA .the cosmos now contain a vast array of fundamentally

particles such as neutron ,electron ,and proton the raw materials that would become the building blocks for everthing that exists today.this early soup would have been impossible to actually see because it could nt held visible light.the free electron would have caused light (photon) to scatter the way droplets in clouds NASA stated. Over time however, these free electron met up with equal possible and negative electric changes .this allowed light to finally shine through, about 380000 years after the big bang.

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It was first predicted by ralph alpher and other science in 1948 but was found only by accident almost 20 years later.this accidental discovery happened when Arno Penzias and Robert Wilson both Telephone Laboratories in New Jersey were building a radio received in 1965 and picked up higher than expected temperatures,according to NASA .At first they though the anomonaly was due to pigeons trying to roost inside the antenna and their waste ,but they cleaned up the mess and killed the pigeons and the anomaly persisted.

Simultanneously, a Princeton University team led by Robert Dicke was trying to find evidence of the CMB and realized that Penzia and Wilson had stumbled upon it with their strange observation .The two groups each published papers in the Astrophysical job

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Because we cant see it directly scientists to have been trying to figure out how to see the big bang through other measures .Is one case, cosmoslogists are pressissing rewind to reach the first instant after the big bang by simulatating 4000 versions of the current universe on a massive supercomputer.We are trying to do something like guessing a baby photo of our universe from the latest picture .study latest picture study leader Masato Shirasako, a cosmologist at the National Astronomical Observatory of Japan.

With what is known about the universe today the reseaches on this 2020 study compared their understanding of how gravitation forces interaction in the primordial universe with their thousands of the3ir virtual universes,

they hoped to be able to accurarely predict what our own universe may have looked like back at the beginning .

Other researchers have chosen diferent different paths to interrogation our universes beginings.

In a 2020 study ,reseachers did so by investingation the split between matter and antimatter.In the study,not yet peer reviewed ,they proposed that the inbalance in the amount of matter and antimatter in the universe is related to the universe vastquantities of dark matter an unknown substance that exerts influence over grvity and yet doesn't interaction with light .they suggested that in the crucial moments immediately after big bang , the universe may have been pushed to make more matter than its inverse, antimatter which then could have led to the formation of dark matter.The CMB has been observed by many researches now and with many spacecraft missions. One of the most famous spacefiring missions to do so was NASA cosmicBackground.

Exploriner(COBE)satellite which mapped the sky in the 1995.

Several other missions have followed in COBES footsteps, such as theBOOMER and experiment (Balloon Observations of Milimetric Radioation Geographysics).NASA S Wilkison Microwave European Space Agenceys Planck satellite .Planck s obsevations, first realized in2019 mapped the CMB in unprecedented detail and revealed thet the universe was older than previously thought 13.82 billion years old , rather 13.7 billion years old.

We think that proton must decay. But how is it possible.there is no significacy to trace proton decay.because it is different kind of interaction.proton have two up quark and one down quark.up quark spin is positive and it is fermion.on the other hand, down quark spin is negative and it is also fermion.so, up quark and up quark have repulsive force but up quar and down quark have a attractive force.combinasion of repulsive force and and attractive force proton must be decay slowly .then two

graviton particles creates in two otherside and by the repulsive force the graviton particles throw so speedly that A high velocity of graviton more faster than photon particles.not only graviton but also a lot of extra energy and a extra particles must be create that system.extra energy may be dark energy and extra particles is axiom particles which is dark matter.

Srodinger equation . below

$$\psi(x) = F\sin(kx) + G\cos(kx)$$

$$\psi(x) = 0, x \to +\infty, x \to -\infty.$$

$$\psi_n = 0 \; for \; all \; x < 0 \; and \; x > L.$$

$$U(x)=0 \; , \; 0 < x < L.$$

We also assume that energy of the particle, E, is less that the height of the barrier I,e,

Or, E< U,

Or, E-U< 0, -E_K.

Equation of scrodinger wave equation,

$$\psi(X) = Ae^{cx} + Be^{-cx}$$

Not diverge as x→ ±∞

(x)=0, for 0≤ $x \leq L$ $= \infty$,Otherwise infinite

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Or, B= 0, ψ_1(x)=Ae^{cx} A=$\psi(X)e^{-cX}$ A=Y-cordinate of wave. B= X-cordinate of wave.

Or, A=0, $\psi(X) = Be^{-cx,}$ and B=$\psi(X)e^{cx}$

Or, A=$\psi_1(x)e^{-c_p x_p}$

Or, $c^2 = \frac{2m(U-E)}{h^2}$, c=$\sqrt{\frac{\quad(\quad)}{\quad}}$ =$\frac{\sqrt{\quad(\quad)}}{\quad}$

$c_p = \frac{\sqrt{2m_p(u-E)}}{h}$=$\frac{\sqrt{-2*6*6*10^{-19}10^{-19}}}{6.626*10^{-34}}$=i1.28060389*$10^{15}$

$c_p x_p = i1.28060389 * 10^{15} * 3 * 10^8 * 4.32 * 10^{19}$=i1.57*$10^{43}$

$c_g = \frac{\sqrt{2m_{g(u-E)}}}{h}$=$\frac{\sqrt{-2*6*6*10^{-32}10^{-32}}}{6.626*10^{-34}}$=i128

Or,$c_g x_g$=$c_g t c_g$=i128*4.32*$10^{19} c_g$=5.53*$10^{21} c_g$ t=Time of theuniverse=4.32*10^{19} $second$

Srcodinger wave equation

$$\frac{\partial^2\varphi}{\partial^2 x}+\frac{2m}{h^2}(E-U)\varphi=0$$

$$or,\psi(x)=A\sin(kx)+B\cos(kx)=0$$

Or,$\psi(x)=A\sin(KX-\omega t)+B\cos(KX-\omega t)$

The wave equation photon in srodinger equation,

Or,$\psi(x_p)$=**A**$\sin(\omega_P^2 X_P-\omega_P t)+B\cos(\omega_P^2 X_P-\omega_P t)$

The wave equation of graviton particles in srodinger equation

Or ,$\psi(x_g)=A\sin(\omega_g^2 x_g-\omega_g t)+B\cos(\omega_g^2 x_g-\omega_g t)$

Whenthe two wave interact with eachother then create the total equation is below

Or,A$\sin(kx_p-\omega_p t)+B_P\cos(kx_p-\omega_p t)=A\sin(kx_g-\omega_g t)+B_g\cos(kx_g-\omega_g t)$

$$A\sin(kx_p - \omega_p t) - A\sin(kx_g - \omega_g t) = B_g\cos(kx_g - \omega_g t) - B_p\cos(kx_p - \omega_{pt})$$

$$2A\cos\left(\frac{KX_P - \omega_P t + kx_g - \omega_g t}{2}\right)\cos\left(\frac{kx_g - \omega_g t - kx_p + \omega_p t}{2}\right) = -B_g\cos(kx_g - \omega_g t) + B_P\cos(kx_p - \omega_p t)$$

$$2A\cos\left(\frac{+kx_p - \omega_p t + kx_g - \omega_g t}{2}\right)\cos\left(\frac{=kx_p + \omega_p t + kx_g - \omega_g t}{2}\right) = -B_g\cos(kx_g - \omega_g t) + B_p\cos(kx_p - \omega_p t)$$

Or,

$$-2A\cos\left(\frac{Kx_p - \omega_p t + kx_g - \omega_g t}{2}\right)\cos\left(\frac{kx_p - \omega_p t - kx_g + \omega_g t}{2}\right) = B_g\cos(kx_g - \omega_g t) - B_p\cos(kx_p - \omega_p t)$$

Or,

$$-2A\cos\frac{(kx_p - \omega_p t) + (Kx_g - \omega_g t)}{2}\cos\frac{(kx_p - \omega_p t) - (kx_g - \omega_g t)}{2} = B_g\cos(kx_g - \omega_g t) - B_p\cos(kx_p - \omega_p t)_{r,M=K}$$

$$x_p - \omega_p t = \omega_p^2 c_p t - \omega_p t = \frac{4\pi}{\lambda^2}c_p t - \frac{2\pi}{\lambda}t$$

$$N=K x_g - \omega_g t = \omega_g^2 c_g t - \omega_g t = \frac{4\pi^2}{\lambda_g^2} c_g t - \frac{2\pi}{\lambda_g} t$$

Or,2A ——— ———

Or, Or,2A

OR, $\ln 2A(e^{-in} + e^{iN} + e^{iM} + e^{-iM}) = \ln B_P \cos M(1 - \frac{B_g}{B_P}\frac{\cos N}{\cos M})$ OR,

$\ln 2 + \ln A - iN + iN + iM - iM = \ln B_P \cos M(1 - \frac{B_g}{B_P}\frac{\cos N}{\cos M})$

Or, $\ln 2A = \ln B_P + \ln \cos M + \ln(1 - \frac{B_g}{B_P}\frac{\cos N}{\cos M})$

OR,

OR,

OR, If A=0, $B_g = \psi(x_g)e^{C_g x_g}$

If,A=0, $B_P = \psi(x_p)e^{C_P X_P}$

$$\psi(X_P) = A\sin\frac{n\pi x_p}{L}$$

N=0,1,2,3, $x_p = \frac{L}{4}$,n= $\frac{1}{4}$

$$\psi(x_p) = A\sin\frac{\pi}{16} = .195090322A$$

6

$$\psi(x_g) = A\sin\frac{n\pi x_g}{L}$$,n=$\frac{1}{4}$, ,$\frac{X_g}{x} = \frac{1.7*10}{5*10^{-5}} = 3.4*10^{10}$

p

$$\psi(X_g) = A\sin(180*3.4*10^{10}) = .62387A$$

OR,

OR, ( )

Or, OR, $\ln\frac{1}{2}+\ln e^{i2*1.66*10^{43}}+iM=\frac{A.62387*e^{i5.53*10^{21}}c_g+iN}{A..195090322*e^{i1.66*10^{43}}+iM}$

Or,- $\ln 2+i3.342*10^{43}+iM=3.2*\frac{e^{I5.53*10^{21}}C_G+iN}{e^{I1.66*10^{43}}+IM}$

OR - $693+I\ 3.342*10^{43}+IM=3.2*\frac{e^{5.53*10^{21}}C_g+IN}{e^{I1.66*10^{43}}+IM}$

OR. OR, $\ln\frac{1}{2}+\ln e^{i2*1.66*10^{43}}+iM=\frac{A...387082*e^{i5.53*10^{21}}c_g+iN}{A..195090322*e^{i1.66*10^{43}}+iM}$ Or,-

$\ln 2+i3.342*10^{43}+iM=3.2*\frac{e^{I5.53*10^{21}}C_G+iN}{e^{I1.66*10^{43}}+IM}$

OR -$693+I\,3.342*10^{43} + IM = 3.2 * \frac{e^{5.53*10^{21}C_g+IN}}{e^{I1.66*10^{43}+IM}}$ $\text{orln}\, i^2+$

$\ln i + 100.2 + \ln i + \ln M = .685 + I\ 5.53 * 10^{21} c_g$

$+iN-i1.66*10^{43} - iM$

OR, $\ln \frac{1}{2} + \ln e^{i2*1.66*10^{43}} + iM3.2 \frac{e^{i5.53*10^{21}} c_g+iN}{e^{i1.66*10^{43}}+iM}$

Or, $.685+i2.*1.66*10^{43} + iM = \ln 3.2 + \ln \frac{e^{I5.53*10^{21}} c_g+iN}{e^{I1.66*10^{43}}+IM}$ OR, $\ln(.687$

$+I3.32*10^{43} + i(2 * 10^{38} - 5.4 * 10^{24}) = 1.16 +$

$i5.53\ 10^{21} c_g + i($ $*$ 58929024

$10^{38} - 5.4 * 10^{24}\ c_g - `1.6 * 10^{14}) - i1.66 * 10^{43} - i(2 *$

)

Or,-.375+$\ln i + 100 = 1.16 + i5.53 * 10^{21} c_g - i1.66 * 10^{43}$

OR,I5.53*$10^{21} c_g$=i1.66*10^{43}-$\ln i - 1.16 + .375 - 100$

Or, $c_g = 3 * 10^{21}$ + tends to $\rightarrow 0$

Velocity of gravituon particles, $V_{c_g} = 3 * 10^{21}\ meter/second$-

friedmann equation and creation of the universe

Some preliminaryies

We begin with einsteain equation

$$R_{\mu\nu} - \frac{1}{2} g_{\mu\nu} + \Lambda\, g_{\mu\nu} = \frac{8\pi G}{c_p^4} T_{\mu\nu}$$

Λ =cosmological consant

EVALUION the line element in einstein equation and using the conservation equation for mass nd energy from $T_\nu^{0\nu}$=0 yield the 4-component friedmann equation

$$a^2 = \frac{8\pi G\rho_{m,0}}{3a} + \frac{8\pi G\rho_{r,0}}{3a^2} + \frac{1}{3}\Lambda c^2 a^2 - kc^2$$

Where $\rho_{m,0}$ is the mass density from baryonic anfd cold dark matter, $\rho_{r,0}$ is the mass density fromradiation , mostly from photon and neutinos, ehwere each quantity is evaliutuion at the presenttime $t_0 = t_{now}$ defined as the time elapsed from the big bang.

Now , $R_{\mu\nu} - \frac{1}{2}\mathbf{R}g_{\mu\nu} + \Lambda g_{\mu\nu} = \frac{8\pi G}{c_p^4} T^1_{\mu\nu}$

But,therefore. $c_g > C_P$

New concept of graviton particles,

Now $a^2 = \frac{8\pi G\rho_{m,0}}{a} + \frac{8\,\pi\, G\rho_{r,0}}{a^2} + \Lambda a^2 c^2 - kc_g^2 = \frac{8\ \pi G}{c^4} T^2_{\mu\nu}$ (2) no

g

Old concept, of photon

Or, $\frac{8\pi G\rho_{r,0}}{3a}+\frac{8\pi\, G\rho_{r,0}}{3a^2}+\frac{1}{3}\Lambda a^2c^2-kc_p^2=M=\frac{8\pi G}{C_P^4}T^1_{\mu\nu}$

$\frac{8\pi G\rho_{m,0}}{3a}+\frac{8\,\pi G\rho_{r,0}}{3a^2}+\frac{1}{3}\Lambda a^2c^2-\mathbf{k}c_p^2+kc_p^2-kc_g^2=\mathbf{N}=\frac{8\pi G}{c^2}T^2_{\mu\nu}$

g

OR,M_K$(c_g^2-c_p^2)=N$

Ort , $\frac{8\pi G}{c^4}T^2_{\mu\nu}=R_{\mu\nu}-\frac{1}{2}Rg_{\mu\nu}+\Lambda g_{\mu\nu}-\mathbf{K}(c_g^2-C_P^2)$

g

Or, $R_{\mu\nu}-\frac{1}{2}Rg_{\mu\nu}+\Lambda g_{\mu\nu}+k\left(c_g^2-c_p^2\right)=\frac{8\pi G}{c^4}T^2_{\mu\nu}$

g

K=+1 closed universe $K = 0$

Flat universe

K= _1 open universe

So we may calculate the aprokcimate velocity of graviton particlesc_g is faster than the velocity of photon particles mean light c_p, I,e ,$c_g > c_p$.

Now the quition is why space time theory of albert einstain is not correctly calculate the the rapidly expanding the universe is maintaining the all calculation.because albert einstain said that in the universe there must not be any particle faster than light(photon).but the graviton particle is faster than light.that is the main mistake or blunder of our greatest scientist albert einstain.

The special theory of relativity is not effected by that mistake. But general relativity which is mostly dependent on the highest velocity of light($c_p = c$) .but now we must depend on new highest velocity of graviton particles($c_g = c$).

The equation

The general theory of relativity is captured by a deceptively simple looking equation.

$$R_{\mu\nu} - \frac{1}{2} R g_{\mu\nu} = \frac{8\pi G}{c^4} T_{\mu\nu}$$

Friedmann equation and creation of the universe

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BYT, THEREFORE, $c_g > C_P$

Now $a^2 = \frac{8\pi G\rho_{m,0}}{a} + \frac{8\,\pi\, G\rho_{r,0}}{a^2} + \Lambda a^2 c^2 - kc_g^2 = \frac{8\ \pi G}{c^4} T_{\mu\nu}^2$ (2)

g

$$\frac{8\pi G\rho_{r,0}}{a} + \frac{8\pi\, G\rho_{r,0}}{a^2} + \Lambda a^2 c^2 - kc_p^2 = M$$

$$\frac{8\pi G\rho_{m,0}}{a} + \frac{8\,\pi G\rho_{r,0}}{a^2} + \Lambda a^2 c^2 - \mathbf{k}c_p^2 + kc_p^2 - kc_g^2 = \mathrm{N}$$

OR,M-$\mathbf{K}(c_g^2 - c_p^2) = N$

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OR, $R_{\mu\nu} - \frac{1}{2} R g_{\mu\nu} = \frac{133312\pi G}{c^4} T_{\mu\nu}$

g

Essentially the equation tells us how a given amount of mass and energy warp spacetime. The left hand side of the equation,

$$R_{\mu\nu} - \frac{1}{2} R g_{\mu\nu}$$

Describes the curvature of spacetime whose effect we perceive as the gravitational force. It is the analogue of the term F on the left handside of Newtons equatin.

The term $T_{\mu\nu}$ON RIGHT HAND SIDE OF the equati8on describes everything there is to know about the way mass,energy , momentum and pressure are distributed throwout the universe ,it is what be-

came of the $m_1 m_2 \, in \, newton \; equation$, it is much more complicated.all of these things are needed to figure out how space and time bend $T_{\mu\nu}$ GOES by the technical term energy momentum tensor. The constant G THAT appear on the right hand side of the equation is again newton constant and C is the light of speed of light . the T term on the right handside describes the momentum (speed and mass) the T now stands for energy which causes time to speed up or slow down .the left hand side c of the equation describes that change in the flow of time.so the $c_g > c_p \; than \; \frac{133312\pi G}{C} T_{\mu\nu} < \frac{8\pi G}{C_P} T_{\mu\nu}$

g

.

$$B = \sqrt{\sqrt{\omega^2}}$$