

The Soul of Hidden Universe in Search of Dark Matter, Dark Energy at the End of Horizon

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Abstract: *“There was nothing before the Big Bang”- Stephen Hawking. It's possible that before the Big Bang, the universe was an infinite stretch of an ultrahot, dense material, persisting in a steady state until, for some reason, the Big Bang occurred. This extra-dense universe may have been governed by quantum mechanics, the physics of the extremely small scale, Carroll said so we may fix an easy question, does dark come from Big Bang? if yes and How? Is there any relation between visible dark and dark energy? How does the universe energy become rising? Is it following energy conservation law? What is Darkness or what is the connection on big bang? Was whole universe between this? What is the mystery of its birth. What is the real power source of supernovae? Only 4 percent of the entire structure of the universe is made up of visible objects? 98 percent remained invisible. 21% of the invisible mass is dark matter, the remaining 75% is dark energy. They can be seen, but there is no conclusive evidence. However, there is no opportunity to question their existence. Scientists want to know what the ghostly secret objects and powers are actually made of. Do these not stay by our side? May be its going too far through our body. How is this one superpower scattered in every corner of the universe? The answers to all these questions can be founded through this research paper.*

Keywords: Dark matter, dark wave, dark mass, UMP particle, Dark mass expanding, cosmological expansion, great fishing problem



1. Introduction

Independent lines of evidence from Type Ia-supernovae and the CMB imply that the universe today is dominated by a mysterious form of energy known as dark energy, which apparently permeates all of space. The observations suggest 73% of the total energy density of today's universe is in this form. When the universe was very young, it was likely infused with dark energy, but with less space and everything closer together, gravity predominated, and it was slowly braking the expansion. But eventually, after numerous billion years of expansion, the growing abundance of dark energy caused the expansion of the universe to slowly begin to accelerate.

Dark energy in its simplest formulation takes the form of the cosmological constant term in Einstein field equations of general relativity. In later we will discussed how does dark energy come from. First we will think where does our visible dark come from?

We will discuss (visible dark) about this on this paper. First we should focus on the Love of universe. How is it created? Universe is made by full of mysterious. According to theory the universe is made by 3 basis element –

- 1) Particle(wave) (Energy)
- 2) Dark(wave) (Unstable energy)

3) Space (No/balance energy)

Dark property is easy to explain by the four basic elementary property-

- 1) Quantum Mechanics
- 2) Atomic ring theory
- 3) Higgs field
- 4) Particle –wave triplet

Quantum mechanics part of quantum field theory, is a fundamental theory in physics. It describes physical properties of wave particle nature.

Atomic Ring theory that is discussed about the unstable particle and it's wave nature.

The Higgs boson helps explain how particles obtain mass, so it seems fitting that it may offer the key to understanding dark matter

Particle- wave triplet also gives a conclusion how can work particle wave and field with part.

According to the currently accepted model in cosmology, our universe is made up of 5% of ordinary matter, 25% cold dark matter, and 70% dark energy. We may get the answer of how dark matter was made after Big bang.

Volume 9 Issue 10, October 2020

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2. Gravitational Lensing

Light emitted by distant galaxies passes by massive objects in the universe, the gravitational pull from these objects can distort or bend the light. This is called gravitational lensing.

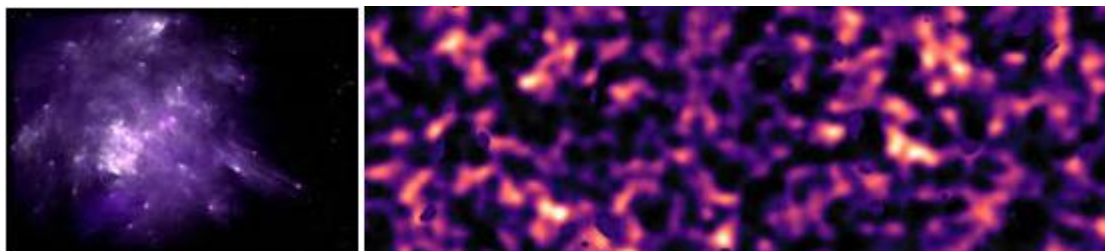
There are three classes of gravitational lensing:

Strong lensing: Strong gravitational lensing can actually result in such strongly bent light: where there are easily visible distortions such as the formation of Einstein rings, arcs, and multiple images. Despite being considered "strong", the effect is in general relatively small

Weak gravitational lensing results in galaxies appearing distorted, stretched or magnified. where the distortions of background sources are much smaller and can only be detected by analyzing large numbers of sources in a statistical way to find coherent distortions of only a few percent

Microlensing: where no distortion in shape can be seen but the amount of light received from a background object changes in time percent.

Gravitational lenses act equally on all kinds of electromagnetic radiation, not just visible light, but also in non-electromagnetic radiation, like gravitational waves. Weak lensing effects are being studied for tThis was discussed in connection with the proposal of the electrical origin of matter, so Wilhelm Wien (1900),^[9] and Max Abraham (1902),^[6] came to the conclusion that the total mass of the bodies is identical to its electromagnetic mass. Wien stated, that if it is assumed that gravitation is an electromagnetic effect too, then there has to be a proportionality between electromagnetic energy, inertial mass, and gravitational mass. When one body attracts another one, the electromagnetic energy store of gravitation is according to Wien diminished by the amount (where is the attracted mass, the gravitational constant, the distance cosmic microwave background as well as galaxy surveys.



3. Brief Review of darkness

Darkness is something that has spread throughout our entire universe. Our universe is 90 to 95 percent dark. Darkness disappears then light comes. When the light goes out again, darkness comes to that place. Even so, owning one is still beyond the reach of the average person. There is nothing in our entire universe that can surpass the speed of light. That is three lakh kilometers per second. So the question here is how fast can the normal darkness?

The ghostly form of darkness has no existence. Darkness means no light. That is lack of light. When you somehow hide from the light you will find darkness. Which we call shadow. If we speak of motion, then darkness is that which is found when light ceases to come. If our sun suddenly stopped giving light, the light would stop coming to the earth and darkness would spread on the earth. But it takes 8 minutes and 19 seconds for sunlight to reach the earth. This means that it will take eight minutes and nineteen seconds for the smallest part of the sunlight to disappear. Then after the smallest part of the light has gone, it will take 6 minutes and 19 seconds for the darkness to come to earth. This means we cannot see the sun on Earth for eight minutes and nineteen seconds.

Most scientists and physicists believe that darkness has no motion, that it cannot move, that it cannot move. If we think of darkness as lack of light and leave behind darkness with light, then darkness will disappear as fast as light will come. But this means that even darkness can travel at the speed of light.

You can see the darkness only after the smallest part of the light has disappeared. There are several places in our universe or some objects or objects from which the light coming out has taken that dark place. The photons coming out of that object produce light and illuminate the place by removing the darkness.

The question is, is there really anything called darkness? If 90 to 95 percent of our universe is dark, then why am I asking, is there anything called darkness?

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Some examples can be taken to understand this. For example, suppose we see a bird as colorful as a cat, but not as a cat. Because that cat doesn't have the kind of cells that we have. This means that the different types of colors that we humans see on this earth are just made up of our own eyes and brains. That is different from all the other animals in our world. But the thing that we can't do is that cats can do it very easily and that they can see even in the dark.

4. Dark mass

Henri Poincaré in 1906 argued that when mass is in fact the product of the electromagnetic field in the aether – implying that no "real" mass exists – and because matter is inseparably connected with mass, then also matter doesn't exist at all and electrons are only concavities in the aether (Ehter)

The dark mass also called the black mass that is found between two quanta or two energy packet.

Planck's work in thermodynamics led to the formulations of his quantum theory. ... Planck called the packets of energy quanta and he was able to determine that the energy of each quantum is equal to the frequency of the radiation multiplied by a universal constant that he derived, now known as Planck's constant. His work led to Albert Einstein determining that light exists in discrete quanta of energy, or photons.

- Calculate the energy element $E=h\nu$, ν is the frequency, and E is energy of an electromagnetic wave. Using Planck's Quantum Theory. Electromagnetic (EM) radiation is a form of energy with both wave-like and particle-like properties; visible light being a well-known example.



First we will calculate what the mass between two quanta:

We know from Schrödinger equation

$$-\frac{\hbar^2}{2m} \frac{d^2}{dx^2} \Psi(x, t) + v \Psi(x, t) = i\hbar \frac{d\Psi(x, t)}{dt} \quad (1)$$

As, there is no energy inside the two quanta. So energy term will be zero.

$$V(x) = \frac{\hbar^2}{2m} \frac{d^2}{dx^2} \Psi(x, t) \quad (2)$$

Let, we assume that $\Psi(x) = \Psi(\xi)$

Where ξ is the dimentionaless variable

And $\xi=kx$, k is the force constant

$$\frac{d\xi}{dx} = k \quad \text{here } \frac{d\xi}{dt} = k \frac{dx}{dt} \quad (3.a)$$

$$\frac{d\Psi}{dx} = \frac{d\Psi}{d\xi} \frac{d\xi}{dx} \quad \text{and } \frac{d^2\Psi}{dx^2} = k^2 \frac{d^2\Psi}{d\xi^2} \quad (3.b)$$

$$= k \frac{d\xi}{dx} \quad (3.c)$$

In Schrödinger time dependent equation

$$\frac{d^2\Psi}{dx^2} + \frac{2m}{\hbar^2} (E - V) \Psi = 0 \quad (4)$$

From equation(3.b)and(4)we get

$$k^2 \frac{d^2\Psi}{d\xi^2} + [\frac{2m}{\hbar^2} E - \frac{2m}{\hbar^2} (\frac{1}{2} m \omega^2 x^2)] \Psi(\xi) = 0 \quad (5)$$

Here potential $v = \frac{1}{2} m \omega^2 x^2$

Divided by k^2

$$\frac{d^2\Psi}{d\xi^2} + [\frac{2mE}{\hbar^2 k^2} - \frac{m^2 \omega^2 \xi^2}{\hbar^2 k^4}] \Psi(\xi) = 0 \quad (6)$$

The constant "k" selected in such a way the co-efficient of ξ^2 unite,

$$\text{So, } \frac{m^2 \omega^2 \xi^2}{\hbar^2 k^4} = 1 \quad (7)$$

$$K = \sqrt{\frac{m\omega}{\hbar}} \quad (8)$$

Put the value of equation (8) in equation (2)

$$V(x) = \frac{2m}{\hbar^2} \frac{d^2\Psi}{dx^2} = \frac{2m}{\hbar^2} k^2 \frac{d^2\Psi}{d\xi^2} \quad (9)$$

From Quantum analysis of Simple harmonic Oscillation

$$F = m_0 \frac{dv}{dt} \quad [m_0 = \text{mass of the black place}] \quad (10.a)$$

$$k\Psi(x) = m_0 \frac{dv}{dt} \quad (10.b)$$

$$*K \frac{d^2}{d\xi^2} \Psi(x) m_0 = \frac{\hbar^2}{2m} k^2 \frac{d}{dt} \frac{d^2}{dx^2} \Psi \quad (11.a)$$

$$= \frac{\hbar^2}{2m} \frac{m\omega}{\hbar} \frac{d}{dt} \frac{d^2}{d\xi^2} \Psi \quad \text{here } \omega = 2\pi\nu = \text{frequency} \quad (11.b)$$

$$= \frac{\hbar}{2\pi} \frac{1}{2m} m 2\pi\nu \frac{d}{dt} \frac{d^2}{d\xi^2} \Psi \quad (11.c)$$

$$= \frac{\hbar\nu}{2} \frac{d}{dt} \frac{d^2}{d\xi^2} \Psi \quad (11.d)$$

$$\text{Here } \frac{d\Psi}{d\xi} = \frac{d\Psi}{dt} \cdot \frac{dt}{d\xi} \quad (12.a)$$

$$= \frac{d\xi}{dt} \cdot \frac{d\Psi}{d\xi}$$

$$\frac{d\xi}{dt} = k \frac{dx}{dt}$$

$$= k \frac{dx}{dt} \frac{1}{\hbar} \Psi(x, t) \quad \text{and } \frac{d\Psi}{dt} = \frac{-Ei}{\hbar} \Psi(x, t) \quad (12.b)$$

$$\text{now, } \frac{d}{dt} \left(\frac{d\Psi}{d\xi} \right) = \frac{-k\hbar}{Ei} \frac{d}{dt} \left[\frac{dx}{dt} \Psi(x, t) \right] \quad (13.a)$$

$$= \frac{-k\hbar}{Ei} \Psi(x, t) \frac{d^2x}{dt^2} - \frac{dx}{dt} \frac{d\Psi(x, t)}{dt} \quad (13.b)$$

$$= \frac{-k\hbar}{Ei} [C\Psi(x, t) - C \frac{d\Psi}{dt}] \frac{1}{[\Psi(x, t)]^2} \quad (13.c)$$

as particle velocity $[\frac{dx}{dt}]_{\text{max}} = [\frac{d^2x}{dt^2}]_{\text{max}} = C$ (light of speed)

$$= \frac{-k\hbar}{Ei} C [\Psi(x, t) - \frac{d\Psi}{dt}] \frac{1}{[\Psi(x, t)]^2} \quad (13.d)$$

*

$$k \Psi m_0 = \frac{\hbar\nu}{2} \cdot \frac{-k\hbar}{Ei} [\Psi(x, t) - \frac{d\Psi(x, t)}{dt}] \frac{1}{\Psi^2(x, t)} \quad (14.a)$$

$$m_0 = \frac{hvc}{2Ei} \cdot \frac{h}{2\pi} \cdot [\Psi(x, t) - \frac{d\Psi(x, t)}{dt}] \frac{1}{\Psi^3(x, t)} \text{ [Mass can not neg]} \quad (14.b)$$

$$= \frac{hv \cdot hc}{4\pi Ei} \left(\frac{d\Psi}{dx} \right) [\Psi(x, t) - \frac{d\Psi(x, t)}{dt}] \frac{1}{\left(\frac{d\Psi}{dx} \right) \Psi^3(x, t)} \quad (14.c)$$

$$= \frac{E \cdot hc}{4\pi Ei} \cdot \frac{ip}{h} \Psi(x, t) [\Psi(x, t) - \frac{d\Psi(x, t)}{dt}] \frac{1}{\left(\frac{d\Psi}{dx} \right) \Psi^3(x, t)} \quad (14.d)$$

$$= \frac{hc}{4\pi} \cdot \frac{p}{h} \cdot 2\pi [\Psi(x, t) - \frac{d\Psi(x, t)}{dt}] \frac{1}{\left(\frac{d\Psi}{dx} \right) \Psi^2(x, t)} \quad (14.e)$$

$$= \frac{hc}{4\pi} \cdot \frac{v}{c} \cdot 2\pi [\Psi(x, t) - \frac{d\Psi(x, t)}{dt}] \frac{1}{\frac{d\Psi}{dx} \Psi^3(x, t)} \quad (14.f)$$

$$= \frac{h}{8\pi} \cdot \frac{c^3 v^4}{c^3 v^3} \cdot 4\pi \cdot [\Psi(x, t) - \frac{d\Psi(x, t)}{dt}] \frac{1}{\frac{d\Psi}{dx} \Psi^3(x, t)} \quad (14.g)$$

$$= 4\pi h \cdot \frac{c^3 v^3}{8\pi v^2 c^3} [\Psi(x, t) - \frac{d\Psi(x, t)}{dt}] \frac{1}{\frac{d\Psi}{dx} \Psi^3(x, t)} \quad (14.h)$$

$$= 4\pi h \cdot \frac{1}{N_v} \cdot \frac{1}{\lambda^3} [\Psi(x, t) - \frac{d\Psi(x, t)}{dt}] \frac{1}{\frac{d\Psi}{dx} \Psi^3(x, t)} \quad (14.i)$$

$$= 4\pi h \cdot \frac{1}{N_v} \cdot \frac{1}{\lambda^3} [\Psi_c(x, t)] \quad (15)$$

here $\Psi_c(x, t) = [\Psi(x, t) - \frac{d\Psi(x, t)}{dt}] \frac{1}{\frac{d\Psi}{dx} \Psi^3(x, t)}$

$$= B \cdot \frac{<\epsilon>}{u} \cdot \frac{1}{\lambda^3} [\Psi_c(x, t)]$$

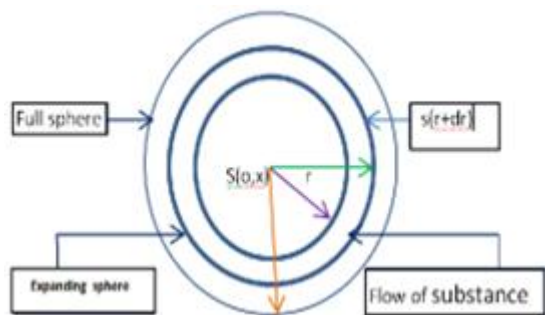
$$B = \text{black mass} = 8.3265 \cdot 10^{-33} \text{ J} \quad (16)$$

$$= B \cdot \frac{<\epsilon>}{u} \cdot \frac{p_x^3}{h^3} [\Psi_c(x, t)] \quad (17)$$

As dark energy causes the universe to expand ever-faster, it may spur some very distant galaxies to apparently move faster than the speed of light. This Hubble Deep Field Image shows some of the most distant galaxies ever observed. This research paper consist vary interesting fact .our dark matter and dark energy is increasing for expanding our universe with time.

5. Dark Mass Expanding

After publishing the theory of Special Relativity the idea of ether has been banded in our concepts of physics because of the scientist seem that the existence of ether was not necessary in order to explain the results of experiments in general physics, in particular in modern physics and electromagnetism.



But every imagination depends upon space time surface. In this article, we will see that a new concept of ether, different from the old pre-relativistic concept of ether, appears to be fundamental in Cosmology, we cannot imagination Standard Cosmological model [5,6] (SCM), without ether or a space time surface for instance the flat rotation curve of galaxies, Nonetheless we will see that this new Cosmology, called Cosmology based on Ether (CBE) interpret successfully all astronomical observations that were previously only

interpreted by SCM, and moreover is compatible with Special and General Relativity. The 3 fundamental following points, that were valid in SCM, remain valid in CBE:

We are considered the sphere that full of ether substance with radius r to (r+dr).if we considered it at a galaxy, we can say it is expending.

The mass M(r) of full sphere is given by,

$$M(r) = \int_0^r p(x) 4\pi x^2 dx \quad (18)$$

Then we find this following equation that provides the net force from r to (r+dr) in the basis of ether substance.

$$dsP(r+dr) + \frac{G}{r^2} p(r) ds dr \int_0^r p(x) 4\pi x^2 dx - dsP(r) = 0 \quad (19)$$

So the net force

$$F(r) = \frac{dp}{dr} = \frac{G}{r^2} p(r) \int_0^r p(x) 4\pi x^2 dx \quad (20)$$

We know from newton's motion F=ma

And acceleration a is the fragment of force component .so we may consider p(r) as the following way

$$\frac{dp}{dr} = \frac{G}{r^2} m_0 \partial f(r, t, \Omega) \int_0^r p(x) 4\pi x^2 dx \quad \text{here } m_0 = \text{mass of dark matter.} \quad (21)$$

Consider an ensemble of neutral particles moving with the velocity of light c through space. The time behaviour of such an ensemble is rigorously described by the Boltzmann transport equation [12] given asfollows,

$$\frac{\partial f(r, t, \Omega)}{\partial t} = -\Omega \cdot \nabla f(r, t, \Omega) \quad (22.a)$$

$$+ \int \Sigma(r, t, \Omega') K(r, t, \Omega' \rightarrow \Omega) f(r, t, \Omega') d\Omega' - \Sigma(r, t, \Omega) f(r, t, \Omega) + S(r, t, \Omega),$$

Where $S(r, t, \Omega)$ is a source term, and $f(r, t, \Omega)$ is the angular flux of the particles in direction $\Omega = (\Omega_x, \Omega_y, \Omega_z)$ at point $= (x, y, z)$ and time t . Possible localised changes in the angular flux as the particles travel through space are described by the cross section $-\Sigma(r, t, \Omega)$ where the kernel $K(r, t, \Omega' \rightarrow \Omega)$ describes how particles may become scattered from direction Ω' to direction Ω , and/or partially absorbed or multiplied in the process.

Now we get from tis equation

$$\partial f(r, t, \Omega) = -\Omega \cdot \nabla f(r, t, \Omega) \quad c \partial t \quad (22.b)$$

$$+ \int \Sigma(r, t, \Omega') K(r, t, \Omega' \rightarrow \Omega) f(r, t, \Omega') d\Omega' \quad c \partial t$$

$$- \Sigma(r, t, \Omega) f(r, t, \Omega) \quad c \partial t + S(r, t, \Omega), \quad c \partial t$$

Integrating both side

$$f(r, t, \Omega) = - \int \Omega \cdot \nabla f(r, t, \Omega) \quad c \partial t \quad (22.c)$$

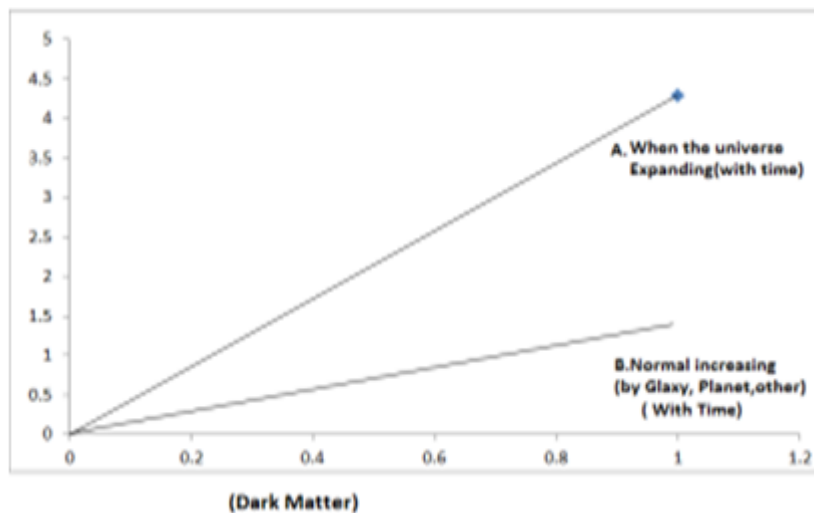
$$+ \int \Sigma(r, t, \Omega') K(r, t, \Omega' \rightarrow \Omega) f(r, t, \Omega') d\Omega' \quad c \partial t$$

$$- \int \Sigma(r, t, \Omega) f(r, t, \Omega) \quad c \partial t + \int s(r, t, \Omega), \quad c \partial t$$

If we put on equation we get the solution

$$\frac{dp}{dr \text{ moving particle}} = m_0 c t * \left(\frac{G}{r^2} f(r, t, \Omega) \int_0^r p(x) 4\pi x^2 dx \right) \quad (23)$$

The following graph



This equation shows that some mysterious things when the particle moving with light velocity, they increase the quantity of Dark matter.

So dark matter mass is not constant in our universe. Dark matter is increase by expanding of universe .it also proved Stephen hawking talk there was nothing before big bang.

6. The great fishing problem

There are many fishing techniques and tactics for catching fish. The term can also be applied to methods for catching other aquatic animals such as molluscs and edible marine invertebrates. Now we are going to catch a science fish. Suppose you are staying in front of a fish pond or a sea. You may observe many types of fish but you cannot measure the amount of fish in the pond. When you step in this pool or beach, this fish will vanish as you break their discipline. This is called great fishing problem

Dark matter is this such as the property.

* Quantum Physics also proved that Dark (wave) consist of energy and it has also a wave property

7. Relation between Dark mass and dark wave(matter and energy)

*Quantum Physics also proved that Dark (wave) consist of energy and it has also a wave property

We know that

$$\text{Dark(wave)} \propto \frac{1}{\text{Particle (wave)}} \quad S(x,t) \Psi(x,t) = E s(x,t) = \text{function of Dark(wave)} \quad (24)$$

$$\Psi(x,t) = \text{function of particle(wave)} \quad \text{Then } D = \frac{d\Psi(x,t)}{dt} = \frac{1}{s(x,t)} \left[\frac{dE}{dt} - \Psi(x,t) \frac{ds}{dt} \right] \quad (25)$$

According to Schrödinger equation

$$\Psi(x,t) = A e^{\frac{i}{\hbar}(x p_x - E t)} \quad (26.a)$$

$$\frac{d\Psi(x,t)}{dt} = -\frac{E i}{\hbar} \Psi(x,t) \quad (26.b)$$

$$E \Psi(x,t) = -\frac{\hbar}{i} \frac{d\Psi(x,t)}{dt} \quad (26.c)$$

From equation (25) we get

$$E \Psi(x,t) = -\frac{\hbar}{i} \left\{ \frac{1}{s(x,t)} \left[\frac{dE}{dt} - \Psi(x,t) \frac{ds}{dt} \right] \right\} \quad (27)$$

$$= -\frac{\hbar}{i} D = i \hbar D \quad (28)$$

From equation 1

$$\frac{d\Psi(x,t)}{dx} = \frac{1}{s(x,t)} \left[\frac{dE}{dx} - \Psi(x,t) \frac{ds}{dx} \right] \quad (29.a)$$

$$\frac{d^2\Psi(x,t)}{dx^2} = \frac{1}{s(x,t)} \left[\frac{d^2E}{dx^2} - \left\{ \frac{d\Psi}{dx} \frac{ds}{dt} + \Psi \frac{d^2s}{dx^2} \right\} + \frac{dE}{dx} - \Psi(x,t) \frac{ds}{dx} \frac{-1}{s^2} \frac{ds}{dx} \right] \quad (29.b)$$

=D

From equation (26.a)

$$\frac{d\Psi(x,t)}{dx} = \frac{i p_x}{\hbar} \Psi(x,t) \quad (30.a)$$

$$\frac{d^2\Psi(x,t)}{dx^2} = \frac{i p_x^2}{\hbar} \Psi(x,t) \quad (30.b)$$

$$p_x^2 \Psi(x,t) = -\hbar^2 \frac{d^2\Psi(x,t)}{dx^2} = -\hbar^2 D'' \quad (30.c)$$

when unstable particle is subjected to the motion with energy

$$E \Psi = \frac{p_x^2}{2m} \Psi + v \Psi \quad (31.a)$$

$$-\frac{\hbar}{i} \left\{ \frac{1}{s(x,t)} \left[\frac{dE}{dt} - \Psi(x,t) \frac{ds}{dt} \right] \right\} = -\frac{\hbar^2}{2m} \frac{1}{s(x,t)} \left[\frac{d^2E}{dx^2} - \left\{ \frac{d\Psi}{dx} \frac{ds}{dt} + \Psi \frac{d^2s}{dx^2} \right\} + \frac{dE}{dx} - \Psi(x,t) \frac{ds}{dx} \frac{-1}{s^2} \frac{ds}{dx} \right] + v \Psi \quad (31.b)$$

$$i \hbar D = -\frac{\hbar^2}{2m} D'' + v \Psi \quad (31.c)$$

Particle (wave) energy and Dark (wave) energy is associated with each other.

Total energy =Dark energy +particle energy

8. UMP particle mother of dark matter

Atomic ring theory specifically mentions a particle which name UMP (unstable massive particle). These particles act like a group. The main feature of these particle is..

- 1) It is responsible for repulsion and attraction.
- 2) It has little mass and mass can founded when its stay on a group.
- 3) Its act weakly interaction
- 4) The wave property of these particle is very low string works on its.
- 5) Several groups come together to form a large particle.
- 6) These particle are spin-less (higgs) and tendency of thee particle to collide is very low.

- 7) Many similarities can found between these particle and Dark matter

These particles can be generated in different ways and they can even be generated from photon particles. In fact, group of UMP particles fragment of large particle. If we assume we got that mass from two quantum that is the mass of a group of Ump particle we get a big solution.

- 1) UMP particles are the energy source of universe. UMP particle do not interact with each other but cause of all interactions in the universe. It transmits signals between large particles. UMP particles are exchanged first when excited at the particle.
- 2) These particles generated a little field and act like wave – particle triplet. Each group can be different and each group may have different particle but its act like small higgs-boson when it is moving.
- 3) It follows the Heisenberg uncertainty principle .It is not possible position, momentum and quantity with at a same time.

We can come a great decision on the examination where the intensity of the particle is higher, the number of particle. So the UMP particles density is not constant. We get the same result on milanar simulation .where the number of galaxy of particle quantity is higher; the dark matter density is higher. So it is easily says that there is a strong relation between UMP and Dark matter.

Some stranger fact on this two factor:

Begot Mystery: there is a definite reason why everything in the universe did not arise suddenly .the major feature UMP particle is unstability .it is changed between energy and mass or string and particle.

It can born in three ways according to atomic ring theory

- 1) From energy or string
- 2) Black mass or dark mass
- 3) Which is founded from two quanta
- 4) Broken of big particle

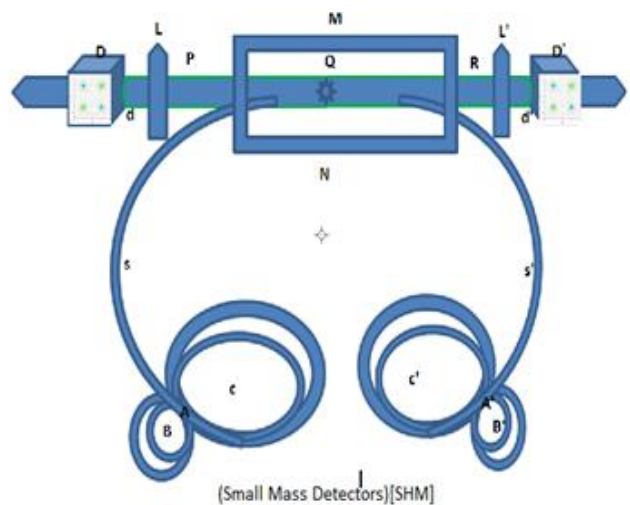


When a large particle is broken, it breaks into many smaller parts. This new smaller parts are called Fragment of UMP. The feature 70-90% of child particle act on mother particle

but 10-30% particle becomes different for varies of energy as seen in a statistic.

Interaction: Because of this particle are so small, the scan not interacts with wave. Rather it works similarly when it comes to a big source or wave. These particles are very low in charge so it is very difficult to detect them. These UMP particles are so small that it can penetrate anything (earth, universe, galaxy).An activation force is required to interact with something but these particle are so small that it cannot reach on this activation value. If an external force tries to bring them closer to the activating force,the opposite action occurs. When charged or given a EM wave, a force is generated between the particles that act like “Great fishing problem”.

9. Experiment on UMP particle

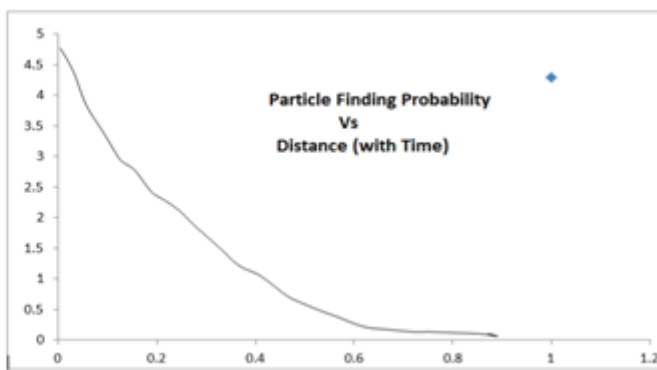
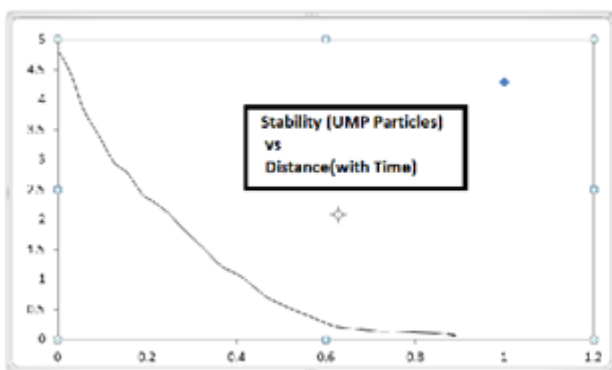
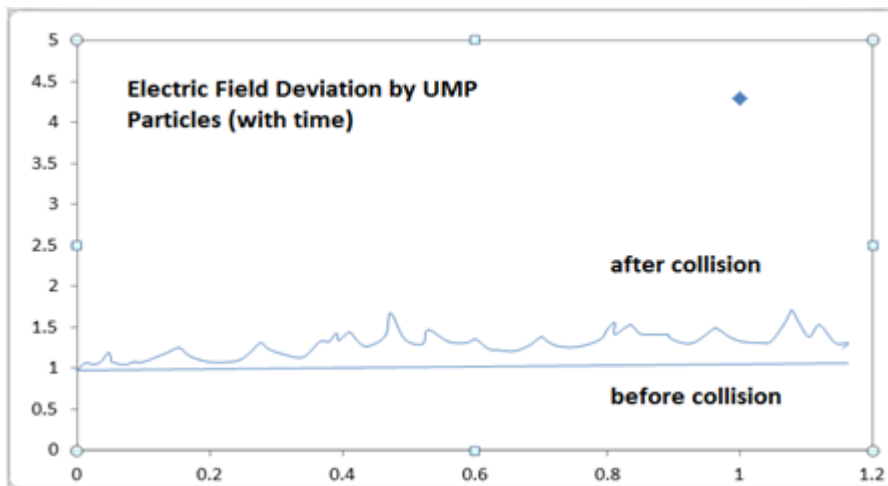


It is the small Mass Detector. Which C and c' is the most powerful particle accelerator. B and B' is have strong magnetic Force that increased the particle speed. S and s' is the tunnel that goes through on the collision place Q. There is a adiabatic wall PMNR to constant energy .L and L' is the Blanket wall .No ordinary particle can penetrate this thick layer. There is small magnetic field on detector D and D' that can be moved on back and front .d and d' is the distance between collider and detector.

10. Observation

After the collision, the two particle will break down and divided into innumerable small parts. Though ordinary particles cannot pass through these layers, only UMP particle (unstable massive particle) will pass through on it. These particles do not interact with EM field but it will deviation the EM field.

11. Results



If we see Einstein energy mass equation,

$$E=m_0c^2$$

for unstable particles or UMP particles energy is nearly zero

$$\text{So, } 0=m_0c^2$$

as mass can not zero so c^2 will zero

$$\text{Or, } c^2 = 0$$

So it provides a conclusion, This particles have no high velocity and its tie the knot with other particles that is discussed before .

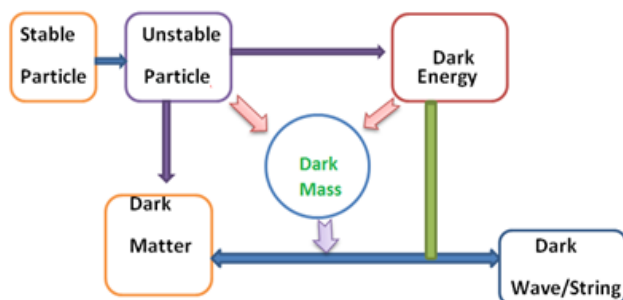


Fig: The soul of universe

12. Conclusion

UMP Particle is responsible and compatible for all type of darkness and Dark matter. The relationship on Dark matter and UMP particle has to do with Whole universe. It is intimately involved with the mystery of the birth of the universe and Big Bang. There are many consistency between dark matter and light though it's act like 180

degree. The amount of the mass between two quanta is called Dark matter Unit (also called Black mass, Dark matter Quanta). Dark matter and Darkness are made with the Big bang and increasing with expanding of universe. UMP particle is the main source of energy of universe and compatible for making a hung gravitational pool. UMP particle makes Dark Wave and radiates energy in from of string (this string and dark wave combine to create dark energy). The energy and mass of universe is always increasing with the increasing of Dark matter and UMP particle.

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