

The theory of need of space (theory of nothing)

Before a couple of years, I was explaining to myself about how everything is created. I knew that every substance is made up of atoms which in turn are made of electrons and quarks. What are electrons and quarks or in simple word, mass made of? I answered energy. As we all know by the famous equation $E = mc^2$. So, what is energy made of? Or what it really is? How did it come into existence? I have no habit of searching answers much in books and other sources but just wandered about it, and what I knew at that time was that nobody knew the answer. But after about a week I thought, what was there before the creation of something (energy). I knew the answer was nothing and what I was seeking was how something came into existence out of nothing. It of course wasn't magically. **So, I felt nothing is only the thing that can exist and in actual nothing is created.** But what about these everything that exist? Is it just an illusion or what is it? But I knew it is nothing that can exist and its existence can't be violated. So everything that is around is nothing. In fact everything is nothing, but how? What is the mechanism that nothing appears as something or creates an illusion of being something?

Something can exist if nothing gets violated. But nothing can't be violated and something, in fact everything is nothing. So what happens actually is nothing remains conserved but in different forms. Either we say 0 or y-y, x-x, z-z, a-a, and so on, we are talking about the same thing. **The main principle that works here is nothing can exist in any of the form remaining conserved.** Conservation of nothing is important; that is, nothing exists or remains conserved.

I of course wasn't that close with quantum physics that dictates the creation of energy with anti-energy or particle with antiparticle from nothing and also dictates the creation of everything and entire universe from nothing. But after I knew about this, I was inspired. But I had different vision about how everything gets created from nothing. Violation of nothing actually happens but due to violation there develops resistance which opposes the violation or acts against it. Violation and resistance (potential) are opposite in nature. This resistance to violation of nothing conserves nothing. After a year I found the way to describe this mathematically.

This theory deals how everything comes out of nothing.

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Theory of The Need of space

(Theory of nothing)

Introduction

The way we define universe with the study of various characteristics of it and compiling them as a set of theory, is all governed by a single law which is the study of the one and only one property of space governing and guiding the entire property or characteristics of universe. This property is ***need of space (need of nothing or law of conservation of nothing)***.

It is the property of space which does not allow the existence of space (nothing) to be violated. In general it resists the non-conservation of space. The existence of space cannot be violated means the value or its any amount can't be zeroed. It does not again mean that the violation does not exist. As the violation to existence of space is created, space develops a potential (resistance) against the violation made. So in fact, existence of any value of space remains conserved; that is, nothing remains conserved. The violation-resistance state is state of nothing. Thus nothing remains conserved. Since the potential is against the violation, space tries to regain its non-violated state or state without the potential state of its existence's conservation. This results the change in any state of anything. In simple word, this creates time.

The ***time*** or any changes in any state of anything will be zero until the violation to its state is made i.e. until there is no any ***violation*** to the state of anything or any system or simply space that system remains unchanged without any change in its state. Thus there the ***time does not exist***.

Here,

$$\text{Time (T)} \propto \text{Violation of space}$$

There is no existence of ***time*** without violation to the existence of space or without the change of the "***non-potential conserved***" state of ***existence of space*** to "***potential conserved***" state of ***existence of space***.

Energy, mass and space (need of space):

Energy actually is the result of violation to the existence of Space. It actually is the potential developed which tries to overcome the violation made and works for the regain of the actual and non-violated state of existence of space. The least possible violation of space (nothing) results least possible energy (resistance against violation of space).

Here,

Energy created or change in energy is directly proportional to the violation created or made.

i.e. $\dot{\eta} \propto E$ Or, $\dot{\eta} \propto (\Delta E)^3$

i.e. $\dot{h} = \omega(\Delta E)^3 \text{_____} (\$)$

Where the value of 'ω' is $\left[\frac{V_0}{E^3}\right]$ as we will see later and 'h' is **need of space (violation created) and "ΔE" is change in energy of the system.**

The property of "need of space" or the property of space to exist and keep its existence conserved, leads everything to exist. Everything existing in universe is just the function of this property of space and the amount of violation created to it. This property of space leads the existence of three states at which any system exists i.e. rest, potential and kinetic.

Kinetic energy in terms of need of space (nothing).

Kineticity of any system is the state that exists when the violated state or the potential state of the system is being converted to non-violated or non-potential state of system.

Now, before moving forward lets view "length contraction" and "increase in mass" of any system (body) when it is motion, which **special relativity** dictates.

When the body is set in motion, then body's length decreases at motion towards the direction of violation or towards the direction of motion by Einstein's equation (from special relativity) as,

$$l = l_o \sqrt{1 - \frac{v^2}{c^2}}$$

Where, ***l = final length of a body.***

v = velocity of body.

l_o = initial length of body.

c = velocity of light in vacuum.

Since, it is the state of violation.

This actually means that the violation to the existence of space of any system is violation to the spatial dimensions of that system.

Now, as explained, the energy increases as the violation to the existence of space or a system increases. Here the energy on the system to which the violation is made increases and thus mass increases on that system.

In general the mass increases as violation increases or the potential (resistance to violation) increases and also the velocity increases as violation increases. Thus the mass increases as velocity increases by Einstein's equation (from special relativity) as,

$$m = \frac{m_o}{\sqrt{1 - \frac{v^2}{c^2}}}$$

Where, ***m = final mass of a body.***

v = velocity of a body.

m_o = initial mass of a body.

c = velocity of light in vacuum.

We have got a clue about how violation to space (nothing) creates resistance (mass or energy) and how are they related. We will later go on further and detailed discussion and show how the violation to space (nothing) is related to resistance (energy or mass).

KINETICITY (motion), mass AND VIOLATION to space (NEED OF SPACE)

From Newtonian 1st law of motion" *any body continues in its state of rest or motion until it is compelled to change its state by any force.*" But actually the state of any body is the function of net violation on it. A body can be in the state of motion only when the net violation on it is not zero i.e. it carries momentum even if it has a relative violation which is not equal to zero.

Now, in case of force acting against body's motion or violation acting against violation contained in the body, the net violation after this action gives the state of body.

i.e. If $\dot{\eta} > -\dot{\eta}'$ then the body continues in its motion in the same direction with decrease in momentum or velocity or violation contained by the body.

Similarly, if $\dot{\eta} \leq -\dot{\eta}'$ then the body gradually loses its momentum, velocity or violation contained in it in the initial direction and finally changes its direction of momentum, velocity or comes to rest due to change in violation or net violation.

Here, $\dot{\eta}$ and $-\dot{\eta}'$ are neither equal in magnitude nor equal in direction.

The violation made on the body contributes to the increase in mass of the body and also the momentum. The condition of violation to the body and momentum has already been discussed above but the relation of violation and mass is quite different from relation between violation and momentum.

In case of violation and momentum, if violation on the body increases then there is only increase in the mass but no decreases. If violation is from all the direction and even if it is not from all the directions, the mass of body increases. On violation from all the direction, the mass increases by greater amount than from one direction because there is more violation in case of violation from all direction than from single direction.

As discussed, the violation on the body contributes to the increases in mass and momentum of body. When the body at lower violation state is provided with violation (from a single direction) then the violation provided contributes much to momentum than to mass at lower velocity. As the violation states becomes higher then the contribution of violation that we provide increases for mass and decreases for momentum than it was in the lower violation states.

In case of violation from all direction, there is no increase in momentum but only in mass(at this net force is zero but violation is greatest) but incase of violation from single or more than single or less than from all directions, the violation contributes to increase in mass as well as momentum(at this net force is not zero and contribution of violation to mass and momentum is as above).

A body continues in its state of motion with uniform velocity only when the net violation is maintained in it and which is not zero and does not change its magnitude. If the violation changes gradually then it results acceleration or deacceleration in the body but the acceleration doesn't increases gradually as explained. On increasing the violation the potential on the body increases i.e. resistance to violation increases(i.e. increase in mass) so the force being created on the body to mass ratio remaining constant cannot increase acceleration on the body.

This also means the acceleration of the body increases until the violation comes near to the extreme violation point i.e. the point of violation after which the violation created converts to mass only.

When violation is made on any particle or a body, then its potential against the violation develops and tries to bring the body to its non-potential state of existence. Now the particle in this attempt tries to acquire the position of existence of non-potentialness and the particle gains Kineticity (momentum). But the Kineticity is determined by the net direction of violation on the particle and the direction of momentum is given by the direction of net violation on it.

Further discussion on energy, mass and space (need of space):

N O S

Actually space (nothing) has a property of being in existence which cannot be violated and every point in space has this property .i.e. its existence cannot be zeroed. Actually space (nothing) is that what exists. And it can be violated but this develops a potential i.e. the factor or form which balances violation and space remains conserved and what results evolution of energy and resistance (mass). Energy and Mass has no existence without violation of existence of space. Mass and energy is the negative of violation created. The total violation actually is pseudo violation to existence of space as the space develops potential or resistance which conserves the existence of space.

Violation-Mass

The violation to existence of space (nothing) or any forms of space is of course the violation to the spatial dimension. Now the change in mass (actually increase) with change in spatial dimension (actually decrease) can be gained as:

As explained, a body with mass ' m_o ' in motion with velocity ' v ' will gain mass and the new mass will be

$$m = \frac{m_o}{\sqrt{1 - \frac{v^2}{c^2}}} \text{ ______ } (\#)$$

Where, **m_o = initial mass of the body.** **m = final mass of the body.**
 v = velocity of body. **c =velocity of light in vacuum.**

At the same time the length of the body decreases and the new length becomes

$$l = l_o \sqrt{1 - \frac{v^2}{c^2}} \text{ ______ } (*)$$

Where, **l_o = initial length of body.** **l = final length of body.**
 v = velocity of body. **c = velocity of light in vacuum.**

And thus the violation created can be accounted as change in spatial dimension of the body

So, the violation created ($\dot{\eta}$) = $\Delta l = l_o - l$ ______ (1) and

Where, **$\Delta l = \dot{\eta}$ = Change (decrease) in length of body (violation of spatial dimension).**

Change in mass (increase) (Δm) = $m - m_o$ ______ (2)

Now from (*) in (1)

$$\dot{h} = l_o \left(1 - \sqrt{1 - \frac{v^2}{c^2}}\right) \quad \left[\because l = l_o \sqrt{1 - \frac{v^2}{c^2}} \text{ length contraction due to motion.} \right]$$

$$\text{Or,} \quad 1 - \frac{\dot{h}}{l_o} = \sqrt{1 - \frac{v^2}{c^2}} \quad (3)$$

And from (#) in (2)

$$\Delta m = \left(\frac{1}{\sqrt{1 - \frac{v^2}{c^2}}} - 1 \right) m_o$$

$$\left[\because m = \frac{m_o}{\sqrt{1 - \frac{v^2}{c^2}}} \text{ increase in mass due to motion.} \right]$$

$$\text{Or,} \quad \frac{1}{\frac{\Delta m}{m_o} + 1} = \sqrt{1 - \frac{v^2}{c^2}} \quad (4)$$

From (3) & (4), we get

$$1 - \frac{\dot{h}}{l_o} = \frac{1}{\frac{\Delta m}{m_o} + 1}$$

On simplifying,

$$\left(\frac{\Delta m}{m_o} + 1 \right) \left(1 - \frac{\dot{h}}{l_o} \right) = 1$$

$$\frac{\Delta m}{m_o} - \frac{\Delta m \cdot \dot{h}}{m_o \cdot l_o} - \frac{\dot{h}}{l_o} = 0$$

$$\frac{\Delta m \cdot l_o - \dot{h} \cdot m_o}{m_o \cdot l_o} = \frac{\Delta m \cdot \dot{h}}{m_o \cdot l_o}$$

$$\Delta m \cdot l_o - \dot{h} \cdot m_o = \Delta m \cdot \dot{h} \quad (**)$$

$$\Delta m \cdot l_o - \Delta m \cdot \dot{h} = \dot{h} \cdot m_o$$

$$\Delta m = \frac{\dot{h} \cdot m_o}{l_o - \dot{h}} \quad (5)$$

Also from (**)

$$\dot{h} = \Delta l = \frac{\Delta m \cdot l_o}{m_o + \Delta m} \quad (6)$$

Now considering a body in motion, there is the violation in a direction of motion and in the same direction is decrease in length and increase in mass. If same amount of violation is created at all points from every directions then the mass will be at rest but there is violation to the existence of body and there is change (decrease) in volume (spatial dimension), thus there is increase in potential or resistance and thus increase in mass. The change in mass due to change in volume or simply the relation of change in mass and change in volume is given as:

Cubing both sides of (5), we get

$$(\Delta m)^3 = \left(\frac{\Delta l \cdot m_o}{l_o - \Delta l} \right)^3$$

$$\Delta m = \sqrt[3]{\left(\frac{\Delta l \cdot m_o}{l_o - \Delta l} \right)^3}$$

$$\Delta m = \frac{m_o}{l_o - \Delta l} (\Delta V)^{\frac{1}{3}} \text{---(7)}$$

Or also,
$$\Delta m = \frac{m_o}{l} (\Delta V)^{\frac{1}{3}} \quad [\because \Delta l = l_o - l]$$

Also, on cubing (6)

$$(\Delta l)^3 = \left(\frac{\Delta m \cdot l_o}{m_o + \Delta m} \right)^3$$

$$\dot{\eta} = \Delta V = \frac{(\Delta m)^3 \cdot V_o}{(m_o + \Delta m)^3} \text{---(8)}$$

If 'm' is final mass i.e. if $m = m_o + \Delta m$, then eq (8) becomes,

$$\dot{\eta} = \Delta V = \frac{(\Delta m)^3 \cdot V_o}{(m)^3} \text{---(9)}$$

Where,

$\Delta V = \text{initial volume } (V_o) - \text{final volume } (V) = \text{change (decrease) in volume or violation to spatial dimension.}$

$\Delta m = \text{change (increase) in mass.}$

Again, multiplying and dividing right-hand side of (9), we get,

$$\dot{\eta} = \frac{(\Delta m)^3 \cdot V_o}{(m)^3} \cdot \frac{(c^2)^3}{(c^2)^3}$$

$$\dot{\eta} = \frac{(\Delta m \cdot c^2)^3 \cdot V_o}{(m \cdot c^2)^3}$$

$$\dot{\eta} = (\Delta E)^3 \cdot \frac{V_o}{(E)^3}$$

If $\frac{V_o}{(E)^3} = \omega$ then,

$$\dot{\eta} = \omega(\Delta E)^3 \text{_____} (10)$$

Where, ***E = final energy.***

Here, 'η' is just used to represent the violation in spatial dimension or space which can be violation in length, volume and violation to any number of spatial dimensions.

Conclusion:

So these are the relations of *violation of space (nothing)* with resistance (energy and *mass*). And thus the mass increases on increase in violation to the existence of space since the potential or resistance increases. Therefore, mass or energy is the function of violation to the existence of space or potential or resistance developed due to violation to existence of space or nothing. Simply understanding energy-violation or mass-violation is the form of space (nothing) and space converts into mass-violation or energy-violation and thus is conserved as energy-violation or mass-violation.

SO, this is how everything is created out of nothing.