

Non-Interactive Mechanics

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Abstract The theory of new type of particles called non-intractable particles, these are the particles which attend every mass state in universe, with it defining the statistic of Non-Intractable particles, the equations of Non-Interactive Mechanics, structure of Nucleus and Atom according to Non-Interactive Mechanics, proof of Dirac Particle-Antiparticle theory, Nishant Effect -The process by which Non-Interactive particles react with matter with this the proofs of Nishant effect 1. Linear harmonic oscillator 2. Plank's radiation law 3. Mass- energy equivalence relation $E=mc^2$ 4. velocity of light 5. The Relativistic relation $E^2=P^2C^2+m^2c^4$.

Keywords Ramanujan Entering, Ramanujan Effect, Velocity of Light

1. Introduction

The Human Afford To Understand Physical Phenomena is Too Old, From Ancient Indian, Greek And So other Civilizations Put Their Approaches To Understand The Physical World Around Them Including Earth, Solar System, Galaxy And This Infinite Universe And So As The Modern Day Scientist Try to Find the Physical World's nature, reason and properties around them such as Newton, A. Einstein.

The Approach to understand the physical world is started with the assumption of the classic way by Newton, later Einstein and plank put their approaches to understand the advance form of physics in two different ways.

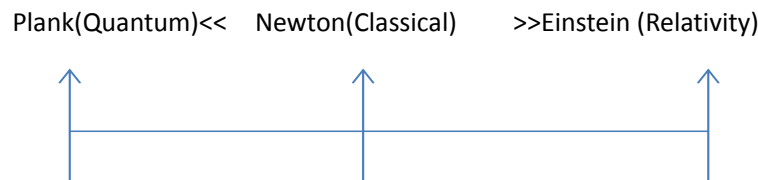


Figure 1

Both ways of plank and Einstein is the another way to approach the way of Newton, both ways have their possibility in some special conditions. But still a question arise as all these three cases posses a same restriction. Now let's see what is this restriction is-

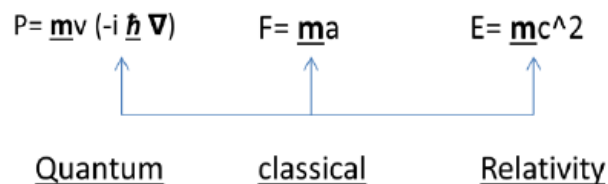


Figure 2

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The terms P(momentum), F(force), E(energy) is attached with the quantity m(mass) and it make possible to explain these quantities practically and physically, but still a question arise “*How A Field Quanta Attend Mass*”? if any field’s quanta possessing these three nature of P(momentum), F(force), E(energy) then without the quantity m(mass) these quality can’t be explained so how a field quanta attend mass value the only understanding of mass of a quanta comes arrive when it comes in range of interaction of other quanta.

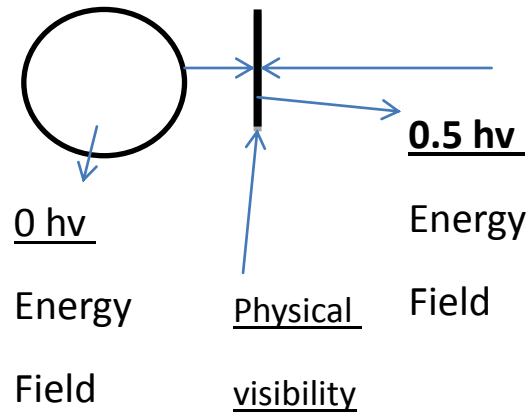


Figure 3

Quantum mechanically a field quanta can be observed and explained at $E=0.5h\nu$ Energy level that it’s “zero-point Energy. Here we introduce a new particles called “*NON-INTERACTIBLE PARTICLES*” or simply “*N-I Particles*” The field quanta of ‘ $0h\nu$ ’ Energy level, the N-I particles are those particles, whose interaction with matter particles is negligible or they doesn’t exchange energy with energy or energy with mass when they interacts with matter obtained particles, they exchange energy with energy only when they interact with each other. Here by the term *interaction means the energy exchange only occurs if the quantas are same or approximately similar energy level and interaction with other energy level quantas will be negligible.*

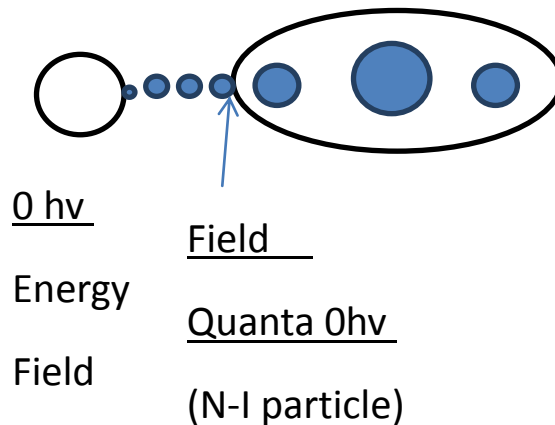


Figure 4

Here in this above figure we can see that the interaction of N-i particles will occur when they attend the $0.5h\nu$ energy level. So now the approach to understand the mechanics of, how these non-intractable particles attend mass field? or simply the ***NON-INTERACTIVE MECHANICS.***

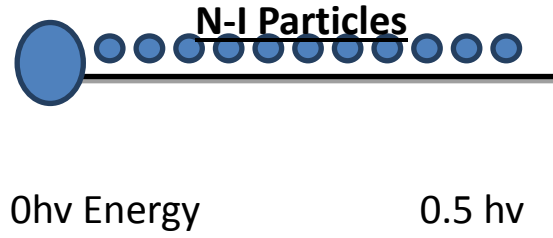


Figure 5

Now we examine what is this mechanics and how it works.

2. Statistical Formulation of Non-Interactive Mechanics

The assembly of these particles is known as ‘non-intractable particles’, by the term non-interactive means interaction of these particles with massed particles (field quantas of $0.5h\nu$ or higher energy levels) is very feeble or negligible and they only interchange energy when interact with each other, these particles approximately zero mass at both rest and movement but hold the ability to lead the mass and mass field in their app. zero mass level.

So the basic points clear as :-

1. These particles exchange energy during their collisions, without the interchange of mass or the exchanged mass quantity is very feeble.
2. Particles possess the ability to follow spin as it provided by field’s geometry.
3. Particles are indistinguishable, so there is no distinction between the various ways in which **ni** non-intractable particles are chosen, here the point to be notice that ‘*these particles move only in straight line, and move without scattering with massed particles*’, the reason is that these particles only interchange energy during their collision or interchanged mass quantity is very feeble so their effective collision is only with one axis and it’s components.

Now we see the distribution law of **ni** non-intractable particles.

A. DISTRIBUTION LAW:-

Let there is **ni** particles present, the procedure of arranging these **ni** particles in **gi** cell’s.

These particles obey ‘Pauli’s exclusion principle’ as they possess the spin of $1/2$. so there is one particle or not any particle will present in a given cell, therefore the number of cells must be greater than number of particles $g_i \gg n_i$.

Here the “Non-intractable cell” means a place leave by a energy form ‘non-intractable particle’.

Now if the primary particle obtain state in **gi** cell so the remaining cells will be $(g_i - 1) !$

So the total number of different ways of arranging **ni** particles among **gi** states with energy level E_i is given by:-

$$\begin{aligned} & g_i (g_i - 1) (g_i - 2) \dots (g_i - (n_i - 1)) \\ \text{or} & \frac{(g_i)!}{(n_i)! \cdot (g_i - (n_i - 1))!} \end{aligned} \quad (1)$$

as $(g_i - n_i) \gg 1$ so $(g_i - n_i + 1) = (g_i - n_i)$

now for the case of non-interactive mechanics as mentioned earlier ($g_i \gg n_i$) so the number of particles with respect to number of cells is very feeble, so

$$(n_i)! \cdot (g_i - n_i)! = (g_i - n_i)! \quad (\text{as } g_i \gg n_i)$$

So the equation –(2) looks as:-

$$\frac{(g_i)!}{(g_i - n_i)!} \quad (2)$$

Now the point to be notice that these particles are indistinguishable, so the distribution law is given by:-

$$\begin{aligned} W(n_1, n_2, \dots, n_i, \dots, n_k) = & (g_1)! / (g_1 - n_1)! * (g_2)! / (g_2 - n_2)! * \dots * (g_i)! / (g_i - n_i)! * \dots * (g_k)! / (g_k - n_k)! \\ W = \sum_{i=1}^K & K \frac{(g_i)!}{(g_i - n_i)!} \end{aligned} \quad (3)$$

so this is the required distribution law for **ni** NON-INTERACTIBLE PARTICLES in **gi** non-intractable cells.

B. MOST PROBABLE DISTRIBUTION:-

Taking logarithm on the both sides of eq. -(3)

$$\log W = \sum_{i=1} (\log g_i! - \log(g_i - n_i)!))$$

Now using stirling approximation:-

Which is $-\log n_i! = n_i \log n_i - n_i$

$$\text{So- } \log W = \sum_{i=1} ((g_i \log g_i) - g_i - (g_i - n_i) \log (g_i - n_i) + (g_i - n_i))$$

$$\log W = \sum_{i=1} ((g_i \log g_i) - (g_i - n_i) \log (g_i - n_i) - n_i) \quad (4)$$

Here the point to be clear in above equation that both g_i and n_i varies, the reason of variation in g_i is that the existence of Non-Intractable particles is beyond 0.5 hv energy levels, as described earlier at this range 'A Non-intractable cell means a place leaved by a Non-intractable particle'.

So here the cell will be the place which attained by 0hv energy level quanta, due to this in eq. -5 both n_i and g_i varies.

Now differentiating eq.-(4)

$$\begin{aligned} \delta(\log W) &= (\delta(g_i \log g_i) - \delta((g_i - n_i) \log(g_i - n_i)) - \delta n_i) \\ &= ((g_i/g_i) \cdot \delta g_i + \log g_i \cdot \delta g_i - (g_i - n_i)/(g_i - n_i) \cdot \delta(g_i - n_i) - \log(g_i - n_i) - \delta(g_i - n_i) - \delta n_i) \\ &= (\delta g_i + \log g_i \cdot \delta g_i - \delta(g_i - n_i) - \log(g_i - n_i) - \delta(g_i - n_i) - \delta n_i) \\ &= (\delta g_i + \log g_i \cdot \delta g_i - \delta g_i - \delta g_i \cdot \log(g_i - n_i)) + (\delta n_i + \delta n_i \cdot \log(g_i - n_i) - \delta n_i) \\ &= (\log g_i - \log(g_i - n_i)) \cdot \delta g_i + (\log(g_i - n_i)) \cdot \delta n_i \end{aligned} \quad (5)$$

(i)- Conservation of total number of particles and cells, that number of particles and no. Of cells are always conserved.

As $n = \sum n_i = \text{constant}$

So $\delta n = \sum_i (\delta n_i) = 0$

Similarly $g = \sum g_i = \text{constant}$

$$\delta g = \sum_i (\delta g_i) = 0$$

(ii) conservation of total Energy of system for particles and cells –

$E = \sum n_i \cdot E_i = \text{constant}$

$$\delta E = \sum_i (n_i \cdot \delta E_i) = 0$$

Similarly for g_i

$$\delta E = \sum_i (g_i \cdot \delta E_i) = 0$$

Substituting this in eq.-(6)

$$\begin{aligned} &= (\log g_i - \log(g_i - n_i)) \cdot \delta g_i + (\log(g_i - n_i)) \cdot \delta n_i \\ &= (\log(g_i/(g_i - n_i)) + \alpha + \beta E_i) \cdot \delta g_i + (\log(g_i - n_i) + \alpha + \beta E_i) \cdot \delta n_i \end{aligned} \quad (6)$$

For solving this equation equating both term equals to zero and solving them sepretly:-

FIRST PART -

$$(\log(g_i/(g_i - n_i)) + \alpha + \beta E_i) \cdot \delta g_i = 0$$

$$\log(g_i/(g_i - n_i)) + \alpha + \beta E_i = 0$$

$$\log(g_i/(g_i - n_i)) = -\alpha - \beta E_i$$

$$n_i = g_i (1 - e^{\alpha + \beta E_i}) \quad \text{-(a)}$$

SECOND PART -

$$(\log(g_i - n_i) + \alpha + \beta E_i) \cdot \delta n_i = 0$$

$$(\log(g_i - n_i) + \alpha + \beta E_i) = 0$$

$$(\log(g_i - n_i)) = -\alpha - \beta E_i$$

$$g_i - n_i = e^{-\alpha - \beta E_i}$$

$$n_i = g_i - e^{-\alpha - \beta E_i} \quad \text{-(b)}$$

adding both eq. -a and -b substituting this in eq.-(7)

$$\begin{aligned} N_i (n_i + n_i) &= g_i (1 - e^{\alpha + \beta E_i}) + g_i - e^{-\alpha - \beta E_i} \\ &= g_i - (g_i e^{\alpha + \beta E_i}) + g_i - e^{-\alpha - \beta E_i} \\ N_i (n_i + n_i) &= 2g_i - g_i e^{\alpha + \beta E_i} - e^{-\alpha - \beta E_i} \end{aligned} \quad (8)$$

The above equation represents the way of cell distribution in Non-intractable particles as if

N_i ($n_i + n_i$) = the number of non-intractable particles.

$2g_i$ = the number of cells (2) available to non-intractable particles.

$e^{\alpha+\beta E_i}, e^{-\alpha-\beta E_i}$ = geometries available to non-interactable particles.

Now we discuss the behaviour of eq-(8) and process of cell distribution to non-interactable particles, as the existence of these particles is stated in $0h\nu$ energy level and the non-interactive mechanics deals with the mechanism of non-intractable particle from $0h\nu$ energy level to $0.5h\nu$ energy level which can be stated as **matter field**, so in equation –(8) N_i represents the number of non-intractable particles, so as 2 non-intractable particle entered in matter field the 2 two cells ($2g_i$) are provided to them, with two geometries of matter field ($e^{\alpha+\beta E_i}, e^{-\alpha-\beta E_i}$) which are equal in amount but different in direction, in which the geometry ($g_i e^{\alpha+\beta E_i}$) occupy a cell is stated as **POSITIVE CURVE GEOMETRY**, and the geometry which is equal in amount of positive curve geometry but cell less and opposite in direction is stated as **NEGATIVE CURVE GEOMETRY**.

So the points are clear as:-

1. At the time of entering of a pair of non-intractable particle in the matter field, there will be two cells are provided to them.
2. After the entering of these non-intractable particles in the matter field they comes under the two geometries in matter field (positive and negative curve geometries) which are equal in amount but opposite in direction ($e^{\alpha+\beta E_i}, e^{-\alpha-\beta E_i}$).
3. As one of the positive curve geometry ($g_i e^{\alpha+\beta E_i}$) is cell occupied geometry, so the first particle enter in the matter field will follow the positive curve geometry, and with it equal in amount but opposite in direction geometry Negative curve geometry is also provided to non-intractable particle.

So the prime rotation followed by non-intractable particles is under positive curve geometry or in other words right-handed rotation is the prime rotation followed by the Non-intractable particles,

With it Negative curve geometry (left hand rotation) is also available to the Non-intractable particles which is just equal in amount but different in direction.

C. POSITIVE AND NEGATIVE CURVE GEOMETRIES

The concept of curved space geometry is arise by the mathematician Riemann and then in general theory of relativity Einstein gives the description of curved space geometry, here in non-interactive mechanics, space geometry categorise by the different rotation properties of non-interactive particles in matter field.

POSITIVE CURVE GEOMETRY-

The term $g_i e^{\alpha+\beta E_i}$ in eq. –(8) represents the positive curve geometry the name positive curve is due to positive signs of α and β , the geometry is a cell occupied positive curve geometry in which the rotation of N-I particles is right handed, rotation of proton in nucleus and all $+1/2$ (app.) rotating particles follow the positive curve geometry provided in matter field, the positive curve geometry can be explained as the rotation of planets around sun is the positive curve geometry. ‘So the prime rotating geometry is positive curve geometry in the matter field’ now as the cell occupied geometry so the interaction will occurs

So “the cell occupied geometry in which the N-I particles follow the right handed rotation is called positive curve geometry”.

NEGATIVE CURVE GEOMETRY

The term $e^{-\alpha-\beta E_i}$ in eq.-(8) represents the negative curve geometry, the name negative curve is due to the negative sign of α and β . the geometry is a non cell occupied geometry, which is equal in amount to positive curve geometry but different in rotation.

D. NON-INTERACTIBLE PARTICLES ENTERING IN MATTER FIELD AND IT’S EXPLANATION

Now we see the equation of entering of non-intractable particles in matter field, this can be seen as the entering of $0h\nu$ energy field quanta (N-I particle) in $0.5h\nu$ energy field quanta or in intractable matter field.

The eq. –(8) represents the distribution of n_i Non-intractable particles in g_i cell’s which is

$$N_i (n_i + n_i) = 2g_i - g_i e^{\alpha+\beta E_i} - e^{-\alpha-\beta E_i}$$

$$\text{Here } e^{-\alpha} = A$$

$$\text{So - } N_i (n_i + n_i) = 2g_i - g_i A^{-1} e^{\beta E_i} - A e^{-\beta E_i} \quad (8)$$

It is convenient to consider continuous distribution of particles energies rather than discrete energies such as- $E_1, E_2, E_3, \dots, E_K$

$$S_n(E) dE = 2g(E) dE - g(E) A^{-1} e^{\beta E} dE - A e^{-\beta E} dE \quad (9)$$

Let us assume $n(E)$ represents the number of particles having energies between E and $E+dE$ if P is the Momentum of given particles so:- $E = \frac{p^2}{2m_0}$

But as we know that particles possess almost zero mass in both rest and moving, so as $m = m_0 \equiv 0$, now here m_0 is the approximately equal to zero mass value so- $E = \frac{p^2}{2m_0}$ (where m_0 is the mass of non-interactable particle approximately equal to zero)

so the eq.- (10) transform into:-

$$n(P)dP = 2g(P)dP - g(P)A^{-1}e^{\beta \frac{p^2}{2m}}dP - Ae^{-\beta \frac{p^2}{2m}}dP \quad (10)$$

Here $n(P)$ represents the no. Of non-intractable particles having momentum between P and $P+dP$.

Then priori probability $g(p)$ that a particle have momentum between P and $P+dP$ is equal to be number of cell's in the phase space within, which such a particle may exist.

As mentioned earlier these particles move only in straight line so:-

$g(P) dP$ = volume of the zone in the phase space / volume of one cell

zone of Non-intractable particles in phase space is given by only a single position and momentum co-ordinates, as we know that these particles could travel only in one directions," so the volume of zone in phase space is given by $-\int dx \int dP_x$, while the volume of one cell is h^3 , so the point is cleared here that particles have six-dimensional space or may be more to move, but they bound to move in the dimensional space where x is position coordinate and P_x is relative momentum, as we choose x and P_x axis to move :-

$$\text{so:- } g(P)dP = \frac{\int dx \int dP_x}{h^3} \quad (11)$$

here non-intractable particles have x, y, z axis and their relative momentum (P_x, P_y, P_z) to move but they are bound to move only in straight line

Here $\int dx = \frac{V}{3}$ because $(\iiint dx dy dz = V)$

As we know that particle lying in the momentum range between P_x and P_x+dP_x (as six dimensional space x, P_x, y, P_y and z, P_z available but particle bound to move in the straight line) so:-

$$\begin{aligned} \int dP_x &= \frac{4\pi(P+dP)^3}{3} - \frac{4\pi P^3}{3} \\ \int dP_x &= \frac{4\pi(P^3 + 3P^2dP + 3PdP^2 + dP^3 - P^3)}{3} \\ \int dP_x &= 4\pi P^2 dP \quad (dP^3 \text{ and } dP^2 \text{ are neglected}) \end{aligned}$$

$$\begin{aligned} g(P)dP &= \frac{4\pi V P^2 dP}{3h^3} \\ &= \frac{4\pi V P^2 dP}{3h^3} \end{aligned}$$

Substituting above value of $g(P) dP$ in equation-(11)

$$n(P)dP = \frac{V \cdot 4\pi P^2 (2 - A^{-1} e^{\beta E}) dP}{3h^3} - A e^{-\beta E} dP$$

Since the total number of non-intractable particles is N so-

$$\begin{aligned} \int_0^\infty n(P) dP &= N \\ N &= \frac{V \cdot 4\pi P^2 (2 - A^{-1} e^{\beta E}) dP}{3h^3} - A e^{-\beta E} dP \\ &= \frac{V \cdot 4\pi P^2 (2 - A^{-1} e^{\beta \frac{p^2}{2m_0}}) dP}{3h^3} - A e^{-\beta \frac{p^2}{2m_0}} dP \quad (\text{as } E = \frac{p^2}{2m_0}) \end{aligned}$$

So:-

$$N = \frac{8\pi V}{3h^3} \int_0^\infty P^3 dP - \frac{4\pi V A^{-1}}{3h^3} \int_0^\infty P^2 e^{\beta \frac{p^2}{2m}} dP - A \int_0^\infty e^{-\beta \frac{p^2}{2m}} dP$$

Neglecting the first integral on R.H.S due to integral limits

$$\text{So- } N = - \frac{4\pi V A^{-1}}{3h^3} \int_0^\infty P^2 e^{\beta \frac{p^2}{2m}} dP - A \int_0^\infty e^{-\beta \frac{p^2}{2m}} dP$$

$$\text{As- } \int_0^\infty P^2 e^{\beta \frac{p^2}{2m}} dP = \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\beta \frac{p^2}{2m}} = \frac{1}{2a} \quad (\text{suppose})$$

$$\text{And } \int_0^\infty e^{-\beta \frac{p^2}{2m}} dP = 1 = b \quad (\text{suppose})$$

$$N = - \frac{4\pi V A^{-1}}{3h^3} \cdot \frac{1}{2a} A \cdot b \quad (12)$$

$$\text{Taking- } - \frac{4\pi V A^{-1}}{3h^3} \cdot \frac{1}{2a} A \cdot b = - \frac{4\pi V A^{-1}}{3h^3} \cdot \frac{1}{2a}$$

$$N = - \frac{4\pi V}{3h^3 A} \cdot \frac{1}{2a}$$

If $\frac{1}{A}$ is very small then

$$N = - \frac{4\pi V}{3h^3} \cdot \frac{1}{2a}$$

Now above mentioned equation can be solved in two parts, let's see them-

1. The first solution of equation -(12)

$$N = - \frac{4\pi V}{3h^3} \cdot \frac{1}{2a} \left(\text{where } \left(\frac{1}{2a} = \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right) \right)$$

$$\text{First Result- } \left(N + \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right) = 0 \quad (13a)$$

$$(N = - \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}}) \quad (13b)$$

1. Second solution of equation -(13) have two forms, the equation -(13) is

$$N = - \frac{4\pi V A^{-1}}{3h^3} \cdot \frac{1}{2a} A \cdot b \quad \text{-(12) if the value of } A^{-1} \text{ is small then}$$

$$N = \frac{A}{A} \left(- \frac{4\pi V}{3h^3} \cdot \frac{1}{2a} \right) - \frac{A}{A} A \cdot b$$

$$N = \frac{1}{A} \left(- \frac{4\pi V A}{3h^3} \cdot \frac{1}{2a} \right) - \frac{1}{A} A^2 \cdot b$$

$$NA = \left(- \frac{4\pi V A}{3h^3} \cdot \frac{1}{2a} \right) - A^2 \cdot b$$

$$A^2 \cdot b + \left(\frac{4\pi V}{3h^3} \cdot \frac{1}{2a} + N \right) A = 0$$

$$A = \frac{-(N + \frac{4\pi V}{3h^3} \cdot \frac{1}{2a}) \pm \sqrt{(N + \frac{4\pi V}{3h^3} \cdot \frac{1}{2a})^2}}{2b} \quad (14)$$

If $A=0$

$$\frac{(N + \frac{4\pi V}{3h^3} \cdot \frac{1}{2a})}{2b} = \frac{\pm \sqrt{(N + \frac{4\pi V}{3h^3} \cdot \frac{1}{2a})^2}}{2b}$$

$$(N + \frac{4\pi V}{3h^3} \cdot \frac{1}{2a}) = \pm \sqrt{(N + \frac{4\pi V}{3h^3} \cdot \frac{1}{2a})^2}$$

As $(\frac{1}{2a} = \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}})$ so above mentioned equation turned into-

$$(A). \quad N + \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} = \pm \sqrt{N^2 + 2N \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \left(\sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} + \left(\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \left(\sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right)^2 \right)} \right)} \quad (15)$$

This is the first form of the second solution of the equation -(12)

(B). This is the second form of the second solution of equation -(12)

$$N = - \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \pm \sqrt{N^2 + 2N \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \left(\sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} + \left(\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \left(\sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right)^2 \right)} \right)} \quad (16)$$

The above mentioned equation is the Non-intractable (N-I) Particle Entering equation in the Matter field equation.

Here the meaning represented by the each term in give equation is

1. N =Non-intractable Particle (N-I particle).

2. $\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} = (M)$ The Matter provided at the time of Entering of N-I Particles.

3. $\pm \sqrt{N^2 + 2N \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \left(\sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} + \left(\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \left(\sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right)^2 \right)} \right)} =$ Distribution of N-I particles

and Matter field or simply Process of Formation (f p.o.f).

The four equations of non-interactive mechanics are

$$1. (N + \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}}) = 0 \quad (13a)$$

$$(N+M=0)$$

Here N is (N-I particle) while M is mass field, so the '*sum of non-intractable particle and matter field is equal to class zero particle field*'. In other word '*A field quantais the union of non-intractable particle and matter field*'.

$$2. (N = - \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}}) \quad (13b)$$

$$(N = -M)$$

The equation showing that '*the non-intractable particle is equal to disintegrated matter*'. here the term -M showing the disintegrated matter .

$$3. N + \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} = \pm \sqrt{N^2 + 2N \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \left(\sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} + \left(\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \left(\sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right)^2 \right)} \right)} \quad (15)$$

$$N+M = \pm (f \text{ p.o.f})$$

The above shown equation showing that '*union of N-I particle and matter field is equal to process of formation*' .

Now if we equate equation -1 and -3 than we find

$$1. (N+M=0) \quad 3. N+M = \pm (f \text{ p.o.f})$$

$$0 = \pm (f \text{ p.o.f})$$

so the process of formation is equal to class zero particle .

$$4. N = - \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \pm \sqrt{N^2 + 2N \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \left(\sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} + \left(\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \left(\sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right)^2 \right)} \right)} \quad (16)$$

$$N = -M \pm (f \text{ p.o.f})$$

The above shown equation showing that '*N-I particle is equal to sum of disintegrated matter and the process of formation*' . this equation is the N-I particles entering equation in matter field.

THIS VALUE IS EQUALS TO THE MESONIC X-RAY OF NUCLEUS RADIUS 1.2+_0.03 fm.

This is also same as deuterons binding energy 2.225+_0.002 Mev

Now let's see a another case if

$$(N = -M \pm (f \text{ p.o.f}) \text{ and } 0 = \pm (f \text{ p.o.f})$$

$$\text{So } N = -M + 0$$

The N-I particles are indistinguishable so taking $0 = N + M$ the N-I particle is indistinguishable but theirs variation in matter as they posses interaction property so

$$N = -M + 0$$

$$N = -M + N + M'$$

$$N = (-M + M') + N$$

$$= (-M + M') - M'' \pm (f \text{ p.o.f}) \quad \text{as } (N = -M'' \pm (f \text{ p.o.f})$$

$$= (-M + M' - M'') \pm (f \text{ p.o.f})$$

$$= (-M + M' - M'') + 0$$

$$= (-M + M' - M'') + N + M''$$

And so as further again this shows the continuous extension of the procedure as this also states that a *N-I particle posses the infinite expansion property* this states that *the process of Non-interactive mechanics is a continues and periodic system in which matter field always extend by every step.*

Here the meaning represented by the each term in give equation is

1. N=Non-intractable Particle (N-I particle).

$$2. \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} = (M) \text{ The Matter provided at the time of Entering of N-I Particles.}$$

$$3. \pm \sqrt{N^2 + 2N \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \left(\sqrt{\frac{8m^3\pi}{\beta^3}} \right) \cdot e^{\frac{\beta p^2}{2m}} + \left(\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \left(\sqrt{\frac{8m^3\pi}{\beta^3}} \right) \cdot e^{\frac{\beta p^2}{2m}} \right)^2} = \text{Distribution of N-I particles}$$

and Matter field or simply Process of Formation (f p.o.f).

Now let's examine the above equations the each term:-

1. 'N' the Non-intractable particle- In above mentioned equations the term 'N' represents the Non-intractable particle. this term shows varies types of quality in matter field and out of matter field which are.

A. Ramanujan Entering.

B. Ramanujan Effect.

A. Ramanujan Entering:- In above mentioned equations the term N represents the N-I particle, whose interaction with matter field is negligible, so for the matter field particle it become a ideal particle so, mathematically-

$N = 1+2+3+4+\dots\infty - (\psi)$ this equation represents that the sum of infinite matter field particle is equal to non-interactable particle.

Now multiplying equation - (ψ) by 4 on both sides then:-

$$4N = 4+8+12+\dots\infty \quad -(\Delta)$$

Now subtracting equation $-(\Delta)$ from $-(\psi)$ we get-

$$N = 1+2+3+4+\dots\infty$$

$$-4N = -4 \quad -8+\dots\infty$$

$$-3N = 1-2+3-4+\dots\infty$$

This gives-

$$-3N = \frac{1}{(1+1)^2}$$

$$N = -\frac{1}{3 \cdot (1+1)^2}$$

$$N = -\frac{1}{12}$$

(17)

The relation is derived by Indian mathematician "Srinivasan Ramanujan".

Here in equation $N = -\frac{1}{12}$

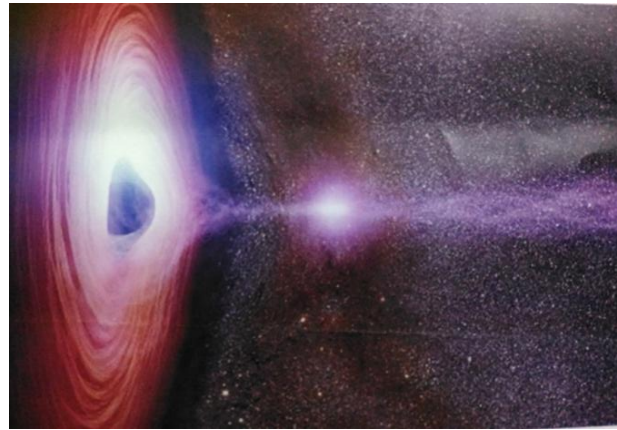
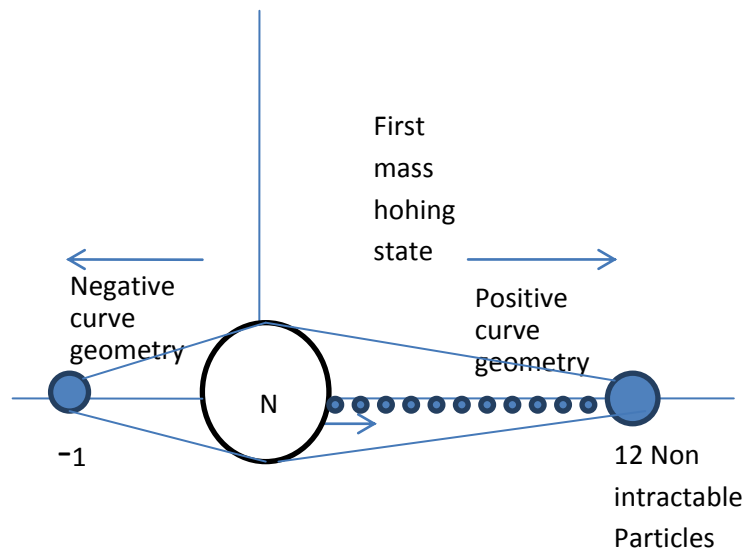
The given terms can be written as $12N = -1$ so by the L.H.S and R.H.S we

Can see that the 12 Non Intractable particles emits by Field quanta in the direction of positive curve geometry till the condition of $12N$ arrives and one Non -Intractable particle emits in the direction of Negative curve geometry. After completing the procedure $12N = -1$ Matter field is available to Positive curve geometry following Non-Intractable Particles.

From this point they have mass field and it's relative state to attain the mass value provided in field.

As the mathematical relation is given by "shri - srinivasn ramanujan".

So the entering of 12 non-intractable particles in mass field by following positive curve geometry while one N-i Particle is following Negative curve Geometry is called as 'Ramanujan Entering'.



(image- NASA)

Similar entering procedure observed by NASA when a particle comes out from black hole.

This is similar to the theoretical and mathematical results mentioned in 'Ramanujan Entering'.

B. Ramanujan Effect-In Ramanujan effect we will study the exchange process of Non-intractable particles.

so Equation -14(a) and equation -14(b) are

$$1. (N + \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}}) = 0 \quad \text{---(13 a)}$$

$$(N + M = 0)$$

$$2. (N = -\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}}) \quad \text{---(13 b)}$$

$$(N = -M)$$

Here $N = 1+2+3+4+\dots\infty$ which gives ' $\frac{1}{12}$ ' after solution, so here N is equal to app. infinite number of positive curve geometry particle so the above relation can be written as

$N(\infty) = -\frac{1}{12}$, here infinite positive curve geometry particles are the function of Non-intractable Particle. Now taking equation -(13 b)

$$N(\infty) = -\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}}$$

Now multiplying N^{-1} on the left of both sides we get

$$N^{-1}N(\infty) = N^{-1} \left(-\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right)$$

This gives-

$$\infty = \frac{1}{N} \left(-\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right) \quad \text{---equation (i)}$$

$$\text{Also - } N(\infty) = -\frac{1}{12}$$

multiplying N^{-1} on the left of both sides we get

$$N^{-1} N(\infty) = N^{-1} \left(-\frac{1}{12}\right)$$

$$\infty = \left(-\frac{1}{12N}\right) \quad \text{-equation (ii)}$$

$$\text{Also- } \infty = \frac{1}{0} \quad \text{-equation (iii)}$$

This gives -

For ∞ this gives the relation

$$\frac{1}{N} \left(-\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right) = \left(-\frac{1}{12N}\right) = \frac{1}{0} \quad \text{equation-(18)}$$

Now again -(13 b)

$$N(\infty) = - \left(\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right) \text{ here } N \text{ is Non-intractable particle , and } \infty \text{ represents the infinite number of positive curve}$$

geometry particles which are the function of N-I particle.

Now taking inverse of above equation -(13 b)

$$\frac{1}{N(\infty)} = - \left(\frac{3h^3}{4\pi V} \cdot 4 \sqrt{\frac{\beta^3}{8m^3\pi}} \cdot \frac{1}{e^{\frac{\beta p^2}{2m}}} \right)$$

Multiplying by N on both sides of given equation

$$\frac{N.1}{N(\infty)} = - N \cdot \left(\frac{3h^3}{4\pi V} \cdot 4 \sqrt{\frac{\beta^3}{8m^3\pi}} \cdot \frac{1}{e^{\frac{\beta p^2}{2m}}} \right)$$

Now multiplying N^{-1} on numerator and denominator both this gives-

$$\frac{1}{(\infty)} = - \frac{N.N^{-1}}{N^{-1}} \cdot \left(\frac{3h^3}{4\pi V} \cdot 4 \sqrt{\frac{\beta^3}{8m^3\pi}} \cdot \frac{1}{e^{\frac{\beta p^2}{2m}}} \right)$$

Which gives-

$$\frac{1}{(\infty)} = - N \left(\frac{3h^3}{4\pi V} \cdot 4 \sqrt{\frac{\beta^3}{8m^3\pi}} \cdot \frac{1}{e^{\frac{\beta p^2}{2m}}} \right) \quad \text{-equation (j)}$$

$$\text{As } \frac{1}{(\infty)} = 0$$

$$\text{So - } 0 = - N \left(\frac{3h^3}{4\pi V} \cdot 4 \sqrt{\frac{\beta^3}{8m^3\pi}} \cdot \frac{1}{e^{\frac{\beta p^2}{2m}}} \right) \quad \text{-equation (jj)}$$

$$\text{Also- } N(\infty) = \left(-\frac{1}{12}\right)$$

Taking inverse on both sides we get-

$$(N(\infty))^{-1} = -12$$

$$\frac{1}{N(\infty)} = -12$$

Multiplying N^{-1} on the denominator of both sides

First the equation can be written as

$$\frac{1}{N(\infty)} = -\frac{12}{1}$$

Now

$$\frac{1}{N^{-1}.N(\infty)} = -\frac{12}{N^{-1}.1}$$

Which gives

$$\frac{1}{\infty} = -12 N$$

$$\text{So- } 0 = -12 N \quad \left(\text{as } \frac{1}{\infty} = 0 \right) \quad \text{-equation (jjj)}$$

Now examining the above equations (i) and (jj) are-

$$\infty = \frac{1}{N} \left(-\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right) \quad \text{- (i)}$$

$$\infty = \frac{(-M)}{N}$$

$$0 = N \left(-\frac{3h^3}{4\pi V} \cdot 4 \sqrt{\frac{\beta^3}{8m^3\pi}} \cdot \frac{1}{e^{\frac{\beta p^2}{2m}}} \right) \quad \text{- (jj)}$$

$$0 = \frac{N}{(-M)}$$

The above shown equations shows that from equation -14(a) and -14(b)

1. $N+M=0$, 2. $N=-M$

The union or sum of element and matter creates a field quanta and as disintegration of matter occurs after that this disintegrate matter collide with field quanta which creates two views or phenomena which are –
when

$$\infty = \frac{1}{N} \left(-\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right)$$

$$\infty = \frac{(-M)}{N} \quad (\text{here } N \text{ is non-interactable particle and } -M \text{ is disintegrate mass})$$

From this view all the mechanism is seems as ∞ , in other words in this view disintegrated matter is always increase with every step.

So as

$$0 = N \left(-\frac{3h^3}{4\pi V} \cdot 4 \sqrt{\frac{\beta^3}{8m^3\pi}} \cdot \frac{1}{e^{\frac{\beta p^2}{2m}}} \right)$$

$$0 = \frac{N}{(-M)}$$

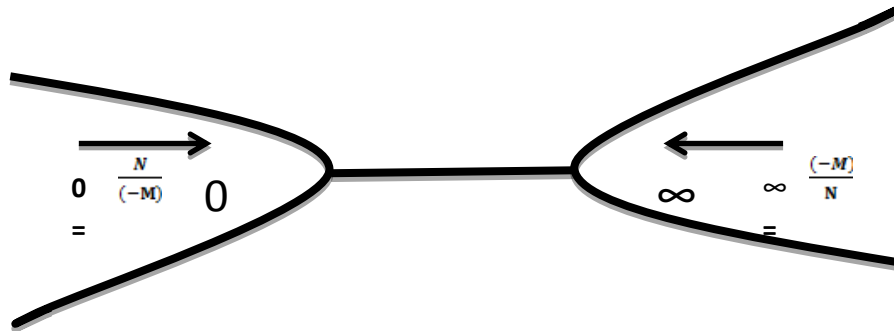
From this view all the mechanism is seems as 0, in other words in this view field quantas continuously emits.

So “The Non-intractable Particle and matter creates field quantas, this creates two views of same phenomena

In which one view represents view of ∞ (the view where matter continuously disintegrates) and one view shows the view of zero 0 (where field quantas continuously emit) by both of these view field quantas and matter fields exchange by each other views, This is ‘Ramanujan effect’ for disintegrate matter and N-I Particle”.

$$1. \quad \infty = \frac{\left(-\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right)}{N} = \frac{(-M)}{N}$$

$$2. \quad 0 = \frac{N}{\left(-\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right)} = \frac{N}{(-M)}$$



RAMANUJAN
EFFECT



Stunning view of the 3 light-year-wide Butterfly Nebula, moving quickly across space at over 600,000 miles (965,606 kilometres) per hour, powered by a dying star with a surface temperature of about 250,000 degrees C!

Credit: **Hubble Space Telescope**

3. The Interaction of Non-Intractable Particles with Matter (M)- The mass term (M) in above equations shown as –

$$M = \left(\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right)$$

For the disintegrated matter the term also appear as –

$$-M = \left(-\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right)$$

By equation -14(a) and -14(b) we see that-

$$N+M=0 \quad -14(a), \quad N = -M \quad -14(b)$$

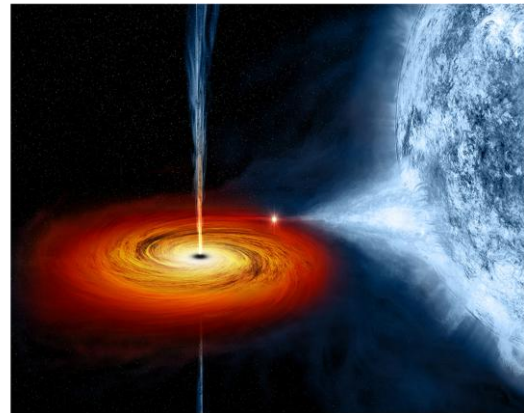
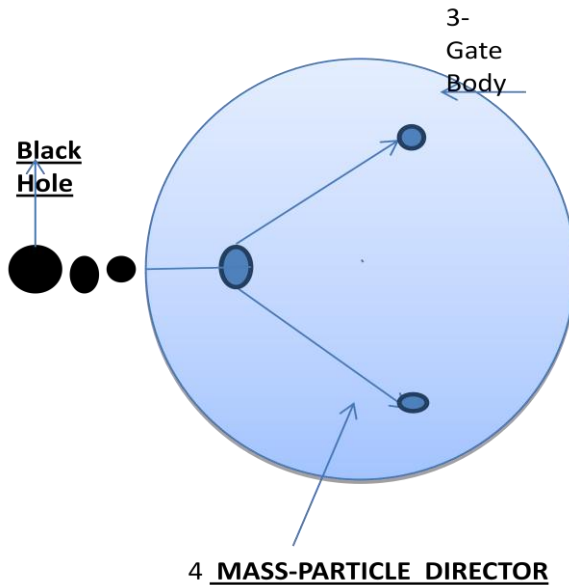
The sum of N-I particle and Matter creates field quanta and by equation -14(b) the non-intractable particle is equal to disintegrated matter. The qualities of this mass (M) field are-

As N-i particle follow ramanujan entering procedure by following the relation $12N = -1$, this equation states that 12 Positive curve geometry following particle is equal to the negative curve geometry following one N-I particle, so at this point positive curve geometry and the relative mass of the field is also available for N-I Particle.

“After entering in the Matter field the N-I particle is surrounded by the region of 4π which posses the volume of V ($unit^3$), here in this region the 3 types of mass attending method is available to each N-I particle, each method posses the degree of freedom of $h^3(h,h,h)$ this state of N-I Particle is known as ‘3-Gate Body’, so the region of 4π with volume of V ($unit^3$) with ‘3-Gate Body’ in which each posses degree of freedom of $h^3(h,h,h)$ is available to N-I particle.

After attending 3-Gate body N-I particle is ready to attend the mass of field. now the mass potential is $\frac{1}{4} \cdot \sqrt{\frac{8m^3\pi}{\beta^3}}$ here this term is seems as fourth part of mass potential, so each mass field posses 4- mass potential, This potentials are named as “Mass-Particle Directors”

Or simply ‘M-P Directors’, here each M-P director posses the region of $\sqrt{8\pi}$ and the mass value of $\left(\frac{m}{\beta}\right)^{\frac{3}{2}}$. so after attending ‘9-Gate Body’ and “4-Mass-Particle Directors” N-I Particle start to gain the mass of the field.



The image of this particle is captured by NASA.

The term $e^{\frac{\beta p^2}{2m}}$ - This exponential term is mentioned in two forms A. $e^{\frac{\beta p^2}{2m}}$ B. $\frac{1}{e^{\frac{\beta p^2}{2m}}}$

The part A gives the view of ∞ (to gain Matter field) due to this N-I particle seems to expand exponentially with the expansion rate of $\frac{\beta p^2}{2m}$.

The part B gives the view of 0, from this view only the Non-intractable particles expand and joint with other N-I particles with The rate of $\frac{\beta p^2}{2m}$.

3. The Process of Formation and Mass Distribution

so after getting 9-gate body and expansion N-I particle attend the mass field, as getting the mass interactive matter form now the distribution of energy takes place in N-I Particles so by equation-(17)

$$N = -\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \pm \sqrt{N^2 + 2N \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \left(\sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} + \left(\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \left(\sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right)^2 \right)} \right.}$$

(N = -M± (f p.o.f))

(17)

Here the part-

$$= \pm \sqrt{N^2 + 2N \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \left(\sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} + \left(\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \left(\sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right)^2 \right)} \right)}$$

is described as process of formation

Or simply f(p.o.f), now opening this above equation-

$$\left(\text{here } M = \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \left(\sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}} \right) \right)$$

$$\begin{aligned} &= \pm \sqrt{N^2 + 2NM + (M)^2} \\ &= \pm \sqrt{N \cdot N} \pm \sqrt{+2N \cdot M} \pm \sqrt{+(M)^2} \\ &= \pm \sqrt{N \cdot N} \pm \sqrt{+2N \cdot M} \pm M \end{aligned}$$
(19)

Now by equation-(8)

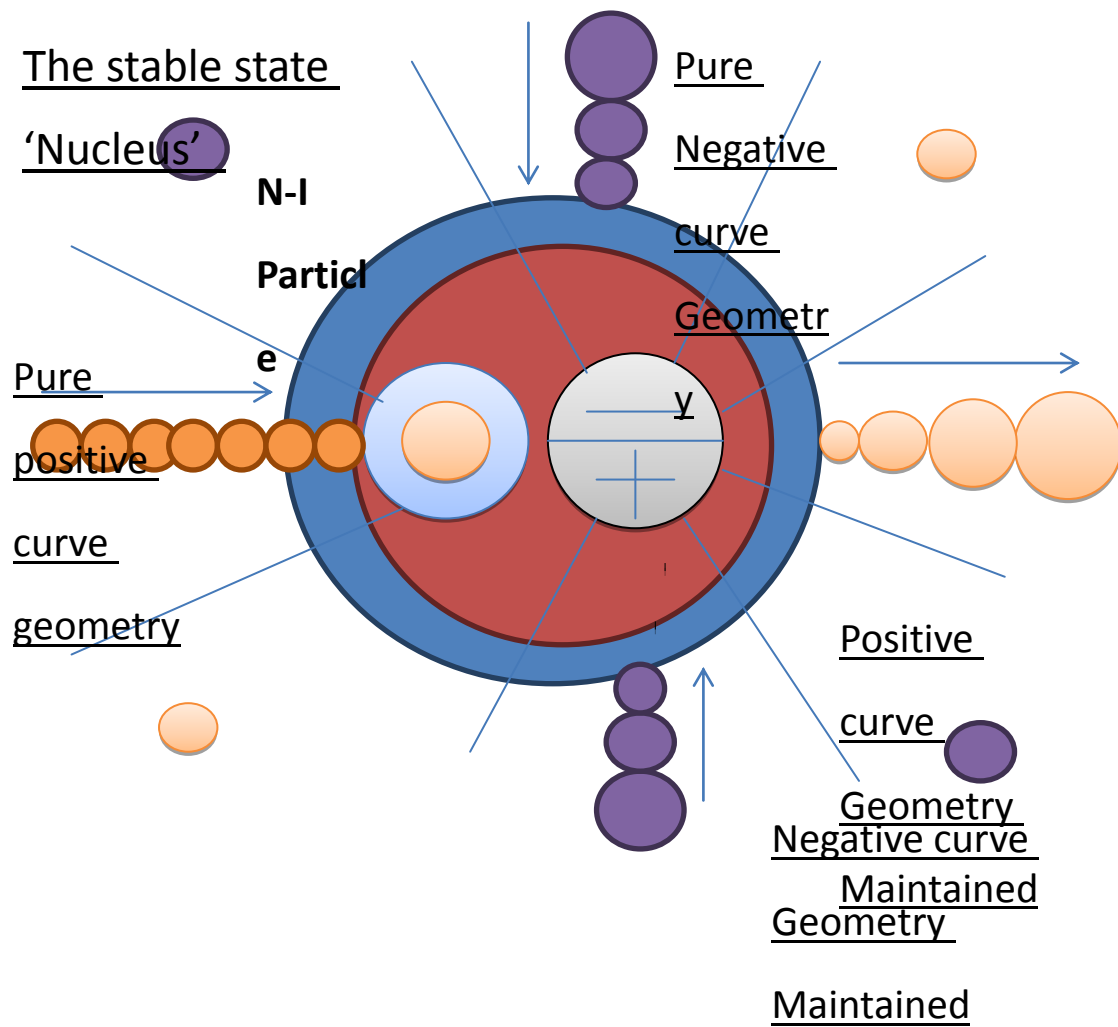
Ni (ni+ni) = $2gi - gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei}$ two cells are provided to every N-I particle as where the first cell holding particle is positive curve geometry particle and will follow right hand rotation while negative curve geometry is also available in the field, so as by equation-(19) we can see two sign variations are available in above equation-(19) Which are ‘ \pm ’ **neutral field cell**, ‘+’ **positive field cell** so equation -(19) states that two N-I particles ($\pm \sqrt{N \cdot N}$) are entering from 0 energy field, then these two particles entering in the matter field ($\pm \sqrt{+2N \cdot M}$), this matter field is ‘dense energy field’ $\sqrt{+M}$ and positive curve geometry field but as the cell distribution formula states as their’s one cell for positive curve geometry particle while other cell is for neutral field particle, so one N-I particle will stay in this field and obtain the relative field’s mass this positive curved geometry’s cell occupied stable and right-hand rotating particle is ‘**PROTON**’. while the second N-I particle will also enter in this ‘dense energy field’ (as equation stating that ($\pm \sqrt{+2N \cdot M}$)) but the only cell is present in this field is occupied so this second **N-I particle will collect some mass from positively curved dense energy field and transmit to the ‘spread energy field’ $\pm M$ and as cell distribution formula this spread energy field is under neutral field particle and follow negative curve geometry this spread energy field particle, which is left-handed rotating and following negative curve geometry and also unstable in dense energy field and positive curve geometry is ‘ELECTRON’.**

4. NUCLEUS AND ATOM THE MOST STABLE STATE

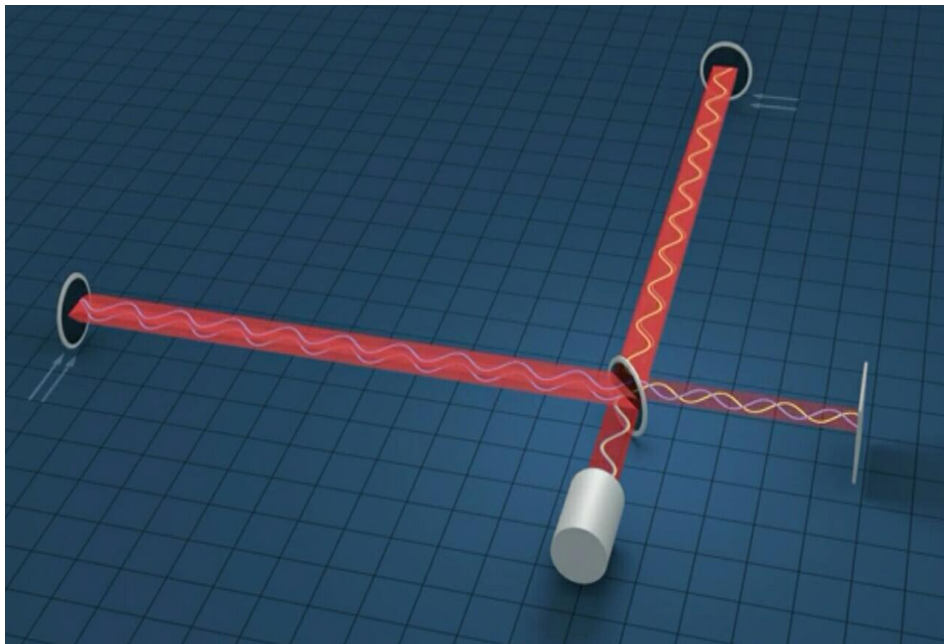
The points are clear by non-intractable mechanics are-

1. 2 cells are provided to non-intractable particles, in which one is for positive curve geometry particle, while another one is not filled by another non-intractable particle.
2. As negative curve geometry is cell less so this cell can’t be filled by not the positive curve geometry particle neither negative curve geometry particle, so this is the second cell will be filled by the neutral particle (+,0,-).
3. energy of field is distributed in two parts - 1. Dense energy field 2. Spread energy field.
4. two types of field geometry is provided which are-
 - i. positive curve geometry .
 - ii. negative curve geometry.
5. the geometries are divide into four parts in which first part is
 - i. pure positive curve geometry and maintained positive curve geometry.
 - ii. pure negative geometry and maintained negative curve geometry.
6. (i) pure positive curve geometry is controlled by it’s cell holding particle ($gie^{\alpha+\beta Ei}$)
 - (ii). All three geometries are controlled by neutral cell occupied particle.

So the figure according to these details is –



This is the figure of stable state' nucleus and atom.



This is the LIGO Experiment BY which Gravitational waves was detected shows same structure as above structure of Nucleus and atom according to Non-Interactive Mechanics.

4. NISHANT Effect

Process for Non-Intractable Particles to attend and react with matter

(i). if we look a reaction is started by interactions, then according to particle-antiparticle theory **both** are conserved in any possible reaction.

(ii). then according to this how can a reaction be possible, because every '+Ve' particle is opposed by it's '-Ve' antiparticle, and due to this it will be almost impossible to perform any possible reaction, we can understand it according to numbers-
(..... -3,-2,-1,+1,+2,+3)

As all the numbers are equal in amount but opposite in nature due to it in any possible reaction they will cross the impact of each other.

(iii). Here if the distribution of matter is equal in both sides ('-Ve', '+Ve') then after the collision during in any reaction all the amount of matter will be destroyed due to this there will be no chance other possible new reactions to happen.

(iv). The only way when a reaction is possible is possible when the reaction type is

$$\begin{array}{cc} 0 & \\ & \cdot \\ & \cdot \\ -1 & +1 \\ -2 & +2 \\ -3 & +3 \end{array}$$

A neutral field is required for the production of any reaction, thus any reaction when collision occurs the reaction will be stable.

(v). According to the non-interactive mechanics cell distribution formula.

$$n_i = 2gi - g_i e^{\alpha + \beta E_i} - e^{-\alpha - \beta E_i}$$

in this equation two cells are provided and positive curve geometry is prime and a cell occupied geometry, so in this case 'Number of particles is always greater than number of Anti-particles', as according to the non-interactive mechanics first particle enter in the matter field is goes under positive curve geometry and R.H rotating particle.

So due to this point the number figure will be

$$\begin{array}{cc} . & 0 . \\ & \cdot \\ & +1 \\ -1 & +1 \\ -2 & +2 \\ -3 & +3 \end{array}$$

The number of particles is near to neutral field rather than Anti-particles.

Non-Interactive mechanics four equations-

$$(i). N+M = 0 \quad (\text{where } M = \frac{4\pi V}{3h^3} \frac{1}{4} \sqrt{\frac{8m^3\pi}{\beta^3}} \cdot e^{\frac{\beta p^2}{2m}})$$

$$(ii). N = -M$$

$$(iii). N+M = \pm (f \text{ p.o.f}) \quad \text{here } (f \text{ p.o.f}) = \sqrt{N^2 + 2N \frac{4\pi V}{3h^3} \cdot \frac{1}{4} \left(\sqrt{\frac{8m^3\pi}{\beta^3}} \right) \cdot e^{\frac{\beta p^2}{2m}} + \left(\frac{4\pi V}{3h^3} \cdot \frac{1}{4} \left(\sqrt{\frac{8m^3\pi}{\beta^3}} \right) \cdot e^{\frac{\beta p^2}{2m}} \right)^2}$$

$$(iv). N = -M \pm (f \text{ p.o.f})$$

Now from equation (iv)

$$N = -M \pm (f \text{ p.o.f})$$

So $N = -M + 0$

The N-I particles are indistinguishable so taking $0 = N + M'$ the N-I particle is indistinguishable but their variation in matter as they possess interaction property so

$$N = -M + 0$$

$$N = -M + N + M'$$

$$N = (-M + M') + N$$

$$= (-M + M') - M'' \pm (\text{f.p.o.f}) \quad \text{as } (N = -M'' \pm (\text{f.p.o.f}))$$

$$= (-M + M' - M'') \pm (\text{f.p.o.f})$$

$$= (-M + M' - M'') + 0$$

$$N = (-M + M' - M'') + N + M''' \text{ and so as}$$

“Matter field is continuously increasing after the production of non-intractable particles”.

‘In case of non-intractable particle the positive curve geometry’s matter always increase by the production of new non-intractable particle, with respect to negative curve geometry’s matter.

(vii). **So the required steps are-**

As mentioned in non-interactive mechanics the two geometries are (i). Positive Curve Geometry, (ii). Negative Curve Geometry

The positive geometry is possessing 12 mass holding states while negative is possessing 11 mass leaving states –

Where these mass leaving states possess cell less geometry, so in that condition negative curve geometry continuously proceed till the Non-intractable particle emit, here the available matter field quality is tri nature.

3.2 NISHANT EFFECT- “ANY REACTION OR PHENOMENA IS CAN’T BE POSSIBLE TILL MATTER FIELD DOESN’T FOLLOW TRI-NATURE PROPERTY AND NEGATIVE CURVE GEOMETRY AND NOT ANY N-I PARTICLES ENTER IN THE POSITIVE CURVE GEOMETRY’S MAXIMUM EXCITING STATE. WHERE THE NUMBER OF PARTICLES IS ALWAYS GREATER THAN IT’S RELATIVE ANTI-PARTICLES, AND BY PRODUCTION OF THESE NON-INTRACTABLE PARTICLE MATTER FIELD ALWAYS INCREASE”.

3.3 EQUATIONS AND PROOFS (Spark Chamber Photos)-

(i). The total energy of a reaction is given by-

$$E = \frac{1}{2}mv^2 + V, \text{ here } E \text{ is total energy of a reaction } \frac{1}{2}mv^2 \text{ is kinetic energy and } V \text{ is potential energy}$$

(ii). Now the system where photonic decays are proceeding the kinetic energy of that phenomena is represented as

$hV - hV_0 = \frac{1}{2}mv^2$, here hV is the energy (E) of a system while hV_0 is work function and $\frac{1}{2}mv^2$ is kinetic energy of the system.

If the matter is following tri-nature property than dividing the frequency of $E = hV$ in three parts.

$$V + \Delta V \quad \text{b. } V \quad \text{c. } V - \Delta V$$

Arranging these in equation of (ii)-

$$h(V + \Delta V + V + V - \Delta V) - hV_0 = \frac{1}{2}mv^2$$

$$h(3V) - hV_0 = \frac{1}{2}mv^2$$

$$\text{if } 3V = V_{\max} \text{ then}$$

$$(iii). \quad h(V_{\max}) - hV_0 = \frac{1}{2}mv^2$$

Now by Non-interactive mechanics

$$N + M = 0 \quad (\text{every system is the combination of Non-Intractable particle and Matter Field})$$

Applying this in equation (iii).

$$h(V_{\max}) - hV_0 = \frac{1}{2}(N + M)v^2$$

$$N + M = \frac{2(hV_{\max} - hV_0)}{v^2} \quad \text{---(A1)}$$

As according to the N-I mechanics equations

$$N + M = \pm \text{f.p.o.f} \quad (\text{which is process of formation p.o.f})$$

So equation –A1 becomes

$$\pm \text{f.p.o.f} = \frac{2(hV_{\max} - hV_0)}{v^2} \quad \text{---(A2)}$$

Now if we look the mass-energy relativistic relation is

$E = m c^2$ where c is speed of light or photons

According to Non-interactive mechanics

$N+M = 0$ where N is non-intractable particle and M is matter, this suggest the sum of N -I particle and Matter is equals to class zero particles. Also every system is the combination of Non-intractable particle and Matter.

Applying this in mass-energy relation

$$E = (N+M). c^2$$

This equation can be represent as

$$E^1 = (N+M) c^{2.1}$$

$$\text{So- } E^n = (N+M) c^{2.n} \quad (\text{here } n = 1, 2, \dots) - (B)$$

Here c are those particle which remains after the collision of positive and negative curve geometry

Mathematically, the velocity of light is

$$C = (gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei})$$

So equation -(B) becomes

$$E^n = (N+M). (gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei})^{2.n} \quad -D(1)$$

As $N+M = \pm \text{fp.o.f}$

$$\text{So } E^n = (\pm \text{fp.o.f}). (gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei})^{2.n} \quad -D(2)$$

Now applying equation -A(1) and -A(2) in -D(1) and D(2)

$$\text{So- } E^n = \frac{2(hV_{\max} - hV_0)}{v^2}. (gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei})^{2.n}$$

So three equations are

$$a. E^n = (N+M). (gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei})^{2.n}$$

$$b. E^n = (\pm \text{fp.o.f}). (gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei})^{2.n}$$

$$c. E^n = \frac{2(hV_{\max} - hV_0)}{v^2}. (gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei})^{2.n}$$

So the combined forms of these relations are

$$E^n = \frac{2(hV_{\max} - hV_0)}{v^2}. (gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei})^{2.n}$$

$(N+M).$
 $(gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei})^{2.n}$

$(\pm \text{fp.o.f}).$
 $(gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei})^{2.n}$

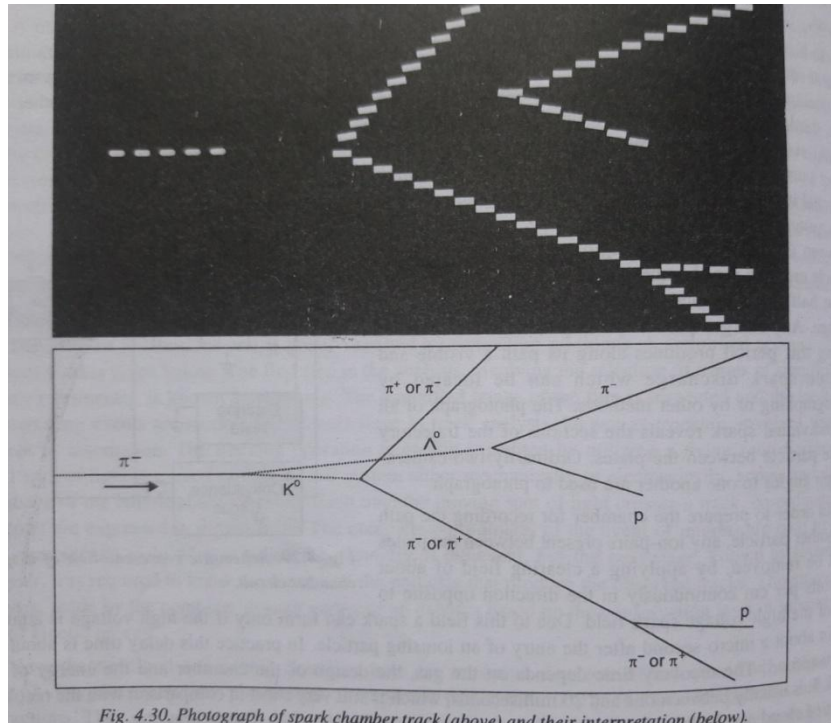
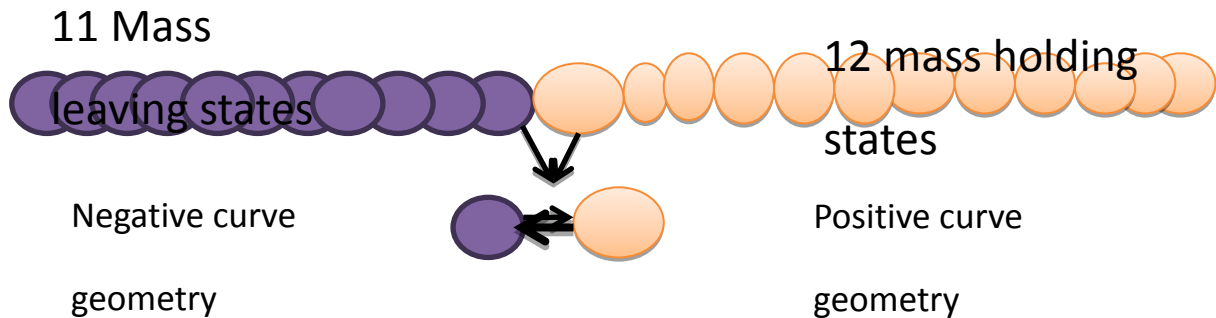


Fig. 4.30. Photograph of spark chamber track (above) and their interpretation (below).

The picture is showing the similar result as mentioned in the above equation so the relation could define particles their nature.

5. Some Non-interactive Phenomenas

- i. **Non-intractable Particle attend field's nature before getting it's physical intractable mass form-**
by Non-interactive mechanics the corresponding N is given by - $1/12$ or $12N = -1$



So the only misbalance in both states is the 1 mass holding state which is actually the cell holding particle entering in the matter field (M), so this gives the first positive curve geometry cell holding Particle is beyond the matter field, as entering in this cell non-intractable particle gain the field's nature and qualities, before getting the physical form.

“this gives the general idea that actions starts before they come to sense, or actions starts before their appearance seems physically”.

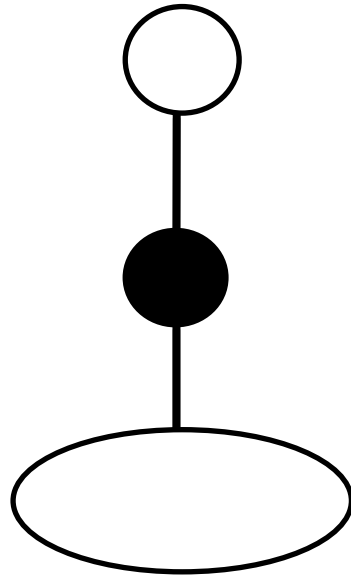
(ii). **The first particle enter in the matter field is positively rotating (R.H.R), so positive curve geometry is the prime geometry.**

The cell distribution formula for the non-interactive mechanics is $N_i = 2gi - gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei}$

Now this equation suggesting that first particle which entering in the matter field, occupied the cell provided to it and it gives the nature of positively rotating under positive curve geometry.

This gives the idea of first particle entering in matter field is positively rotating or following positive curve geometry.

So if the field is generally define as –



According to Dirac's particle –antiparticle theory these charge distribution should be treated as matter and antimatter, as non-intractable particles enter in the positive curve geometry so-

This gives the idea of “matter is more in universe correspond to its anti-matter”.

(iii) . **Universe possesses the mechanism of continuous creation and destruction-**

The supreme mechanics diagram states that 11th mass leaving and 12th mass holding states are co- bindingly creating the physical world's phenomena.

Here 11 mass leaving state continuously mass leaving its state which are under negative curve geometry $e^{-\alpha-\beta Ei}$, while the 12th mass holding state continuously holding the mass states and with it the other 11 mass holding states are also attending the mass states.

Where the similar in amount but different in rotation and property 11 mass leaving state is also present with negative curve geometry

So 11 mass holding state = 11 mass leaving state

Where 1 one particle attending the mass field continuously holding the mass field.

This gives the continuous process of mechanisms creation and destruction where creation is prime.

(iv). **Every Physical particle is the combination of the N-i particle and Mass field (M)-**

Now generally the laws of physics are written as-

1. $F = ma$ 2. $E = mc^2$ 3. $P = mv$ now all the quantities are positive matter field's and the intractable properties of (F, E, P) and their effects in physical world can be easily observe.

By N-I mechanics this type of force is under positive curve geometry or in other words under positive matter field by the cell distribution formula $N_i = 2gi - gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei}$ positive curve geometry is cell occupied geometry so for the matter field of positive curve geometry all the matter is the combination with its N-I particle or

$$N + M = 0$$

So the physical formula according to non-interactive mechanics is

$$1. F = (N+M) \cdot a \quad 2. P = (N+M) \cdot v \quad 3. E = (N+M) \cdot C^2.$$

For $N=0$ or Non-Intractable particle is not present in matter field above equations become

$$1. F = M \cdot a \quad 2. P = M \cdot v \quad 3. E = M \cdot C^2$$

6. Proofs

$$1. E^n = \frac{2(hV_{\max} - hV_0)}{v^2} \cdot (gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei})^{2.n}$$

$$V_0 = 0 \text{ Then } c = (gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei}) \text{ and } n=1$$

$$\frac{2(hV_{\max})}{v^2} \cdot (c)^2.$$

$$\text{For } c=v, c^2/v^2 = 1$$

$$E^n = 2hV_{\max}$$

$$h \text{ vmax} = \frac{1}{2} E^n$$

$$E^n = \frac{1}{2} h \text{ v}^n$$

This is the equation of **linear harmonic oscillator**.

$$2.E^n = \frac{2(h\text{Vmax} - h\text{Vo})}{v^2} \cdot (gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei})^{2.n}$$

$$\text{For } v_0 = 0, c = (gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei}) \text{ and } n=1$$

$$E^n = \frac{2(h\text{Vmax})}{v^2} \cdot (c)^2.$$

$$\text{For } c=v, c^2/v^2 = 1$$

$$E^n = 2h\text{vmax}$$

$$\text{For } n = 2, 4, 6, \dots$$

$$E^n = n h\text{vmax}$$

$$3.E^n = \frac{2(h\text{Vmax} - h\text{Vo})}{v^2} \cdot (gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei})^{2.n}$$

By photo electric effect

$$\frac{1}{2} m V^2 = (h\text{Vmax} - h\text{Vo})$$

$$E^n = \frac{2(\frac{1}{2} m V^2)}{v^2} \cdot (gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei})^{2.n}$$

$$c = (gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei}) \text{ and } n=1$$

$$E = m \cdot (c)^2$$

This is mass energy equivalence law.

Velocity of light

$$E^n = \frac{2(h\text{Vmax} - h\text{Vo})}{v^2} \cdot (gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei})^{2.n}$$

$$\text{For } v=c \quad E=h\text{vmax}, v_0=0, n=1$$

$$h \text{ vmax} = \frac{2(h\text{Vmax})}{v^2} \cdot \left(\frac{gi(e^{\alpha+\beta Ei})^2 - 1}{e^{\alpha+\beta Ei}} \right)^{2.n}$$

$$1 = \frac{2}{c^2} \cdot \left(\frac{gi^2(e^{\alpha+\beta Ei})^4 - 1}{e^{(\alpha+\beta Ei)^2}} \right)$$

$$\text{Taking } gi(e^{\alpha+\beta Ei})^2 - 1 = gi(e^{\alpha+\beta Ei})^2$$

$$c^2 \cdot e^{(\alpha+\beta Ei)^2} = 2gi^2(e^{\alpha+\beta Ei})^4$$

$$M c^2 = 2Mgi^2(e^{\alpha+\beta Ei})^2$$

$$gi = \sqrt{\frac{M c^2}{2M(e^{\alpha+\beta Ei})^2}}$$

$$gi = \frac{c}{\sqrt{2}} \cdot \frac{1}{(e^{\alpha+\beta Ei})} \quad (-a)$$

$$gi = \frac{3 \cdot 10^8}{\sqrt{2}} \cdot \frac{1}{(e^{\alpha+\beta Ei})}$$

$$gi = \frac{2.12 \cdot 10^8}{(e^{\alpha+\beta Ei})}$$

NEXT-

$$E^n = \frac{2(h\text{Vmax} - h\text{Vo})}{v^2} \cdot (gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei})^{2.n}$$

$$\text{For } v = c$$

$$E^n \cdot c^2 \cdot (e^{\alpha+\beta Ei})^2 = 2 (h\text{Vmax} - h\text{Vo}) (gi(e^{\alpha+\beta Ei})^2 - 1)^2$$

$$\text{For } n=1, \text{ and } 2(h\text{Vmax} - h\text{Vo}) = M v^2$$

$$M c^4 \cdot (e^{\alpha+\beta Ei})^2 = M v^2 \cdot ((gi^2(e^{2\alpha} + e^{2\beta Ei} + 2e^\alpha e^{\beta Ei}) - 1)^2)$$

$$\text{taking } (e^{\alpha+\beta Ei})^2 - 1 = (e^{\alpha+\beta Ei})^2$$

$$M c^4 \cdot (e^{\alpha+\beta Ei})^2 = M v^2 \cdot (gi^2(e^{2\beta Ei} + 2e^{\beta Ei}))^2 \text{ taking } e^\alpha = \text{constant}$$

$$M c^4 \cdot (e^{\alpha+\beta Ei})^2 = M v^2 \cdot (gi^2(e^{4\beta Ei} + 4e^{2\beta Ei} + 4e^{3\beta Ei}))$$

Neglecting higher power terms

$$M c^4 \cdot e^{2\beta Ei} = M v^2 \cdot (g i^2 (4e^{2\beta Ei}))$$

This gives

$$c^4 = v^2 \frac{c^2}{2e^{2\beta Ei}} (4e^{2\beta Ei})$$

$$c^2 = 2 v^2$$

$$V = \frac{c}{\sqrt{2}}$$

Using $c = 3 \times 10^8$ m/sec

$$V = 2.12 \times 10^8 \frac{m}{sec}$$

For $c = v\sqrt{2}$

CN-I = 299813275.22 m/sec

And the current velocity of light is $c = 299792458$ m/sec

So the difference is 20817.22 m/sec

This gives particles faster than light and also termed as approximation of velocity of light.

THE RELATIVISTIC CONDITION

$$E^n = \frac{2(hV_{max} - hV_0)}{v^2} \cdot (gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei})^{2.n}$$

$$\text{AS } n=1 \text{ and } c = (gie^{\alpha+\beta Ei} - e^{-\alpha-\beta Ei})$$

$$= \frac{2(hV_{max} - hV_0)}{v^2} \cdot (c)^2$$

By photo electric effect

$$\frac{1}{2} m V^2 = h v_{max} - h v_0$$

Applying this gives

$$E = m \cdot (c)^2$$

By non-interactive mechanics

$$N = -M$$

Multiplying -1 on both sides gives

$$-E = -m \cdot (c)^2$$

$$-E = N \cdot (c)^2$$

$$N = \frac{-E}{c^2} \quad -A$$

Later

$$E = N + M \cdot (c)^2$$

$$M \cdot (c)^2 = N + M \cdot (c)^2$$

$$N = 0$$

Putting in A gives

$$0 = \frac{-E}{c^2}$$

$$\text{As } 0 = \frac{N}{-M}$$

Equating both equation gives

$$\frac{N}{-M} = \frac{-E}{c^2}$$

This gives

$$N = (M)^2 - B$$

Next-

$$E = N + M \cdot (c)^2$$

$$E = (M^2 + M) \cdot (c)^2$$

Squaring on both sides

$$(E)^2 = (M^4 + M^2 + 2M^3) (c)^4$$

Neglecting higher power terms

$$(E)^2 = M^2(c)^4$$

$$(E1)^2 = M^2 C^2(c)^2$$

$$(E1)^2 = P^2(c)^2 \quad -x$$

Then

$$E = \pm \sqrt{N^2 + 2NM} + M^2 \cdot (c)^2$$

$$N = (M)^2$$

$$E = \pm \sqrt{M^4 + 2M^3 + M^2} \cdot (c)^2$$

Neglecting higher power terms

$$E = \pm M \cdot (c)^2$$

Taking $\lambda = \pm 1$

$$E = \lambda M \cdot (c)^2$$

Now squaring gives

$$E^2 = \lambda^2 (M)^2 (c)^4$$

$$E^2 = (E1)^2 + E2^2$$

$$E^2 = P^2(c)^2 + \lambda^2 (M)^2 (c)^4$$

THEORETICAL AND EXPERIMENTAL PROOFS OF NON-INTERACTIVE MECHANICS-

(i). Dirac's theory of particle-antiparticle and positron as a proof -

Every Electron possesses both positive curve geometry's dense energy and negative curve geometry's spread energy or in other words every electron possesses right handed and left handed rotation property. As by cell distribution formula for N-I particles ($N_i (n_i + \bar{n}_i) = 2gi - gie^{\alpha + \beta Ei} - e^{-\alpha - \beta Ei}$) every N-I particle comes in pair in which one is positive curve geometry particle and another is negative curve geometry particle this is same as '**DIRAC'S 'PARTICLE - ANTIPARTICLE' THEORY**', also justify the EXISTENCE OF POSITIVE ELECTRON '**POSITRON**' WHICH IS SAME AS THEORETICAL AND EXPERIMENTAL RESULTS.

(ii). Electrons possess both positive curve geometry's 'dense field energy and right hand rotation and also negative curve geometry's spread field energy and its left hand rotation Which justify the positive and right hand rotating electron or '**POSITRON**' WHICH IS SAME AS THEORETICAL AND EXPERIMENTAL RESULTS.

7. Results

1. The distribution law for N-i Particles is $N_i (n_i + \bar{n}_i) = 2gi - gie^{\alpha + \beta Ei} - e^{-\alpha - \beta Ei}$.
2. A field quanta is the union of N-i particle and matter, according to the formula $N+M=0$.
3. Energy and size of a Non-intractable particle is given by the equation $N = -M \pm \sqrt{N^2 + 2NM + (M)^2}$ the equation shows same order as Masonic x-ray detection of nucleus radius 1.2 ± 0.03 fm. This is also same as deuterons binding energy 2.225 ± 0.002 Mev.
4. In the process of attending matter field N-I particles change into elementary particles like proton, electron, positron
5. According to Non-interactive mechanics the movement of non intractable particles happens before it comes in the sense of physical observation.
6. The laws of Physics where Mass is mentioned should be improvised, it should be written as " $N+M$ " in place of only ' M ', such as $E = (N+M)C^2$ in above manuscript this relation satisfies the relativistic condition $E^2 = P^2(c)^2 + \lambda^2 (M)^2 (c)^4$ with the relation $E = \pm \sqrt{N^2 + 2NM + (M)^2} C^2$.
7. Non-intractable particles are faster than the velocity of light, as the velocity of non-intractable particle is $C_{N-I} = 299813275.22$ m/sec and current velocity of light is $c = 299792458$ m/sec so Non-intractable particles are 20817.22 m/sec faster than light.
8. Every reaction of N-I particles in universe follows "Nishant Effect", here the energy of N-i Particle follows tri-nature property, these energies are
 - a. $E^n = \frac{2(hV_{max} - hV_o)}{v^2} \cdot (gie^{\alpha + \beta Ei} - e^{-\alpha - \beta Ei})^{2.n}$
 - b. $E^n = (N+M) \cdot (gie^{\alpha + \beta Ei} - e^{-\alpha - \beta Ei})^{2.n}$
 - c. $E^n = (\pm f.p.o.f.) \cdot (gie^{\alpha + \beta Ei} - e^{-\alpha - \beta Ei})^{2.n}$

These relations satisfies the conditions of

- i. Linear harmonic oscillator $E=1/2 \hbar \nu$
 - ii. Plank's radiation law $E= \hbar \nu$
 - iii. Einstein mass-energy equivalence relation $E= mc^2$
 - iv. Relativistic condition $E^2 = P^2(c)^2 + (M)^2(c)^4$.
9. The structure of Nucleus and atom according to Non-Interactive Mechanics in manuscript shows same view as LIGO Experiment.

8. Conclusions

1. Field quantas of a corresponding field are the union of Non-intractable particles and matter. So we reach to the point that a field quanta is not only composed of matter only but a independent particle N-I particle makes union with matter to create a field quanta, the relation is given as $N+M=0$.
2. For starting the process of formation of Nucleus and atom, Non-Intractable particle emits matter field, this disintegrated matter react with the process of formation $\pm \sqrt{N^2 + 2NM + (M)^2}$ and creates the radius and binding energy of Nucleus and Atom The relation is given as $N=-M \pm \sqrt{N^2 + 2NM + (M)^2}$.
3. The Entering of N-I particles in matter field happens according to the process mentioned in Ramanujan Entering and the exchange of Non-Intractable particles happens according to the Ramanujan Effect.
4. The disintegrated matter according to the formula $N=-M \pm \sqrt{N^2 + 2NM + (M)^2}$ divides into two forms first is "dense energy field" which follows clockwise rotation and "spread energy field" which follows anticlockwise rotation in these energy fields Non-Intractable particles enter and follows the respective fields nature and gain energy in form of mass (as E is proportional m) due to this process particles like proton, electron, positrons forms.
5. Non-intractable particles holds the nature to follow and fields properties such as spin, charge, mass, energy.
6. After entering in matter field matter every Non-intractable particle follows Nishant Effect to gain matter field.

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