

# **$E_0 = m_0 C^2 = F_0 R_0$ : Find the second static equation of energy and find the largest forces of nature at all and find smallest particles in the universe (Al-Jabrton)**

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## **Abstract**

Einstein the kinetic energy in static case discovered through his theory of special relativity, it was expressed about contain of the material of energy  $E_0 = m_0 C^2$  this equation is very important in physics, But today we discover the second static equation of energy It is the potential energy or the internal energy of the Fundamental particles  $U_0 = F_0 R_0$  and the quantity of energy equal the quantity of static kinetic energy to Einstein , But this equation is very important because it know us at the internal structure , The basic of the material and it is characteristics , such as New forces undiscovered in nature so far and the dimensions of the particles and smaller particles in nature.,

The previous three bulletins were the entrance to a new physical theory is (recovery Theory of energy) Which we can derive them previous theories such as: Newton's principles - the theory of relativity to Einstein - quantum theory of Max Planck - hypotheses Bohr - Mechanics waveform of Louis de Broglie in addition to other new theories were not known before today.

**Keywords:** second static equation of energy, largest forces of nature at all, smallest particles in the universe, (Al-Jabrton) ,recovery theory of energy.

## **1. Introduction**

### **1.1 Vibration mass hanging to spring around the equilibrium position 0.**

Suppose that we have a ball it's diameter  $\hat{R}$  hanging spring length  $\hat{L}$  In the case of rest, as in Figure 1 the ball effected by  $\hat{F}$  force this lead to elongation of the spring to the amount of 10 cm Then a force  $F$  starts vibrating mass and spring around the equilibrium position  $0$ . The ball is under the influence of two forces:

$\hat{F}$  is called Strain force

$F$  Elastic restoring force

This movement Know in physics simple harmonic motion The shortened S.H.M .

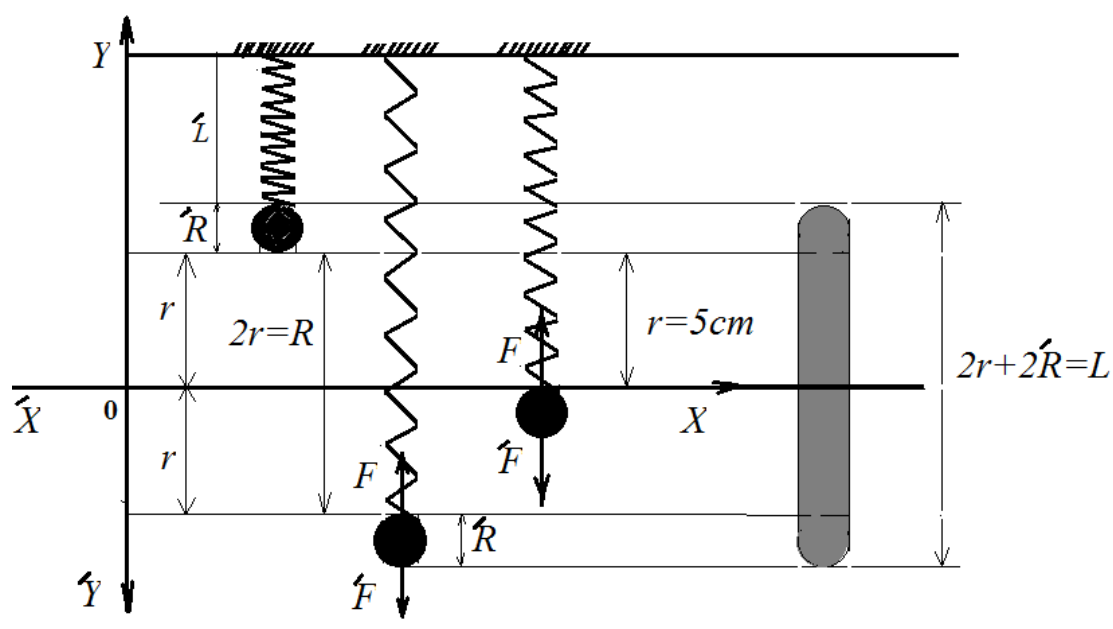
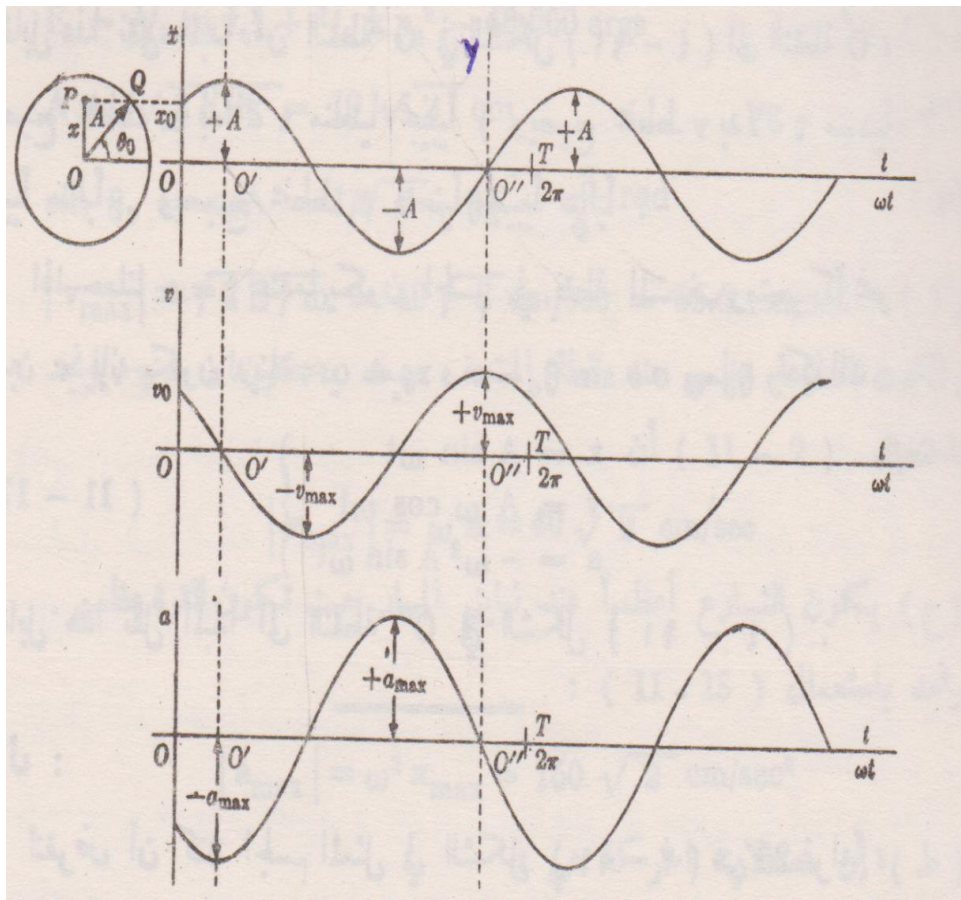


Figure 1

The number of tremors in the second so called frequency.

-Assume that  $f$  was  $f = 50$  HZ i.e. that the Mass vibrating 50 times per second If the diameter of the ball  $\hat{R} = 1$  cm and the amplitude  $A = r = 5$  cm will be shaped from spring and the ball a column its length  $L = 2\hat{R} + 2r = 12$  cm As in Figure 2

-Then the ball and pulsating occupied size of the void

-The greater the frequency led to increasing hardness this column, If we want to break down this column we had that influence the strength of the column is equal to the force that led to vibration it Which is Strain force equal to restored force.

### 1.2 vibration in the plane X O Y

The vibration in the plane X O Y leads to the occupation of the volume of a cylinder of  $v = L \cdot \hat{R}$  and have a  $L = 2\hat{R} + \text{diameter}$

$L = 2\hat{R} + 2r = 12$  cm As in Figure 2

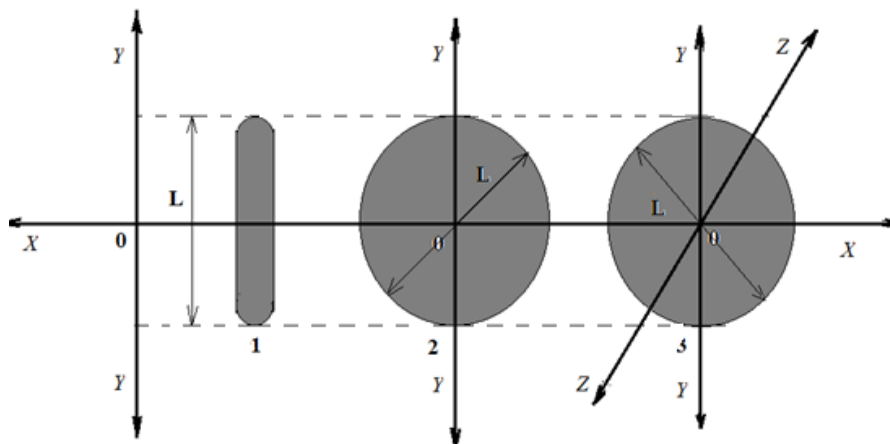


Figure 2

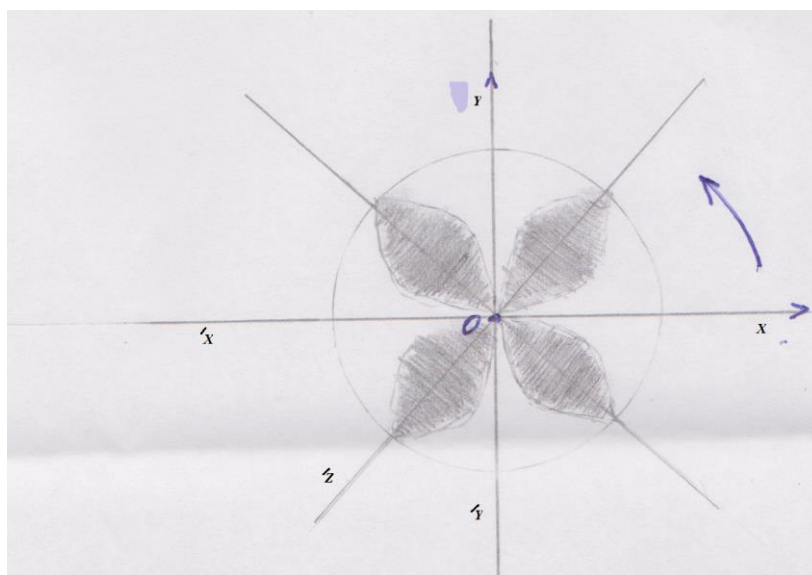


Figure 3

### 1.3-Vibration in vacuum inter spatial coordinates XYZ

The Interstitial vibration will be shaped a ball, diameter of this ball is the same as the length of the column at vibration about the axis or vibration at plane will be diameter of ball is:

$$L=2 \hat{R} + 2r = 12 \text{ cm}$$

-This applies to any vibration of elastic body, elastic ball, for example

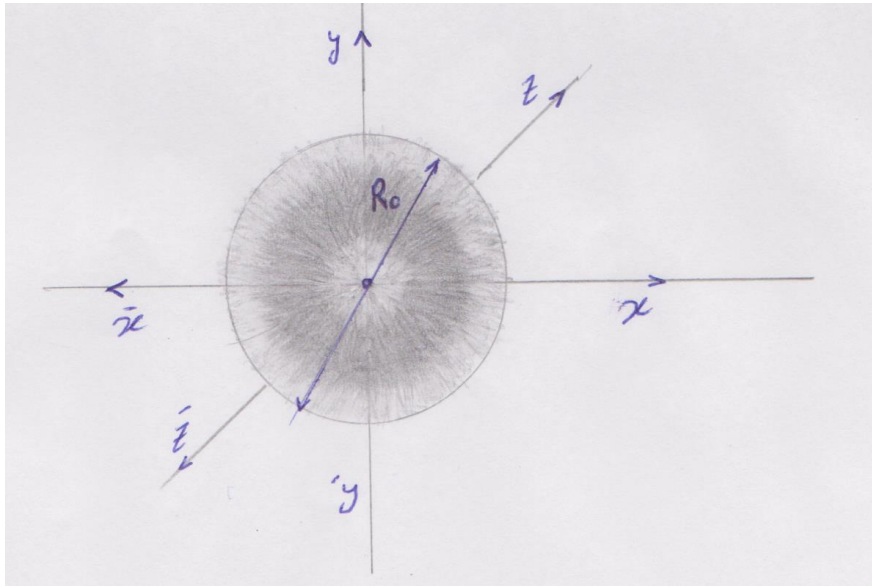


Figure 4

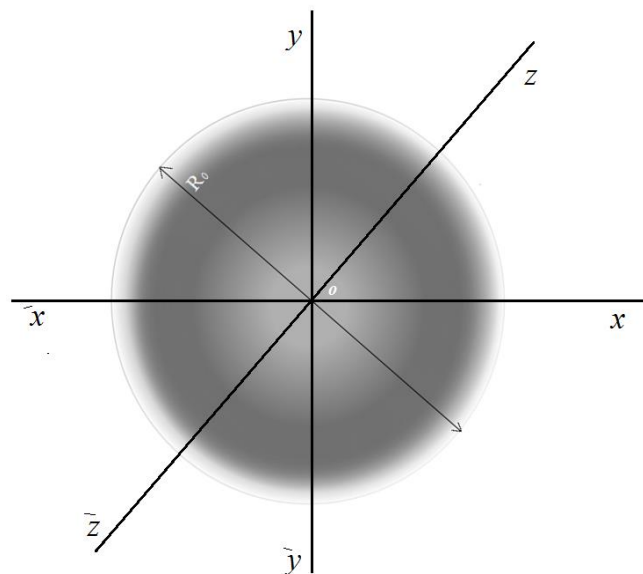


Figure 5

## 2. The Fundamental particle

The Fundamental particle is the smallest particle in nature Its mass not zero and the mass must be greater than zero and smaller than the mass of the neutrino I call (**Al-Jabrton**), It is the first unit that make up the neutrino as well as the neutrino is the basic unit of which is formed by the electron and positron as well as the electron is the basic unit for the formation of a proton and antiproton. Protons and neutrons formed the nucleus of atoms and with electrons are formed atoms and accumulation of atoms is formed masses of the universe.

### 2.1 Definition of the particle

Fundamental particle is stable restricted: (material and antibacterial – electromagnetic-radiuthermal) wave

### 2.2 motion of particle

One of the results of the theory of energy recovery is: the status of rest or uniform rectilinear motion the speed of recovery of energy is equal to the speed of light, this means that the medium recovers its lost energy by the speed of light (Which takes a particle of the system  $\mathbf{0}$  = medium).

$$V_r = \frac{R}{t} = \frac{\dot{R}}{\dot{t}} = C$$

And that the two forces are equal: the  $\dot{F}$  driving force  $F$  inertia force

$$\dot{F} = F$$

And temporal intervals are equal  $\dot{t} = t$  and that this is in the cases of uniform rectilinear motion and rest, we cannot differentiate between them.

### Assuming Fundamental particle is: Wave stable material constrained

Alternation of two forces on the particle (this requires that each force time interval of their own) the very fact that the particle hardness is less than force any one of these two forces cannot crash the particle Forcing the particle vibration, Since the time interval is very small, this makes vibration very quickly, Just like the vibration of light waves, Thus, the movement of the particle simple harmonic motion (S.H.M).

Particle moves simple harmonic motion a wave like motion is characterized by movement, to:

-Particle wave is restricted.

– Fundamental particle diameter  $\overline{R_0}$

-  $R_0$  Final diameter of particle

- Equal to the wavelength represented by the particle  $R_0 = \lambda$

-Elementary particle speed at take-off is zero

-The final particle speed is the speed of light C

- Fundamental particle mass  $\overline{m_0}$  when the speed of the particle is zero.

( - The final particle mass (a static mass that we know of electron or proton, which we thought it was static  $m_0$ )

-Particle acceleration at take-off maximal and the value  $a_c = \frac{c^2}{R_0}$

-At the beginning of the first quarter of the wave and are accelerated up to the speed of light at the end of the quarter.

-In the second quarter, slower start to the end

-And accelerated in the third quarter

-The decelerated in the fourth quarter

- And accelerated in the first quarter, and so on

-In the first quarter, accelerated phase (phase of the Fusion) and means of increasing mass  $\overline{m}_0$  to  $m_0$

-In the second quarter decelerated stage (fission stage or radiation) where radiation from the mass from  $m_0$  into  $\overline{m}_0$

-As the movement vibrating vacuum, it means that the shape of the particle would be spherical diameter, Wavelength of the particle.  $\lambda = R_0$

-  $a_c$  : Max acceleration which can transfer the primary particle Lump sum to speed of light.

- When mass take off the mass increases (System insulated and energy always reserved), and acceleration begins Speed to decrease while begins increases.

- ((Particle is: (ball its diameter is  $R_0$ ), which at the same time (stable material constrained Wave its length  $\lambda$ )...)).

I.e.  $C = \frac{R}{T} = \frac{\lambda}{T} = \lambda \cdot v$

$R_0$  : Is the diameter of the particle in the virtual case to particle i.e. the final diameter which we know in the case of superficial rest?

$\overline{m}_0$ : is the mass of "primary particle" Who built it material and the greatest value to it at the end of vibratory motion i.e. at speed of light is  $m$  It is the same value that we see in the case of a particle superficial rest it is  $m_0$   
 Measured in the rest state i.e. rest mass.

-When the mass take off it start increases (isolated system the energy always reserved), and the acceleration begins to decrease while speed starting increases.

- Final particle mass Become  $m$ , a particle mass that we see in the superficial case for the Ground observer is  $m_0$  mass, which generally accepted such as the mass of the electron or mass of proton.

-At the end of the first quarter of the wave the kinetic acceleration eliminates the speed of particle reaches to the speed of light.

-At the beginning of the second quarter of the wave nature does not allow speeds higher than the speed of light, so get a sudden shock

Which prevents particle from continuing to increase the speed than speed of light, here the force of inertia force = restored force (Similar to elastic force of spring) that curbs the speed to less than the speed of light a time to be almost non-existent this is what causes the collapse of any material "mass" and converted into radiation energy the Mass begins to decrease and diameter increases until the end of the second quarter. Where the mass back to its former position (basic Particle) and nonexistent the speed and acceleration of a new start, and so on...

In accelerated case the kinetic acceleration  $\mathbf{a}_c$  converts into gravitation acceleration  $\mathbf{g}$  will be added to original acceleration of mass.

## 2.3 energy of Particle

### 1. The kinetic energy

We have a primary mass  $\overline{m}_0$  and we have acceleration recedes the mass to speed of light this lead to increase the mass into  $m_0$

The total kinetic energy is:

$$E_0 = \overline{E}_0 + \Delta E_0$$

$$m_0 C^2 = \overline{m}_0 C^2 + C^2 \Delta m_0 \quad \rightarrow \quad m_0 C^2 = \overline{m}_0 C^2 + \beta m_0 V^2 \dots 1$$

### 2. Potential energy

We have primary mass is  $\overline{m}_0$  and primary high  $\overline{R}_0$  but the mass increases into  $m_0$  and the high reach into  $R_0$  and the impact force is  $F_0$  this mean the potential energy increased for two reasons:

- 1- Increasing the mass from  $\overline{m}_0$  into  $m_0$
- 2- Increasing the high from  $\overline{R}_0$  into  $R_0$

The total potential energy become equal total of energy primary and final

$$U_{P0} = \overline{U}_0 + \Delta U_{P0}$$

$$R_0 = \overline{R}_0 + \Delta R_0$$

Multiply two sides by  $F_0$  find  $F_0 R_0 = F_0 \overline{R}_0 + F_0 \Delta R_0 \dots 2$

Total two kinetic and potential energy equal mechanic energy it is constant quantity because the system isolated

$$E_m = E_K + U_P \dots 3$$

When the kinetic energy is max at ( $V_{\max} = C$  and  $m_0$ )

The potential energy equals zero  $\overline{R}_0 = 0$  i.e.  $U_P = 0$

$$E_m = E_{kmax} \dots 4$$

When the potential energy is max at ( $R_0$ ) the kinetic energy equal zero  $V = 0$

$$E_m = U_{pmax} \dots 5$$

From 4 & 5 we find  $E_m = E_{kmax} = U_{pmax} \dots 6$

Backing to 1 and 2 and compensation in 6 we find:

$$E_0 = m_0 C^2 = F_0 R_0 \dots 7$$

This equation is very important to transformation of energy and interprets the rest internal energy to particle Einstein's equation to rest kinetic energy. which Similarity

$F_0$  That is the force of the assembly of the particle material it is the force that keeps the coherence of the particle nor is destroy particle And convert it into energy Unless particle subjected to force  $F \geq F_0$

And  $R_0$  is static diameter of the particle.

The equation 7 may be very important equations in modern physics as reveal to us about the structure of the particle and its characteristics are important.

$F_0$  : Is not a nuclear force, but the force is the force of the assembly or the physical components of the nucleus, namely:

Is the force capable to radiating the material that converts it into energy, or is the force that transforms energy And assembled and converted into a material , It is the largest force in nature exist in smaller units of material(particles) it is much bigger than nuclear force((the forces that bind the components of the nucleus For the formation of larger units of material particles for the formation of atoms and these forces much greater than the forces assembling atoms(Atomic bonding forces) to form big masses).

### 3- Results

1- Discovery of the primary particle, which is formed from primary particles such as neutrino, electron and proton.

2-discovery of the basic particle vibrates by frequency is very high rank of vibration of light waves.

3- Find the second equation of energy- equation NO. 7

4-finding radioactive force or the combined force or cohesion force of material which is the largest forces of nature at all

5-  $a_c$ : Kinetic acceleration decreases with increasing speed and acceleration becomes zero when speed reaches to the speed of light.

6-In case of kinetic the kinetic acceleration  $a_c$  converts into a gravitation acceleration ( $g$ ) addition to the original gravitation of the mass.

7- Vibration of particle is a Stereoselective vibration in (X Y Z) its diameter is:  $\lambda = R_0$

8 - Most of density is concentrated in the center of the first quarter and the center of the third quarter of Wave as we imagined in the previous figure 5

### 4. Conclusion

If the equation of Einstein discovered the amount of kinetic energy of the static material and rest body contain enormous energy Second, the energy equation does not reveal the internal energy only but reveal the internal structure of the smaller particles of nature and the forces of nature in the larger particles as well as their characteristics.

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