

THE “TRAP-TI” THEORY

ᵀBharath Aldro Cless Saurabh Kumar
 ᵀA Pass Out Student Of Mathematics Department Of Aki’s Poona College
 ᵀMathematics Department Of Aki’s Poona College Pune - India

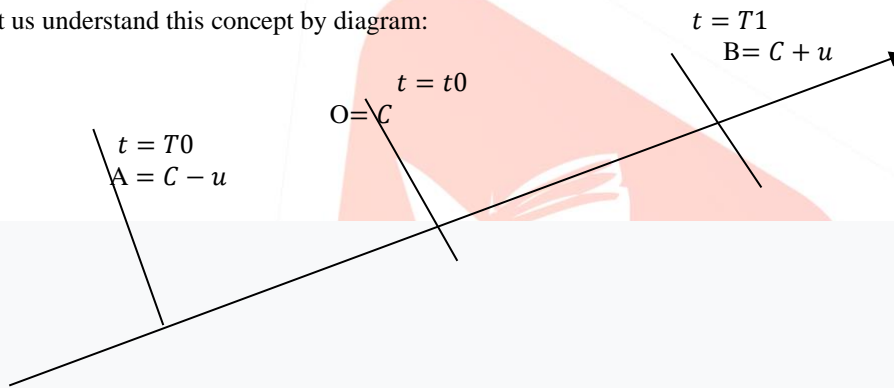
Abstract - In this paper, I have given a new formula of Physics, which originated from my imagination. Just think that if any particle which is moving at the speed of light increases to a certain velocity and the velocity of the moving particle decreases with the same velocity of light.

keywords - Particle, Velocity of light, Trap-Ti, and Energyless Particle.

Introduction

When any particle which is moving at the velocity of light. The velocity of particle is decreased “u m/s” at time T0 and at the time T1 it goes to increase with “u m/s”. Under both these conditions, the particle’s MASS changes according to the laws of physics. Now with this assumption that what will be the MASS and velocity of the particle, we will be able to aim for Albert Einstein’s equation of energy and change in MASS. After that we will explain the fact that what the purpose of the new imagination is

Let us understand this concept by diagram:



Here we can clearly see that at point O time $t = t_0$ the velocity of the particle is equal to the velocity of light. Similarly at point A time $t = T_0$, the velocity of the particle is less than “u” of velocity of light. At time $t = T_1$ the velocity of the particle is “u” greater than the velocity of light.

Now as mathematical we can explain as below:

At point A time $t = T_0$ and Velocity of the particle is
 $C - u = V_0$ (1)

At point O time $t = t_0$ and Velocity of particle is
 $C = \text{Velocity of the light}$

At point B time $t = T_1$ and Velocity of particle is
 $C + u = V_1$ (2)

Multiply equation (1) and equation (2)

$$\begin{aligned} (C + u)(C - u) &= V_0V_1 \\ C^2 - u^2 &= V_0V_1 \\ C^2 &= V_0V_1 + u^2 \end{aligned} \quad \text{..... (3)}$$

Here equation (3) is known as Trap equation.

Now we consider two pre-proved results of the physics:

First is: $E = M C^2$ and second one is $M = M_0 \left(1 - \frac{v^2}{c^2}\right)^{-\frac{1}{2}}$

Consider: $E = M C^2$

But according Trap equation $C^2 = V_0V_1 + u^2$

Now $E = M (V_0V_1 + u^2)$

$$E = MV_0V_1 + Mu^2 \dots\dots\dots (4)$$

Now consider: $M = M_0 \left(1 - \frac{v^2}{c^2}\right)^{-\frac{1}{2}}$

Simplify $M^2 (C^2 - V^2) = (M_0)^2 C^2$

Now replace value of C from Trap equation:

$$M^2 (V_0V_1 + u^2 - V^2) = (M_0)^2 (V_0V_1 + u^2)$$

$$M (MV_0V_1 + Mu^2) - M^2V^2 = (M_0)^2 V_0V_1 + (M_0)^2 u^2 \dots\dots\dots(5)$$

Now by relations (4) and (5) we get:

$$M(E) - M^2V^2 = (M_0)^2 V_0V_1 + (M_0)^2 u^2$$

$$ME - M^2V^2 = (M_0)^2 (V_0V_1 + u^2)$$

$$ME - M^2V^2 = (M_0)^2 C^2$$

It's a quadratic equation in term of M.

We also can write as: $M^2V^2 - ME + (M_0)^2 C^2 = 0$

Let $E^2 - 4V^2 (M_0)^2 C^2 = S$ (It's known as

$$M = \frac{[E \pm \sqrt{S}]}{2V^2}$$

$$M = \frac{[E \pm \sqrt{E^2 - 4V^2 (M_0)^2 C^2}]}{2V^2}$$

It's known as Trap-Ti equation.

Here **M₀** mass when particle in the rest and **M** is the mass of particle when its moving with velocity **V** and C is the velocity of the light i.e. 3×10^8 m/s .

Now in special cases:

Case (1): If particle in the rest

$M = M_0$ and $V = 0$

Than Trap-Ti equation become

$$M = \frac{[E \pm \sqrt{E^2 - 4V^2 (M_0)^2 C^2}]}{2V^2}$$

$$M_0 = \frac{E \pm E}{2V^2}$$

$M_0 = 0$, if - sign taken

$M_0 = \frac{2E}{2V^2}$, if + taken.

Case (2): If particle is moving with velocity of the light.

$V = C$ Then

$$M = \frac{[E \pm \sqrt{E^2 - 4C^2 (M_0)^2 C^2}]}{2C^2}$$

$$M = \frac{[E \pm \sqrt{E^2 - 4C^4 (M_0)^2}]}{2C^2}$$

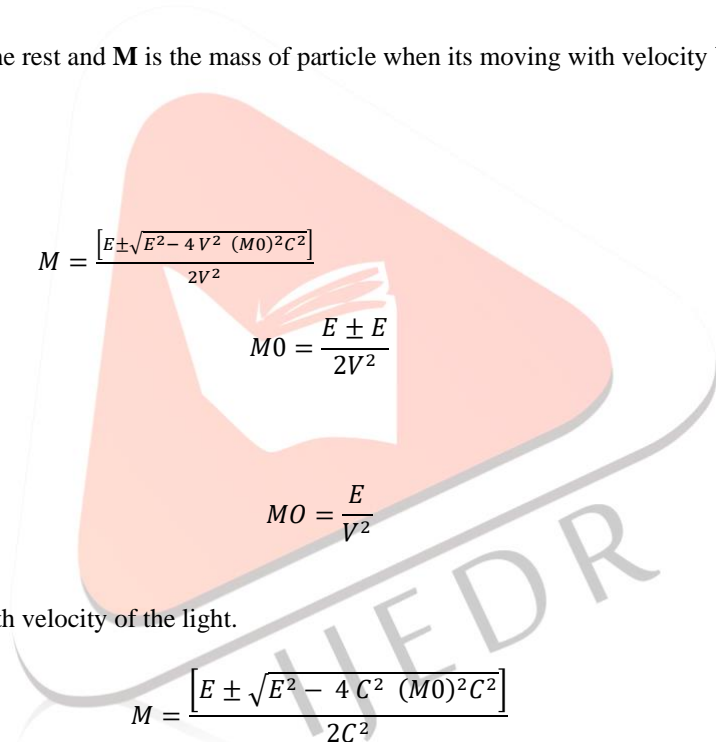
$$2MC^2 = E \pm \sqrt{E^2 - 4C^4 (M_0)^2}$$

$$[2MC^2 - E]^2 = E^2 - 4C^4 (M_0)^2$$

$$4M^2C^4 + E^2 - 4EMC^2 = E^2 - 4C^4 (M_0)^2$$

$$4M^2C^4 - 4EMC^2 = -4C^4 (M_0)^2$$

$$4M^2C^2 - 4EM = -4C^2(M_0)^2$$



$$\begin{aligned}
 M^2 C^2 - EM &= -C^2 (M_0)^2 \\
 M^2 C^2 - EM + C^2 (M_0)^2 &= 0 \\
 M &= \frac{E \pm \sqrt{E^2 - 4C^4 (M_0)^2}}{2C^2}
 \end{aligned}$$

Suppose there are indifferent particles in the universe which are always energyless (not a energy carrier) and moves at the speed of the light.

i.e.: $E = 0$ and $V=C$.

$$\begin{aligned}
 M &= \frac{0 \pm \sqrt{0 - 4C^4 (M_0)^2}}{2C^2} \\
 2MC^2 &= \sqrt{-4C^4 (M_0)^2} \\
 MC^2 &= i (C^2) M_0 \\
 M &= i M_0
 \end{aligned}$$

$$\frac{M}{M_0} = \sqrt{(-1)} \dots\dots\dots (6)$$

(6) Equation is known as Imaginary mass equation.

Conclusion:

Finally, I reached the conclusion that the energyless (**Basic component of the universe**) particle in the universe, which is moving at the speed of light, whose decreases or increase in velocity is only a certain amount. The mass of such particle is imaginary relative to the break period.

Reference:

I have used a new concept (Trap Equation) in this paper, Albert Einstein’s energy equation and the theory of mass transformation.

