

# Disprove of Einstein theory of general relativity and its related theories using reasoning and analysis and probable equation using calculus instead of Einstein general theory of relativity

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## Abstract:-

In the present paper we have reviewed the Einstein theory of general relativity and other related theories (example relativistic distance, relativistic time, relativistic length contraction and relativistic mass) and have disproved Einstein theory of general relativity and its related theories using some calculation by generating the data and also by reasoning and analysis. In the present paper we have also tried to formulate the probable equation using calculus instead of Einstein general theory of relativity and the results are shown in this paper. In this equation we have considered, distance, time, velocity, acceleration, gravitational force, magnetic force etc.

**Keywords:-** Einstein theory of relativity, new equation, calculus, gravitational force, magnetic force.

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## 1. Introduction:

Einstein proposed general theory of relativity equations for distance and time between the two observers present in two inertial frame of reference by considering the velocity of light in these equations. The equations for general theory of relativity and other related theories are given below  $t_2 = [t - (vx/c^2)] / \sqrt{1 - (v^2/c^2)}$ ,  $x_2 = [x - vt] / \sqrt{1 - (v^2/c^2)}$ ,  $L = L_0 \sqrt{1 - (v^2/c^2)}$ ,  $m = m_0 \sqrt{1 - (v^2/c^2)}$  [1-4]. In these equations the term  $\sqrt{1 - (v^2/c^2)}$  is equal to one as shown in discussion part for wide range of velocities varying from 1 m/s to  $3.0 \times 10^8$  m/s. This makes no difference in considering or not considering the term  $(\sqrt{1 - (v^2/c^2)})$  in the Einstein theory of relativity and other theories. For velocity equal to velocity of light the above parameters like  $x_2$ ,  $t_2$ ,  $m$  becomes infinite and the value of  $L$  becomes zero. In the present paper we have disproved the Einstein theory of relativity and related theories by some calculations by generating data and by reasoning and analysis and this have been shown in discussion. As the Einstein theory of general relativity is wrong concept which have been proven by calculations and reasoning and analysis, in the present case new equations based on calculus are proposed and is presented in this paper.

## 2. Results and Discussion:

Einstein theory of general relativity and other related theory describe relative distance and time lag between two observers situated at two different inertial frame of reference. It states that there is no universal frame of reference and the speed of light is constant irrespective of observer in different inertial frame of reference.

According to general theory of relativity,

$$\text{The time lag } \Delta t_2 = \Delta t_1 / \sqrt{1 - (v^2/c^2)} \quad (1)$$

The time lag and relative displacement according to special theory of relativity are given by

$$t_2 = [t - (vx/c^2)] / \sqrt{1 - (v^2/c^2)} \quad (2)$$

$$x_2 = [x - vt] / \sqrt{1 - (v^2/c^2)} \quad (3)$$

$$y_2 = y \quad (4)$$

$$z_2 = z \quad (5)$$

**Table 1** Calculations using  $x_2 = [x - vt] / \sqrt{1 - (v^2 / c^2)}$

Velocity (v) (m/s)	Velocity of light (c) (m/s)	x (m)	$v^2/c^2$	$\sqrt{1 - (v^2 / c^2)}$	t(s)	$x_2 = [x - vt] / \sqrt{1 - (v^2 / c^2)}$
10	$3 \times 10^8$	10	$1.1 \times 10^{-15}$	1	10	$-9 \times 10^1$
$10^2$	$3 \times 10^8$	$10^2$	$1.1 \times 10^{-13}$	1	10	$-9 \times 10^2$
$10^3$	$3 \times 10^8$	$10^3$	$1.1 \times 10^{-11}$	1	10	$-9 \times 10^3$
$10^4$	$3 \times 10^8$	$10^4$	$1.1 \times 10^{-9}$	1	10	$-9 \times 10^4$
$10^5$	$3 \times 10^8$	$10^5$	$1 \times 10^{-7}$	1	10	$-9 \times 10^5$
$10^6$	$3 \times 10^8$	$10^6$	$1 \times 10^{-5}$	0.99999	10	$-9 \times 10^6$
$10^7$	$3 \times 10^8$	$10^7$	$1.1 \times 10^{-3}$	0.99944	10	$-9 \times 10^7$
$10^8$	$3 \times 10^8$	$10^8$	$1.1 \times 10^{-1}$	0.94281	10	$-9.6 \times 10^8$
$3 \times 10^8$	$3 \times 10^8$	$3 \times 10^8$	1	0	10	$\infty$

**Table 2** Calculations using  $x_2 = [x - vt] / \sqrt{1 - (v^2 / c^2)}$

Velocity (v) (m/s)	Velocity of light (c) (m/s)	x (m)	$v^2/c^2$	$\sqrt{1 - (v^2 / c^2)}$	t(s)	$x_2 = [x - vt] / \sqrt{1 - (v^2 / c^2)}$
10	$3 \times 10^8$	10	$1.1 \times 10^{-15}$	1	10	$-9 \times 10^1$
$10^2$	$3 \times 10^8$	$10^2$	$1.1 \times 10^{-13}$	1	$10^2$	$-9.9 \times 10^3$
$10^3$	$3 \times 10^8$	$10^3$	$1.1 \times 10^{-11}$	1	$10^3$	$-9.9 \times 10^5$
$10^4$	$3 \times 10^8$	$10^4$	$1.1 \times 10^{-9}$	1	$10^4$	$-9.9 \times 10^7$
$10^5$	$3 \times 10^8$	$10^5$	$1 \times 10^{-7}$	1	$10^5$	$-9.9 \times 10^9$
$10^6$	$3 \times 10^8$	$10^6$	$1 \times 10^{-5}$	0.99999	$10^6$	$-1.0 \times 10^{12}$
$10^7$	$3 \times 10^8$	$10^7$	$1.1 \times 10^{-3}$	0.99944	$10^7$	$-1.0 \times 10^{14}$
$10^8$	$3 \times 10^8$	$10^8$	$1.1 \times 10^{-1}$	0.94281	$10^8$	$-1.0 \times 10^{16}$
$3 \times 10^8$	$3 \times 10^8$	$3 \times 10^8$	1	0	$3 \times 10^8$	$\infty$

We have generated data and have calculated the relative distance using equation (3). The results obtained are shown in Table 1 & 2. It can be that the value of  $\sqrt{1 - (v^2 / c^2)}$  is one irrespective of all range of velocity of the observer. The relative distance is approximately equal to  $v \cdot t$ . There is no need of  $\sqrt{1 - (v^2 / c^2)}$  in relative distance equation as this is equal to 1 and the relative distance is equal to velocity\*time.

**Table 3** Calculations using equation  $t_2 = [t - (vx/c^2)] / \sqrt{1 - (v^2 / c^2)}$

Velocity (v) (m/s)	Velocity of light (c) (m/s)	x (m)	$v^2/c^2$	$\sqrt{1 - (v^2 / c^2)}$	t(s)	$t_2 = [t - (vx/c^2)] / \sqrt{1 - (v^2 / c^2)}$
10	$3 \times 10^8$	10	$1.1 \times 10^{-15}$	1	10	10
$10^2$	$3 \times 10^8$	$10^2$	$1.1 \times 10^{-13}$	1	10	10
$10^3$	$3 \times 10^8$	$10^3$	$1.1 \times 10^{-11}$	1	10	10
$10^4$	$3 \times 10^8$	$10^4$	$1.1 \times 10^{-9}$	1	10	10
$10^5$	$3 \times 10^8$	$10^5$	$1 \times 10^{-7}$	1	10	10
$10^6$	$3 \times 10^8$	$10^6$	$1 \times 10^{-5}$	0.99999	10	10
$10^7$	$3 \times 10^8$	$10^7$	$1.1 \times 10^{-3}$	0.99944	10	10
$10^8$	$3 \times 10^8$	$10^8$	$1.1 \times 10^{-1}$	0.94281	10	10.48
$3 \times 10^8$	$3 \times 10^8$	$3 \times 10^8$	1	0	10	$\infty$

**Table 4** Calculations using equation  $t_2 = [t - (vx/c^2)]/\sqrt{1 - (v^2/c^2)}$

Velocity (v) (m/s)	Velocity of light (c) (m/s)	x (m)	$v^2/c^2$	$\sqrt{1 - (v^2/c^2)}$	t(s)	$t_2 = [t - (vx/c^2)]/\sqrt{1 - (v^2/c^2)}$
10	$3 \times 10^8$	10	$1.1 \times 10^{-15}$	1	10	$10^1$
$10^2$	$3 \times 10^8$	$10^2$	$1.1 \times 10^{-13}$	1	$10^2$	$10^2$
$10^3$	$3 \times 10^8$	$10^3$	$1.1 \times 10^{-11}$	1	$10^3$	$10^3$
$10^4$	$3 \times 10^8$	$10^4$	$1.1 \times 10^{-09}$	1	$10^4$	$10^4$
$10^5$	$3 \times 10^8$	$10^5$	$1 \times 10^{-07}$	1	$10^5$	$10^5$
$10^6$	$3 \times 10^8$	$10^6$	$1 \times 10^{-05}$	0.99999	$10^6$	$10^6$
$10^7$	$3 \times 10^8$	$10^7$	$1.1 \times 10^{-03}$	0.99944	$10^7$	$10^7$
$10^8$	$3 \times 10^8$	$10^8$	$1.1 \times 10^{-01}$	0.94281	$10^8$	$10^8$
$3 \times 10^8$	$3 \times 10^8$	$3 \times 10^8$	1	0	$3 \times 10^8$	$\infty$

We have also generated data and have calculated the relativistic time using equation (2). The results obtained are shown in Table 3 & 4. It can be that the value of  $\sqrt{1 - (v^2/c^2)}$  is one irrespective of all range of velocity of the observer. The relativistic time is approximately equal to t and becomes infinity at velocity of light. There is no need of  $\sqrt{1 - (v^2/c^2)}$  in relativistic time equation as this is equal to 1 and the relative time is equal to time of study.

According to the Einstein theory we can go to future if we travel with greater speed with less aging. The greater speed he means is related to distance travelling but not the time travelling (equation 2). This means that we should see ourselves and the aged self simultaneously if we go in to future 50 years ahead of present by travelling with greater speed. This is wrong because the above means that the present and future is happening at same space and time, which is not so in the real case. We go to future if we travel 1 foot in 1 second. There one can see self not the aged self, one sees transition from past to present and not to the future. Even if one travel with speed of light or greater than speed of light for instance then one will be in another world for example another planet or universe rather than in future and past. The other concept may also be wrong because same mathematical representation is used to define the relative distance between two observers situated at two different inertial frame of reference or situated at same inertial frame of reference.

Suppose that one can travel with speed equal to speed of light and has travelled for one second then the time lag between the two observers will be infinite whether they are situated in two different inertial frame of reference or single/two observers situated in same frame of reference (by substituting  $v = c$  in equations (1) and (2)). This infinite time lag is very wrong if one travelled with speed of light for only one second.

According to general theory of relativity and special theory of relativity the relative distance between two observers situated at two inertial frame of reference is infinite (by substituting  $v = c$  in equation (3)) if one observer travelled with speed of light for one second and the other observer is at rest. But in the real case the relative distance would be  $3 \times 10^8$  meters/s x 1s which is equal to  $3 \times 10^8$  meters. This is another example which disproves the Einstein theory of relativity and its related theories.

The Einstein theory of general relativity and its related theories considered only the velocity but not the acceleration; this may also leads to erroneous results. They have also not consider gravitational and magnetic field in theory of relativity.

It is known that even light cannot escape from the vicinity of the black holes due to enormous gravitational and magnetic field according to scientists. The black holes are the dead stars possessing enormous gravitational and magnetic fields. The light may be coming from different direction towards the black hole and the light parallel to the black hole may be accelerated towards the black hole due enormous gravitational and magnetic field of black holes, this is one example where the light may be accelerated towards the black holes if the light is travelling towards the black holes. This means that the speed of light in the vicinity of black hole is greater than the original speed of light. Light travelling perpendicular to the black hole may be slowed down and are accelerated towards the black hole. This again contradicts the Einstein theory of general relativity and also the other related theories which state that speed of light is constant in vacuum.

It is also known that everything in the universe is accelerated due to gravity of earth by  $9.8 \text{ m/s}^2$  towards the center of the earth. Light is not the exceptional case, if light travels for sufficiently longer times under the influence of the gravity of earth then the velocity of light would be increased by some factor in real sense.

The concept that there is no universal frame of reference and absolute distant cannot be obtained accurately, but, relative distance between two observers can be obtained accurately is also a wrong concept. If suppose that there

are two inertial frame of reference for two observers situated in respective inertial frame of reference. Then the relative distance and the time lag cannot be obtained accurately because the one observer's inertial frame of reference is real or random and the second inertial frame of reference is arbitrary or both the inertial frame of reference is random. The second inertial frame of reference/coordinate axis has no correlation with the first inertial frame of reference because it is random. This results in erroneous results using Einstein general theory of relativity and its related theories. Hence considering the any one of the two inertial frame of reference as the universal frame of reference would be beneficial and this would gives the relative distant and time lag very accurately.

It is known to all that the gravitational field is inward towards the center of the planets, stars, pulsars, supernovas, galaxies etc. It is also known in the present case that the gravity comes to effect within the upper atmosphere and above the upper atmosphere it has little effect and this is evidenced by floating of space scientists/astronauts in space craft that go beyond the upper atmosphere of the earth. From this observation it can be concluded that gravitation has little effect on the orbital of planets around the sun beyond the center of the planetary motion. The planets may also be orbiting around the sun due to magnetic field of sun and the planets; the planets may be traversing across the magnetic lines of force. This is evidenced from the practical studies in X + II class by drawing the compass needle deflection around the magnet and these lines are called magnetic line of force. Based on this observation it is believed that the planets may also be orbit around the sun is due to magnetic field.. The line of magnetic forces does not pass through the middle of the sun; this is needed to be investigated. One of the answers may be due to spherical shape of sun and the planets and also due to spin of the planets and the sun around their own axis.

In physics, length contraction – according to Hendrik Lorentz – is the physical phenomenon of a decrease in length detected by an observer of objects that travel at any non-zero velocity relative to that observer. This contraction more formally called Lorentz contraction or Lorentz–FitzGerald contraction is usually only noticeable at a substantial fraction of the speed of light; the contraction is only in the direction parallel to the direction in which the observed body is travelling. This effect is negligible at everyday speeds, and can be ignored for all regular purposes. Only at greater speeds does it become important. As the magnitude of the velocity approaches the speed of light, the effect becomes dominant, as can be seen from the formula:

**Table 5** Calculations using equation  $L=L_0\sqrt{1-(v^2/c^2)}$

Velocity (v) (m/s)	Velocity of light (c) (m/s)	$L_0$ (m)	$v^2/c^2$	$\sqrt{1-(v^2/c^2)}$	$L=L_0\sqrt{1-(v^2/c^2)}$
1	$3 \times 10^8$	1	$1.1 \times 10^{-17}$	1	1
10	$3 \times 10^8$	10	$1.1 \times 10^{-15}$	1	$10^1$
$10^2$	$3 \times 10^8$	$10^2$	$1.1 \times 10^{-13}$	1	$10^2$
$10^3$	$3 \times 10^8$	$10^3$	$1.1 \times 10^{-11}$	1	$10^3$
$10^4$	$3 \times 10^8$	$10^4$	$1.1 \times 10^{-9}$	1	$9.9 \times 10^3$
$10^5$	$3 \times 10^8$	$10^5$	$1 \times 10^{-7}$	1	$9.9 \times 10^4$
$10^6$	$3 \times 10^8$	$10^6$	$1 \times 10^{-5}$	0.99999	$9.9 \times 10^5$
$10^7$	$3 \times 10^8$	$10^7$	$1.1 \times 10^{-3}$	0.99944	$9.9 \times 10^6$
$10^8$	$3 \times 10^8$	$10^8$	$1.1 \times 10^{-1}$	0.94281	$9.4 \times 10^7$
$3 \times 10^8$	$3 \times 10^8$	$3 \times 10^8$	1	0	0

**Table 6** Calculations using equation  $L=L_0\sqrt{1-(v^2/c^2)}$

Velocity (v) (m/s)	Velocity of light (c) (m/s)	$L_0$ (m)	$v^2/c^2$	$\sqrt{1-(v^2/c^2)}$	$L=L_0\sqrt{1-(v^2/c^2)}$
10	$3 \times 10^8$	1	$1.1 \times 10^{-15}$	1	1
10	$3 \times 10^8$	10	$1.1 \times 10^{-15}$	1	10
10	$3 \times 10^8$	$10^2$	$1.1 \times 10^{-15}$	1	$10^2$
10	$3 \times 10^8$	$10^3$	$1.1 \times 10^{-15}$	1	$10^3$
10	$3 \times 10^8$	$10^4$	$1.1 \times 10^{-15}$	1	$10^4$
10	$3 \times 10^8$	$10^5$	$1.1 \times 10^{-15}$	1	$10^5$
10	$3 \times 10^8$	$10^6$	$1.1 \times 10^{-15}$	1	$10^6$
10	$3 \times 10^8$	$10^7$	$1.1 \times 10^{-15}$	1	$10^7$

10	$3 \times 10^8$	$10^8$	$1.1 \times 10^{-15}$	1	$10^8$
10	$3 \times 10^8$	$3 \times 10^8$	$1.1 \times 10^{-15}$	1	$3 \times 10^8$

$$L = L_0 \sqrt{1 - (v^2/c^2)} \quad (6)$$

where  $L_0$  is the proper length (the length of the object in its rest frame),  
 $L$  is the length observed by an observer in relative motion with respect to the object,  
 $v$  is the relative velocity between the observer and the moving object,  
 $c$  is the speed of light,

We have generated data and calculated the length contraction using equation (6) and this is shown in table 5 & 6. It can be seen from table that the value  $\sqrt{1 - (v^2 / c^2)}$  is one and is slightly changed for higher velocities  $10^6$  m/s. The length contraction ( $L$ ) is equal to Initial length ( $L_0$ ).

The length contraction means that the material vanishes at the speed of velocity of light irrespective of material, length and time in consideration; this is very illogical to think in the real sense. Suppose if one consider same material with different lengths then the material with different lengths vanishes if it travels with velocity of light even if it is considered for fraction of seconds, but the materials length contraction is different at certain fraction of velocity of light. For material with different lengths the time is very important factor if one has to consider the Einstein theory of relativity to consider completely vanishing of length if it travels with speed of light, but the time factor is not considered in length contraction formula. This makes it obvious to think of length contraction as illogical concept which in turn doubt the application of Einstein theory of general relativity as length contraction is based on Einstein's theory of general relativity.

The other concept related to the Einstein theory of relativity is relativistic mass and the equation is as shown below

$$m = m_0 / \sqrt{1 - (v^2 / c^2)} \quad (7)$$

In this case also the data is generated and have calculated using above equation (7) and the obtained results are shown in table 7 & 8.

**Table 7** Calculations using equation  $m = m_0 / \sqrt{1 - (v^2 / c^2)}$

Velocity (v) (m/s)	Velocity of light (c) (m/s)	$m_0$ (Kg)	$v^2/c^2$	$\sqrt{1 - (v^2 / c^2)}$	$m = m_0 / \sqrt{1 - (v^2 / c^2)}$
1	$3 \times 10^8$	1	$1.1 \times 10^{-17}$	1	1
10	$3 \times 10^8$	10	$1.1 \times 10^{-15}$	1	10
$10^2$	$3 \times 10^8$	$10^2$	$1.1 \times 10^{-13}$	1	$10^2$
$10^3$	$3 \times 10^8$	$10^3$	$1.1 \times 10^{-11}$	1	$10^3$
$10^4$	$3 \times 10^8$	$10^4$	$1.1 \times 10^{-9}$	1	$10^4$
$10^5$	$3 \times 10^8$	$10^5$	$1 \times 10^{-7}$	1	$10^5$
$10^6$	$3 \times 10^8$	$10^6$	$1 \times 10^{-5}$	0.99999	$10^6$
$10^7$	$3 \times 10^8$	$10^7$	$1.1 \times 10^{-3}$	0.99944	$10^7$
$10^8$	$3 \times 10^8$	$10^8$	$1.1 \times 10^{-1}$	0.94281	$10^8$
$3 \times 10^8$	$3 \times 10^8$	$3 \times 10^8$	1	0	$\infty$

**Table 8** Calculations using equation  $m = m_0 / \sqrt{1 - (v^2 / c^2)}$

Velocity (v) (m/s)	Velocity of light (c) (m/s)	$m_0$ (Kg)	$v^2/c^2$	$\sqrt{1 - (v^2 / c^2)}$	$m = m_0 / \sqrt{1 - (v^2 / c^2)}$
1	$3 \times 10^8$	$10^3$	$1.1 \times 10^{-17}$	1	$10^3$
10	$3 \times 10^8$	$10^3$	$1.1 \times 10^{-15}$	1	$10^3$
$10^2$	$3 \times 10^8$	$10^3$	$1.1 \times 10^{-13}$	1	$10^3$
$10^3$	$3 \times 10^8$	$10^3$	$1.1 \times 10^{-11}$	1	$10^3$

$10^4$	$3 \times 10^8$	$10^3$	$1.1 \times 10^{-09}$	1	$10^3$
$10^5$	$3 \times 10^8$	$10^3$	$1 \times 10^{-07}$	1	$10^3$
$10^6$	$3 \times 10^8$	$10^3$	$1 \times 10^{-05}$	0.99999	$10^3$
$10^7$	$3 \times 10^8$	$10^3$	$1.1 \times 10^{-03}$	0.99944	$10^3$
$10^8$	$3 \times 10^8$	$10^3$	$1.1 \times 10^{-01}$	0.94281	$10.62 \times 10^2$
$3 \times 10^8$	$3 \times 10^8$	$10^3$	1	0	$\infty$

It can also be seen that the relativistic mass is equal to initial mass for different range of masses and velocity. The relativistic mass is  $10.62 \times 10^2$  Kg at  $10^8$  velocity in m/s. The mass becomes infinity at velocity of light.

There is no much difference in using the expression  $\sqrt{1 - (v^2 / c^2)}$  in the relativistic equations calculations as it is equal to 1.

Albert Einstein proposed mass–energy equivalence in 1905 in one of his Annus Mirabilis papers entitled "Does the inertia of a body depend upon its energy-content? The equivalence is described by the famous equation:

$$E = mc^2 \tag{8}$$

where E is energy, m is mass, and c is the speed of light. The formula is dimensionally consistent and does not depend on any specific system of measurement units. The equation  $E = mc^2$  indicates that energy always exhibits relativistic mass in whatever form the energy takes. Mass–energy equivalence does not imply that energy may be "converted" to matter, but it allows for matter to be converted to energy. The calculation using the equation (8) are shown in Table 9.

**Table 9** Calculations using equation  $E=mc^2$

m (Kg)	c (m/s)	$E=mc^2$ (Kg.m/s)
1	$3 \times 10^8$	$9 \times 10^{16}$
10	$3 \times 10^8$	$9 \times 10^{17}$
$10^2$	$3 \times 10^8$	$9 \times 10^{18}$
$10^3$	$3 \times 10^8$	$9 \times 10^{19}$
$10^4$	$3 \times 10^8$	$9 \times 10^{20}$
$10^5$	$3 \times 10^8$	$9 \times 10^{21}$
$10^6$	$3 \times 10^8$	$9 \times 10^{22}$
$10^7$	$3 \times 10^8$	$9 \times 10^{23}$
$10^8$	$3 \times 10^8$	$9 \times 10^{24}$
$3 \times 10^8$	$3 \times 10^8$	$2.7 \times 10^{25}$

It is known to all that mass can be converted in to energy and energy can be converted in to matter, but total conversion is not possible in real sense. According to Einstein the upper limit for the unit mass to be converted in to energy irrespective of material to be used is  $9.0 \times 10^{16}$  joules per kilogram. Then the question arises from one kilo gram of uranium and one kilo gram of water if converted in to energy is it possible to produce same output energy ( $9.0 \times 10^{16}$  joules per kilogram)? This is not the case in real sense.

Let us consider another example; we all know that the total energy possessed by a body of mass m and moving with velocity v at a certain height h is given by

$$E = mv^2/2 + mgh \tag{9}$$

where g is acceleration due to gravity.

Equating equation (8) and (9) will gives  $mc^2 = mv^2/2 + mgh$

$$mc^2 = mc^2/2 + mgh; \text{ since body is moving with velocity of light.}$$

$$mc^2/2 = mgh$$

$$c^2/2 = gh \tag{10}$$

$$h = c^2/(2g)$$

Using Einstein mass energy relation we got h value to be equal to  $c^2/(2g)$ , this is very strange because h value is constant as g value is constant and disproves the Einstein mass energy relation because height can be anything, for example photons coming from sun and other stars may be located at different heights. This contradicts the mass energy relation proposed by Einstein.

Suppose in another example, let us consider h to be relativistic that is  $h = h_1/\sqrt{1-(v^2/c^2)}$ , then equation (10) becomes

$$c^2/2 = g h_1/\sqrt{1-(v^2/c^2)}$$

Since it is considered that the body is moving with the velocity of light; the above equation becomes

$$c^2/2 = \infty, \text{ this result is very wrong and erroneous as } c \text{ is constant value which is equal to } 3 \times 10^8 \text{ m/s.}$$

The above example through reasoning and analysis disproves the mass and energy equivalence relation as proposed by Einstein.

Please think over the above and reconsider the use of the theory of general relativity proposed by Albert Einstein and its related theories.

The theory of relativity proposed by Einstein consider velocity of light and but this should not be the case. Einstein theory of relativity considers velocity and not acceleration.

In view of the above one need to formulated new equations using calculus by considering distance, time, velocity, acceleration, gravitational field and magnetic field.

The equations using the calculus are as shown below

$$\begin{aligned}
 x = \int_{x_1}^{x_2} dx + \int_{t_1}^{t_2} v * dt + \int_{t_1}^{t_2} \int_{t_1}^{t_2} a * dt^2 + \\
 \int_{r_1}^{r_2} \int_{r_1}^{r_2} \int_{r_1}^{r_2} \int_{r_1}^{r_2} \frac{G * m_1 * m_2}{4\pi r^2 * t^2} * \frac{2}{(m_1 + m_2) * a * r} * \frac{V_1 * V_2}{m_1 V_2 + m_2 V_1} dr^4 + \\
 \int_{r_1}^{r_2} \int_{r_1}^{r_2} \int_{r_1}^{r_2} \int_{r_1}^{r_2} \frac{\mu * q_1 * q_2}{4\pi r^2 * t} * \frac{2}{(q_1 + q_2) * v * B * r} dr^4 \tag{11}
 \end{aligned}$$

Here dx is change in distance, v is the velocity, dt is the change in time, t is the time, a is acceleration, B is magnetic field, q1, q2 are the magnetic charges, m1, m2 are masses, a is the acceleration, r is distance, V1, V2 are the volumes, G is the gravitational constant,  $\mu$  is the magnetic constant, v is the velocity.

$\frac{G * m_1 * m_2}{4\pi r^2}$  is the gravitational force

$\frac{G * m_1 * m_2}{4\pi r^2 * t^2}$  is the power

$\frac{2}{(m_1 + m_2) * a * r}$  is the inverse of work done by gravitational force.

$\frac{V_1 * V_2}{m_1 V_2 + m_2 V_1}$  is the inverse of average density of two objects

$\frac{\mu * q1 * q2}{4\pi r^2}$  is the magnetic force

$\frac{\mu * q1 * q2}{4\pi r^2 * t}$  is the magnetic energy

$\frac{\mu * q1 * q2}{4\pi r^2 * t^2}$  is the magnetic power

$\frac{2}{(q1 + q2) * v * B * r}$  is the inverse of work done by magnetic force

In the equation (11) B/μ is H and H is Amp/m, and Amp is q/t and by substituting this in equation (11) the equation becomes

$$\begin{aligned}
 x = & \int_{x1}^{x2} dx + \int_{t1}^{t2} v * dt + \int_{t1}^{t2} \int_{r1}^{r2} a * dt^2 + \\
 & \int_{r1}^{r2} \int_{r1}^{r2} \int_{r1}^{r2} \frac{G * m1 * m2}{4\pi r^2 * t^2} * \frac{2}{(m1 + m2) * a * r} * \frac{V1 * V2}{m1V2 + m2V1} dr^4 + \\
 & \int_{r1}^{r2} \int_{r1}^{r2} \frac{q1 * q2}{4\pi r^2 * t^2} * \frac{2 * t * r * 2}{(q1 + q2) * v * r * (q1 + q2)} dr^3 \tag{12}
 \end{aligned}$$

In the above equation (12) the units of G in term 4 should be balanced and also the volume. The units of G are N.m<sup>2</sup>/Kg<sup>2</sup> and this can be balanced as shown in equation 13.

$$\begin{aligned}
 x = & \int_{x1}^{x2} dx + \int_{t1}^{t2} v * dt + \int_{t1}^{t2} \int_{r1}^{r2} a * dt^2 + \\
 & \int_{r1}^{r2} \int_{r1}^{r2} \int_{r1}^{r2} \int_{r1}^{r2} \int_{r1}^{r2} \int_{r1}^{r2} \frac{G * (m1 * m2)^2}{(4\pi r^2 * t^2)^2} * \frac{2}{(m1 + m2) * a} * \frac{2}{(m1 + m2) * a * r} * \frac{V1 * V2}{m1V2 + m2V1} dr^7 + \\
 & \int_{r1}^{r2} \int_{r1}^{r2} \frac{q1 * q2}{4\pi r^2 * t^2} * \frac{2 * t * r * 2}{(q1 + q2) * v * r * (q1 + q2)} dr^3 \tag{13}
 \end{aligned}$$

The volume can be balanced by considering 1/(V1+V2) in equation (13) and the equation becomes

$$\begin{aligned}
 x = & \int_{x1}^{x2} dx + \int_{t1}^{t2} v * dt + \int_{t1}^{t2} \int_{r1}^{r2} a * dt^2 + \\
 & \int_{r1}^{r2} \int_{r1}^{r2} \int_{r1}^{r2} \int_{r1}^{r2} \int_{r1}^{r2} \int_{r1}^{r2} \frac{G * (m1 * m2)^2}{(4\pi r^2 * t^2)^2} * \frac{2}{(m1 + m2) * a} * \frac{2}{(m1 + m2) * a * r} * \frac{V1 * V2}{m1V2 + m2V1} * \frac{1}{V1 + V2} dr^7 + \\
 & \int_{r1}^{r2} \int_{r1}^{r2} \frac{q1 * q2}{4\pi r^2 * t^2} * \frac{2 * t * r * 2}{(q1 + q2) * v * r * (q1 + q2)} dr^3 \tag{13}
 \end{aligned}$$

In the above equation a=r/t<sup>2</sup> and v=r/t, then the above equation become



$$\begin{aligned}
 x &= \int_{x1}^{x2} dx + \int_{t1}^{t2} v * dt + \int_{t1}^{t2} \int_{t1}^{t2} a * dt^2 + \\
 &\int_{r1}^{r2} \int_{r1}^{r2} \int_{r1}^{r2} \int_{r1}^{r2} \int_{r1}^{r2} \int_{r1}^{r2} \frac{G * (m1 * m2)^2}{(4\pi r^2 * t^2)^2} * \frac{2 * t^2}{(m1 + m2) * r} * \frac{2 * t^2}{(m1 + m2) * r * r} * \frac{V1 * V2}{m1V2 + m2V1} * \frac{1}{V1 + V2} dr^7 + \\
 &\int_{r1}^{r2} \int_{r1}^{r2} \frac{q1 * q2}{4\pi r^2 * t^2} * \frac{2 * t * r * 2 * t}{(q1 + q2) * r * r * (q1 + q2)} dr^3 \tag{13}
 \end{aligned}$$

The above equation can be integrated and then the equation becomes approximately equal to

$$\begin{aligned}
 x &= [x2 - x1] + v * [t2 - t1] + a * [t2 - t1]^2 + \\
 &\frac{G * (m1 * m2)^2}{(4\pi)^2} * \left(\frac{2}{(m1 + m2)}\right)^2 * \frac{V1 * V2}{m1V2 + m2V1} * \frac{1}{V1 + V2} * \log[r2 - r1] + \\
 &\frac{q1 * q2}{4\pi} * \frac{4}{(q1 + q2)^2} * \log[r2 - r1] \tag{14}
 \end{aligned}$$

It is Known that the  $B = \mu H$  and  $H = i/d$ ;  $d$  is distance,  $i$  is current,  $B$  is the magnetic field strength and  $H$  is the magnetic field intensity.

$$B = \mu * i/d$$

$$B = \mu * q/(t * d) \text{ since } i = q/t$$

$$\text{Then } q = B * t * d / \mu$$

By substitution of  $q$  value in equation (14) then the equation becomes

$$\begin{aligned}
 x &= [x2 - x1] + v * [t2 - t1] + a * [t2 - t1]^2 + \\
 &\frac{G * (m1 * m2)^2}{(4\pi)^2} * \left(\frac{2}{(m1 + m2)}\right)^2 * \frac{V1 * V2}{m1V2 + m2V1} * \frac{1}{V1 + V2} * \log[r2 - r1] + \\
 &\frac{(B1 * t * d) * (B2 * t * d)}{4\pi * \mu^2} * \frac{4 * \mu^2}{((B1 * t * d) + (B2 * t * d))^2} * \log[r2 - r1] \tag{15}
 \end{aligned}$$

From equation (15) the term 4 is the distance travelled due to gravitational field of sun, earth and moon and this orbital distance moved by earth around the sun is  $3.58 \times 10^{11}$  m. and the orbital distance covered by moon around the sun is  $8.91 \times 10^7$  m. The orbital distance covered by moon around the earth is  $1.15 \times 10^{21}$  for whole year. Also from equation (15) the term 5 is the distance travelled by earth due to magnetic field of sun and this is equal to  $7.7 \times 10^{-4}$  m by considering the magnetic field of earth and sun.

### 3. Conclusions:

In the present paper we have reviewed the Einstein theory of general relativity and other related theories (example relativistic distance, relativistic time, relativistic length contraction and relativistic mass) by performing some calculation based on data generated for distance, time, and length, mass over wide range of values. In this paper we have shown that the term  $\sqrt{1 - (v^2 / c^2)}$  is equal to one irrespective of wide range of all the above parameters and have disproved Einstein theory of general relativity and its related theories also by using reasoning and analysis. In the present paper we have also tried to formulate the probable equation using calculus instead of Einstein general theory of relativity and have been successful in doing that. We have considered in this new equation distance, time, velocity, acceleration, gravitational force, magnetic force etc.

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