

# Antigravity in the Six Dimensional Space-Time

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## ABSTRACT

This paper presents a method for producing a gravity field through an electromagnetic field. The electromagnetic field can produce a positive or negative gravity field. The relationship between gravity force and electromagnetic is unknown. Former studies by theoretical physics predict the relationship between these two forces. Based on the general balance theory in six dimensions of space and time, the electromagnetic field was studied from this viewpoint. Three-dimensional waves oscillate in the fourth dimension and electromagnetic waves distort space-time. Aggregating these distortions can behave like a positive or negative gravity field. Consequently, the production of energy is possible from gravitational fields.

**Keywords:** Antigravity; Electromagnetic; Six dimensional space-time

## ABOUT THE STUDY

Fundamental forces of nature are in relation to each other. The relationship between these forces is a difficult problem for uniting quantum mechanics and general relativity. Many theories have been expressed for uniting these forces [1-5]. Electromagnetic force is very similar to gravity force [6].

Two kinds of mass exist. The mass that results from object motion in the time dimension is called 'gravity mass' and the mass that results from object motion in the space dimension is called 'relativistic mass' [7]. All the objects have "spin" in space and time [7]. On this basis, the electromagnetic field establishes a direct relationship with the gravity field and object density. As gravity forces curved space-time, also electromagnetic waves can curve space-time as well [8].

### The waves

A one-dimensional object oscillates in two-dimensional space. A two-dimensional plane oscillates in three-dimensional space. Therefore, a three-dimensional sphere requires a four-dimensional space for oscillation (Figure 1).

Material waves (de Broglie waves) are interpretable in six-dimensional space-time, and even if the object does not have movement, it has a wavelength. The wavelength of an object has a relationship with the object's density (equation 1) (Figure 2).

$$\sin 0 = 0 \Rightarrow x, t \neq c \quad \xi = \sin(\cos^{-1}(\frac{\Delta x}{c})) + \sin(\cos^{-1}(\frac{\Delta y}{c})) + \sin(\cos^{-1}(\frac{\Delta z}{c}))$$

$$\lambda = \frac{h}{mv} \Rightarrow P_x = mv \Rightarrow P' = m \Rightarrow \lambda = \frac{h}{P'}$$

$$t = \frac{t_0}{\xi} \equiv t = t_0 \sqrt{1 - \frac{2GM}{rc^2}} \Rightarrow c(\eta_1^2 + \eta_2^2 + \eta_3^2) = r_{x,\rho} c \Rightarrow \sin(\cos^{-1}(\frac{\sqrt{2GM}}{c\sqrt{r}})) \equiv \sin \phi$$

$$t = \frac{t_0}{\eta}, l = \frac{l_0}{\eta}, m = \frac{m_0}{\eta}, m' = \frac{h\nu}{c^2}, (\rho c)^{\frac{1}{2}} = \Delta x, r_{x,\rho} = \Delta x + \Delta x,$$

$$(m' + m_x) = \frac{m'}{\eta} \rightarrow \sin \theta = \frac{m'}{m' + m_x} \dots \dots \dots (1)$$

$$(\rho c) = \Delta x^2, \left(\frac{c}{\rho}\right) = \Delta t^2$$

$$\rho = \left(\frac{m'}{2\pi^2 r^3}\right), \frac{m}{\rho} = \frac{2\pi^2 r^3}{\eta} \Rightarrow P = \left(\frac{m'}{2\pi^2 r^3}\right) \Delta x$$

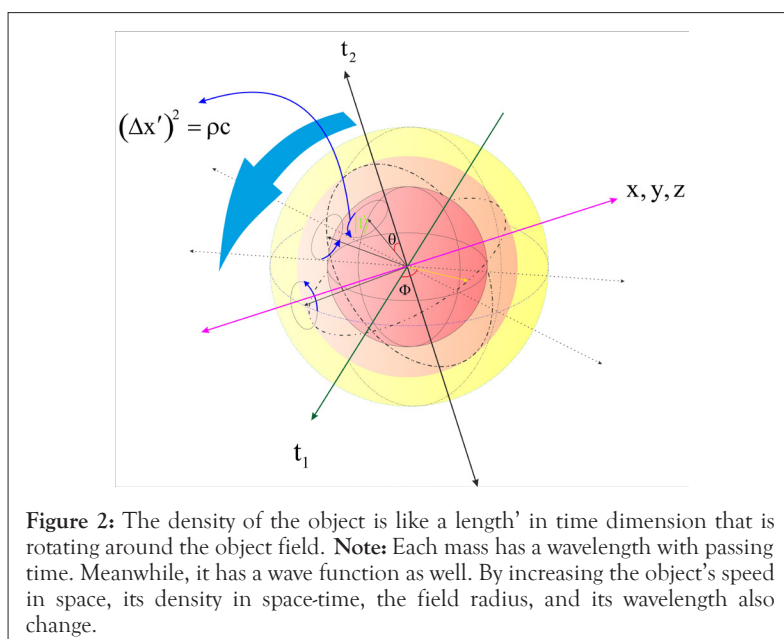
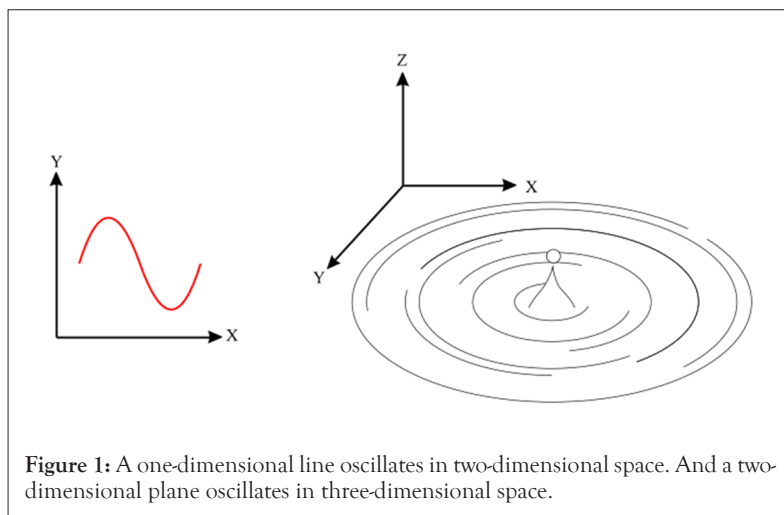
Likewise, electromagnetic waves exhibit similar behavior. Time axes in six-dimensional space-time are two perpendicular axes. Magnetic field and electric field are the two reasons for the existence of these two axes. The electric field is created from the

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compression of the density field in one time dimension and the magnetic field is created from the compression of the density field in another time dimension. Whereas, the gravity field curves both time dimensions (Figure 3). Thus, Electromagnetic field is not able to make an effect on the gravity field. Maxwell equations express this model explicitly (equation 2).

$$\nabla \cdot B = 0, \nabla \cdot E = 0, \nabla \times E = -\frac{\partial B}{\partial t}, \nabla \times B = \frac{\partial E}{\partial t} \frac{1}{c^2} \dots \dots \dots (2)$$

The reason for the rotation of an object during the time around the density axis is the creation of eccentricity in the two dimensions of time. Matter in space and time creates heterogeneity, and this heterogeneity creates stress in the matter. The electrical charge of particles is related to the spin phase of particle density, it also depends on the spin phase of constituent particles in the time dimensional.

If the electromagnetic field rotates in a direction contrary to the rotation of the object density field around the two time axes, it can create a positive gravity field. On this basis, it shall be considered that in order to produce a positive gravity field, how much is the density radius in time, and how much is the frequency proportion for each time of complete rotation in the two time axes. At first, density shall be expressed in the length

form in space and time. This length is equal to the object field radius in the time dimension (equation 3) (Figure 4).

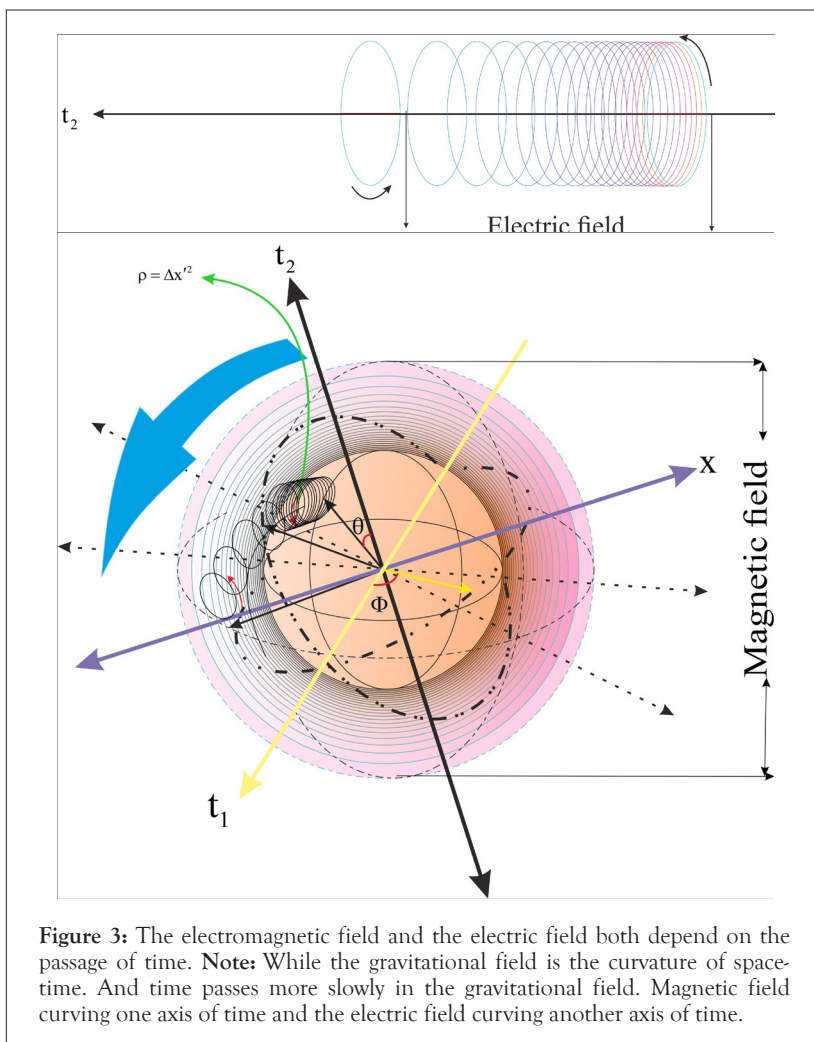
The radius for the density of an object field is equal to the density radius. The field density changes over time in a rotating form. The density of the mass field follows geometric relations. One radian on a circle is equal to the radius and mass density in the mass field follows the same relation. As a result of this heterogeneity in time-space structure, the mass itself causes eccentricity for other dimensions of space-time. This eccentricity is a rotating factor around the density field.

$$\Delta x^2 + \Delta t^2 = c^2, c = \lambda v, v = \frac{cm}{h}, \frac{c2\pi^2 r^3}{m} = \Delta t^2, \frac{mc}{V} = c\rho \Rightarrow c^2 \rho V = mc^2 = h\nu$$

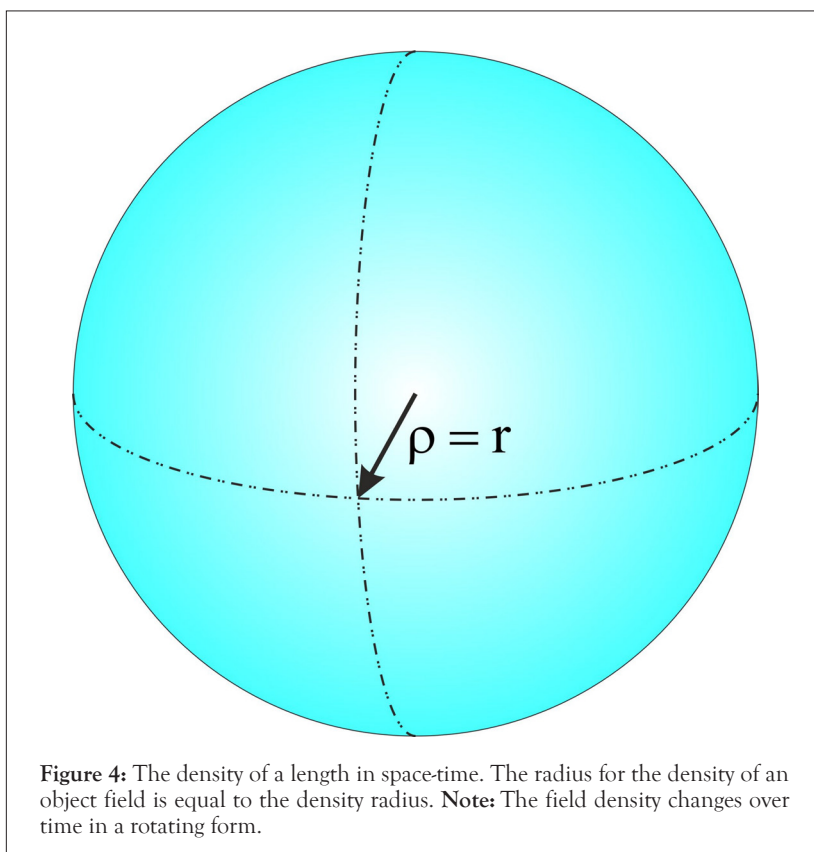
$$c\rho = r_x, \frac{c}{\rho} = r_t, \Delta t^2 = \Delta t'^2 + \Delta t''^2 - \Delta \tau^2 \dots \dots \dots (3)$$

The electromagnetic field creates distortion in space-time. The cause for this distortion is the rotating of the density field (Figure 5).

An electromagnetic field is a folded space with no change. Even though an electromagnetic field is a field without change, it has rotational vibrations which are the results of heterogeneity in space-time.



**Figure 3:** The electromagnetic field and the electric field both depend on the passage of time. **Note:** While the gravitational field is the curvature of space-time. And time passes more slowly in the gravitational field. Magnetic field curving one axis of time and the electric field curving another axis of time.



**Figure 4:** The density of a length in space-time. The radius for the density of an object field is equal to the density radius. **Note:** The field density changes over time in a rotating form.

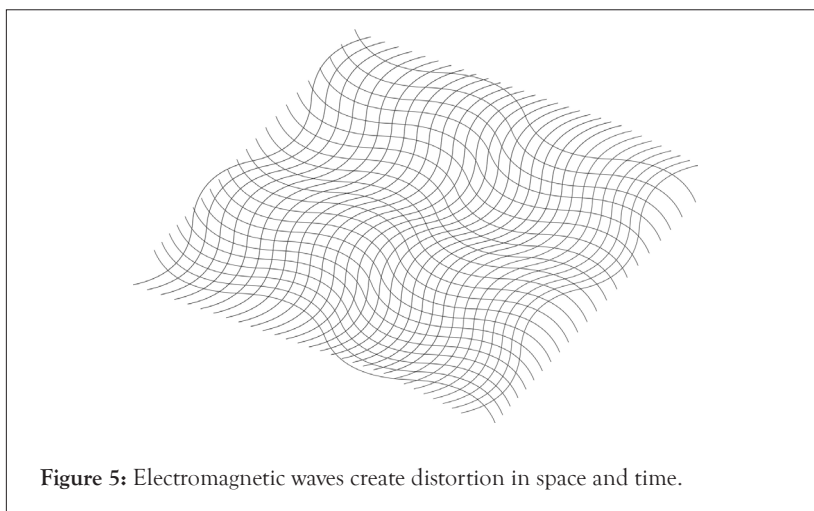


Figure 5: Electromagnetic waves create distortion in space and time.

**Antigravity motor**

The behaviour of electromagnetic waves in electromagnetic fields differs depending on the wave’s phase. Electromagnetic field is can product using electromagnetic waves. A rotating electromagnetic field in a static electromagnetic field can produce positive or negative curvature in space-time.

Superconductors can be useful in this case. According to Figure 6, L1 resists current spike pulse passage. Due to the existence of a magnetic nucleus inside the inductor, the inductance of the inductor decreases. As a result, the first inductor produces a powerful electrical field, and the second inductor produces a magnetic field. In this manner, other inductors also perform this work. The second current pulse is contrary to the first pulse. In this manner, due to passing time based on the field spin of mass in two dimensions of six-dimensional space-time, a positive or negative gravity field can be produced (equation 4) (Figure 6).

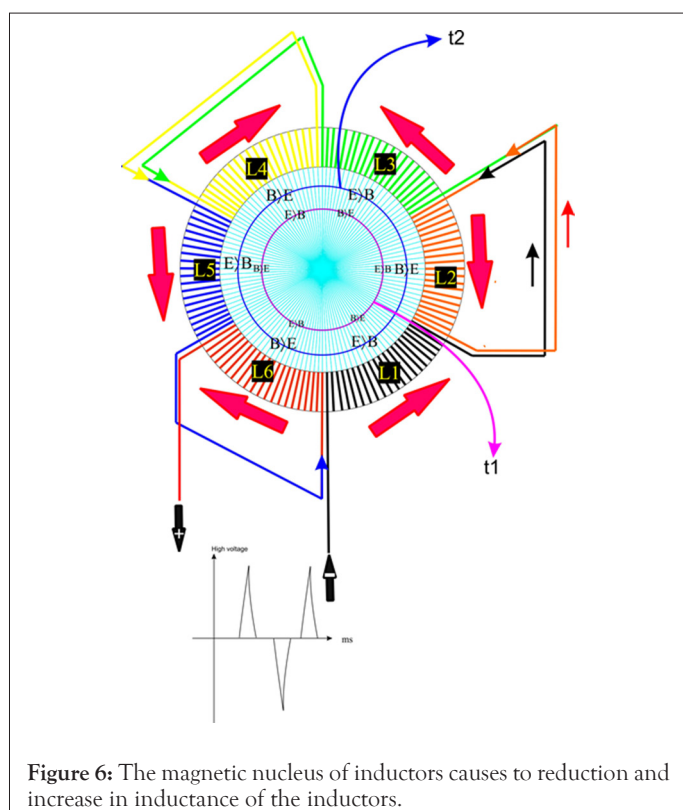


Figure 6: The magnetic nucleus of inductors causes to reduction and increase in inductance of the inductors.

As a result, a pulse current can create both an electric field and a magnetic field. With consideration of permanent change of density in the object density field, a set of these hexagonal loops shall make the produced field stable with coordinated overlapping.

Based on changing the matter state in the density field of six-dimensional space-time, an anti-gravity field can be calculated for a specific mass based on the object’s density (equation 4).

$$\iint_{x,t} |\varnothing(x,t)|^2 dt dx = 1, \quad |\varnothing\rangle = b_1 |\tilde{\psi}_1\rangle + b_2 |\tilde{\psi}_2\rangle + \dots + b_n |\tilde{\psi}_n\rangle$$

$$|\tilde{\psi}\rangle = \alpha_1 |A_1\rangle + \alpha_2 |A_2\rangle + \alpha_3 |A_3\rangle + \alpha_4 |A_4\rangle + \alpha_5 |A_5\rangle + \alpha_6 |A_6\rangle$$

$$b_\mu = x_\mu + ti, \quad X_\mu = (x_1, x_2, x_3, x_4, x_5, x_6) \Rightarrow b_\mu b_\mu^* = \left(\frac{1}{3}\right) \dots (4)$$

$$\int_0^{2\pi} |\psi(x,t)|^2 dx = 1 \rightarrow \frac{2\pi}{6} \Rightarrow \left(\frac{\pi}{3}\right), \left(\frac{2\pi}{3}\right), (\pi), \left(\frac{4\pi}{3}\right), \left(\frac{5\pi}{3}\right), (2\pi)$$

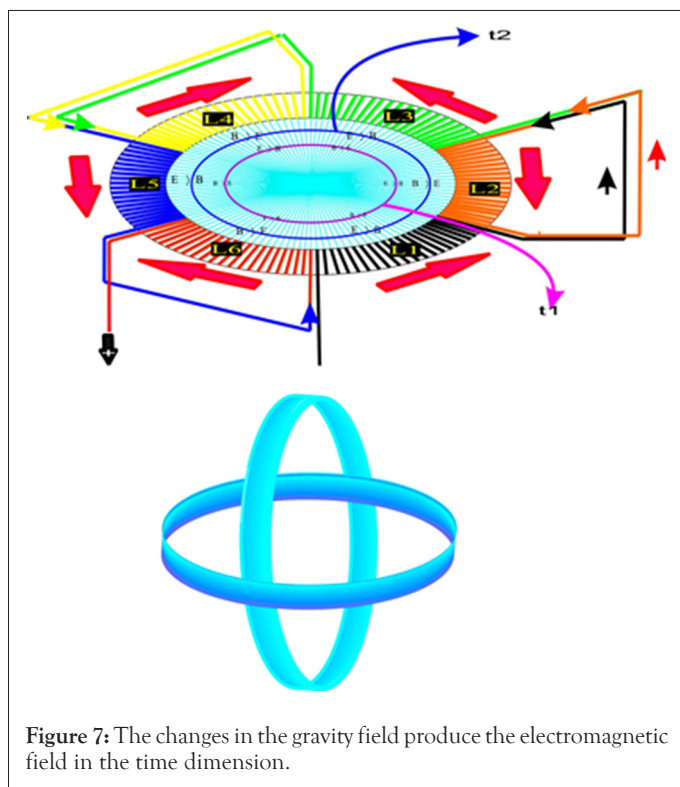
$$A_1 = \pm\left(\frac{\pi}{3}\right), A_2 = \pm\left(\frac{2\pi}{3}\right), A_3 = \pm(\pi), A_4 = \pm\left(\frac{4\pi}{3}\right), A_5 = \pm\left(\frac{5\pi}{3}\right), A_6 = \pm(2\pi),$$

$t = 1, 2, 3, 4, 5, 6$

$$\varnothing_{\mu\nu} = \begin{pmatrix} \cos^2\theta \cos^2\phi & A_t & A_t & A_t & A_t & A_t \\ A_t & \cos^2\phi & A_t & A_t & A_t & A_t \\ A_t & A_t & e^{-i\pi\varphi} & A_t & A_t & A_t \\ A_t & A_t & A_t & e^{i\pi\varphi} & A_t & A_t \\ A_t & A_t & A_t & A_t & \sin^2\theta & A_t \\ A_t & A_t & A_t & A_t & A_t & \sin^2\theta \sin^2\phi \end{pmatrix}$$

**Producing energy from the gravity field**

Electromagnetic force can be produced by rotation of the object in six-dimensional space-time. The desired ring inductor shall be designed on the basis of gravity field spin which depends on the object density. Two ring inductors with opposite structures and perpendicular to each other can produce an electrical regular pulse current flow from the gravity field. A superconductor coil in an electromagnetic field can convert change the resulting changes from the spin of the gravity field to an electrical current (Figure 7).



**Figure 7:** The changes in the gravity field produce the electromagnetic field in the time dimension.

Two superconductors Hexagon inductors perpendicular to each other having magnetic nuclei can produce electrical current from a gravity field. Consequently, a complex set of superconductive matters can produce electrical current from the gravitational field. Non-electrical resistance of superconductive matter in low and high temperatures can explain the direct relationship of the mass field with the electromagnetic field.

## CONCLUSION

On the basis of this test, a deep relationship between electromagnetic force and gravity can be found. Meanwhile, this test was designed to prove six-dimensional space-time theory. In case of its positive outcome, energy can be produced from the gravity field. Manufacturing a Warp anti-gravity motor is an

important consequence of this test. Some problems such as very exact calculations, and the application of superconductors, for making special magnetic fields are small obstacles against the obtained results. The success of this design can pave the way for producing matter and anti-matter from empty space.

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## CONFLICTS OF INTEREST

The author reports no conflicts of interest. The author alone is responsible for the content and writing of this article.

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