

New Discoveries About Gravity?!!! 2

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1. Calculation of gravitational waves frequency in the universe
2. The structure of gravitational waves and their patterns in space from the most detailed to the most general states
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6. The possibility of creating artificial gravity in spacecraft, to make a suitable gravity for the crew members
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1. Calculation of gravitational waves frequency in the universe

- 1.1. Calculating the gravitational frequency of solar systems
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- 1.4. Calculating the gravitational frequency between black holes and their stars
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1.1. Calculating the gravitational frequency of solar systems

Usually, gravity is a topic related to stars, planets and their moons. In fact, gravity is the interaction between stars and their planets and also planets and their moons which move in specific orbit with a generally constant speed. Also, they have regular and balanced structures. So, for structures which orbits have been balanced, the following relations can be considered:

“Summation of forces influencing planets \equiv Summation of forces influencing stars.”

$$\sum_{i=1}^n F_{iStar} \equiv \sum_{i=1}^n F_{iPlanet}$$

By considering the balance of the planet and the central star, it can be said that the effect of these two forces on each other are always the same and its value is equal to zero (Figure 1):

$$F_1 = F_2 \Rightarrow F_1 - F_2 = 0$$



Figure 1. Summation of forces between star and planet

This particular state conveys the concept that the balanced structure is due to the effect of gravitational electromagnetic waves between the star and the planet. It means the gravitational electromagnetic waves stabilize this structure.

In fact, it can be said that if there were no gravitational electromagnetic waves, the stability of the structure between the star and the planet would not be like this. So the following special relation can be obtained: “Kinetic Energy = Energy of Gravitational Waves”. So, the relation between the energy of a planet and electromagnetic waves will be:

$$\frac{1}{2}mv^2 = nh\vartheta$$

Where “n” is the number of force lines passing through the surface of the planet.

Note: According to the calculated energy of the photons which is:

“Primary Energy - Rotational Energy = Effective Energy”

$$\frac{1}{2}mc^2 - \frac{1}{2}mr^2\omega^2 = h\vartheta$$

Which has been proven as a formula for energy of photon and electromagnetic waves, and its paper has been published and distributed before, the relationship between the energy of a planet and electromagnetic waves is:

$$\frac{1}{2}mv^2 = n\frac{1}{2}m_p(c^2 - r^2\omega^2) = nh\vartheta \Rightarrow \vartheta = \frac{mv^2}{2nh}$$

Where, “n” is the number of force lines passing through the surface of the sphere. So, we could find it by dividing the surface area of planet by surface area of a photon:

$$n = \frac{S}{S_p} = \frac{4\pi r^2}{4\pi r_p^2} = \frac{r^2}{r_p^2}$$

$$\vartheta = \frac{r_p^2}{2h} \times \frac{mv^2}{r^2}$$

$$\frac{r_p^2}{2h} = \text{constant} \cong \frac{1}{10}$$

And finally the gravitational frequency will be equal to:

$$\vartheta = \frac{mv^2}{10r^2} \quad \text{or} \quad \vartheta = \frac{E_k}{5r^2}$$

Now, according to the last formula, we compute the gravitational frequency between Earth and Sun:

$$\vartheta = \frac{mv^2}{10 r^2} \Rightarrow \vartheta_{Earth} = \frac{(5.97 \times 10^{24})(2.98 \times 10^4)^2}{10(6.37 \times 10^6)^2} \Rightarrow \vartheta_{Earth} \cong 1.3 \times 10^{19} Hz$$

And the calculated amount of gravitational frequency between the Sun and the planets of the Solar System should be as follows (Table 1):

Planet	Mass (kg)	Radius (m)	Velocity around the Sun (m/s)	Frequency (Hz)
Mercury	3.30E+23	2.44E+06	4.74E+04	1.24E+19
Venus	4.87E+24	6.05E+06	3.50E+04	1.63E+19
Earth	5.97E+24	6.37E+06	2.98E+04	1.30E+19
Mars	6.42E+23	3.39E+06	2.40E+04	3.22E+18
Jupiter	1.90E+27	6.99E+07	1.31E+04	6.63E+18
Saturn	5.68E+26	5.82E+07	9.68E+03	1.57E+18
Uranus	8.68E+25	2.54E+07	6.80E+03	6.24E+17
Neptune	1.02E+26	2.46E+07	5.43E+03	4.98E+17
Moon	7.34E+22	1.74E+06	2.98E+04	2.16E+18

Table 1. Gravitational frequency for planets in the Solar System

According to the results, the position of gravitational waves in the electromagnetic wave spectrum will be as follows (Figure 2):

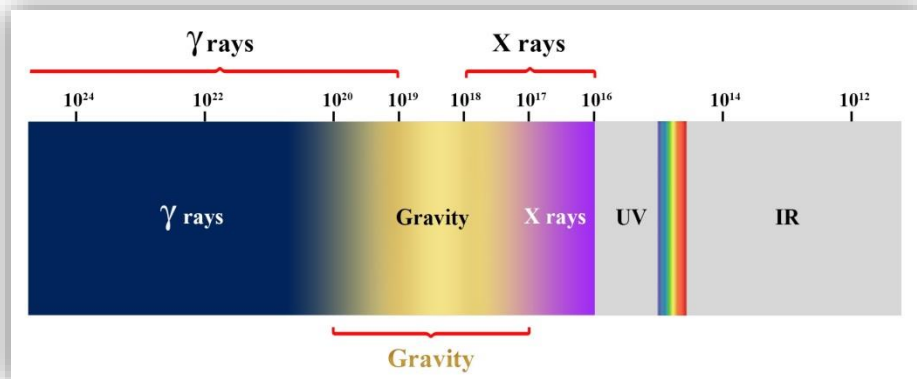


Figure 2. Electromagnetic wave spectrum include gravitational wave range

**How nice it is to observe the universe through a gravitational eye;
in other words, to observe gravitational waves with eyes.**

Important Notes:

- i. Although it seems that the properties of the central star do not take into account in the above relation, but it should be noted that the effect of the central star force is considered in the planet's speed (v). Or, it can be said that the speed amount of planets is the effect of the central star force.
- ii. Gravitational waves can be considered as missing, strong, abundant and effective waves, but they are imperceptible.
- iii. It should be noted that gravitational waves can have a lot of energy and performance, like the conversion of hydrogen to helium in stars. The energy of these gravitational waves can be used on Earth as an energy source.
- iv. By comparison, a proper level of gravitational fluxes generates as much energy as a nuclear power plant.
- v. The existence of a powerful and stable gravity that causes the stability of the existing structure in systems, galaxies, etc., is itself a reason to prove of the existence of black holes.
- vi. The importance of frequency is that by having the gravitational frequency of planets, stars, black holes, etc., more information about them can be obtained. In fact, we can say that the gravitational frequency of planet, black hole, star, etc., is the alive soul of them. For example, if we can calculate the frequency of a black hole that located at the center of the Milky Way galaxy, we can obtain an overall image of that black hole. In fact, it can be said that the frequencies of that black hole will show us the images of that black hole. Although visible light cannot be received from the black hole, but in this method 90% of the inner and outer features of the black hole can be seen.

Conclusion:

According to the presented contents, it can be said that the relationship between a star and the surrounding planets is through gravitational waves or the force lines or the gravitational flux that separate from the star, enter the planet and return to the star. This permanent cycle causes a permanent effect. It should be noted that gravitational waves are generated by stars, and we must measure the gravity of planets with stellar gravity. Also, just as there must be two poles in order to have a magnetic field, gravitational waves or gravitational fluxes do not make sense if we only have a single star (sun).

1.2. Calculating the gravitational frequency between planets and their moons

The following notes should be considered in gravitational waves:

I. Main gravitational waves

It can be said to the waves that leave the star, enter the planet of that star and return to the star again. Their frequencies are between $10^{17} Hz$ to $10^{20} Hz$.

II. Sub-gravitational waves

It can be said to waves that travel from planet to natural satellite or other planets and return to the planet again. This cycle is planet to planet or planet to natural satellite. It is clear that the frequency of sub-gravitational waves is lower than the frequency of the planet's main gravitational waves.

An example for better understanding, whenever a radiant photon emits from the Sun its velocity is "C". But according to environmental conditions, its velocity will decrease. In fact, it can be said that in sub-gravitational waves, the kinetic energy of the waves decreases. As a result, its frequency also seems to

decrease. In fact, although the structure of gravitational waves is always constant, but if the kinetic energy decreases, the frequency decreases too. According to above and the proven frequency relation in solar systems:

$$\vartheta = \frac{mv^2}{10r^2}$$

Where, the parameters are mass, radius, and velocity of the planet around the central star. The relation between the planet and its moon is as follows:

$$\vartheta = \frac{mv^2}{10kr^2}$$

It should be noted that the initial gravity is between sun and planet, which only some part of that, is transferred to the planet's moon. In fact, the main gravity is between the star and the planet and the less one is between the planet and its moons. So, the amount of flux that is transferred from the planet to the moon does not always cover the entire surface of the moon, and only a percentage of the initial gravitational flux passes through the moon. Therefore, to calculate the gravitational waves frequency between moons and planets, we need to define a coefficient called the decreasing coefficient "k", which has included in the denominator of the relation. For example the amounts of gravitational wave frequencies between planets of the Solar System and some of their moons are as follows (Table 2) (For all examples we put k = 25%):

Planet	Natural Satellite	Mass (kg)	Radius (m)	Velocity around the Planet (m/s)	Frequency (Hz)
Mars	Phobos	1.06E+16	1.12E+03	2.10E+03	1.49E+16
Earth	Moon	7.30E+22	1.70E+06	1.02E+03	1.05E+16
Uranus	Ariel	1.25E+21	5.79E+05	5.51E+03	4.53E+16
Neptune	Tritan	2.10E+22	1.35E+06	4.39E+03	8.88E+16
Saturn	Titan	1.34E+23	2.57E+06	5.57E+03	2.52E+17
Jupiter	IO	8.93E+22	1.82E+06	1.73E+04	3.23E+18

Table 2. Gravitational frequency for natural satellites in the Solar System

2. The structure of gravitational waves and their patterns in the space from the most detailed to the most general states

Since the photon is the basis of the universe and every structure is made up of photons, the nature of gravitational waves also is the photon. And its structure is based on the motion of photons. In the gravitational waves, photons are separated from the stars by the gravitational effect of the planets, so that their external motion is intertwined in their internal motion or its superstring state, and form the long continuous series of photons. In fact, it can be said that in the solar plasma environment, the external motion of a photon converges with its internal motion and it leads to converging photons and forms a single superstring structure that is interconnected in a ring to ring feature and travels between the star and

the planet (Figure 3). Toward the linear direction, the gravitational fluxes are firm and steady and to the perpendicular direction, they have curvature property.

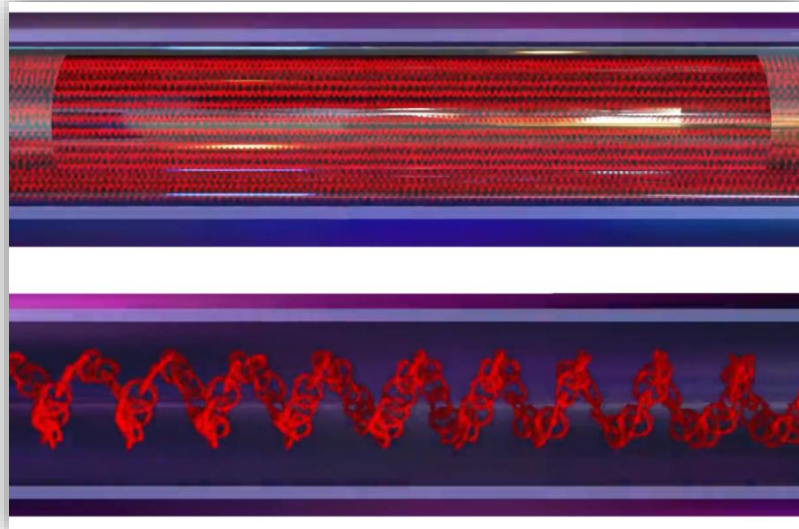


Figure 3. Photons are interconnected in a ring to ring feature and travel between star and planet.

It should be noted that in nature, the production of photons exists only in stars. Sometimes they become visible photons, or in other words, radiant photons, and sometimes intertwined photons, or gravitational photons. Photons with a frequency less than visible spectrum are called infrared and high frequencies are called ultraviolet, and in fact the gravitational waves are the electromagnetic photons with a special property of continuity.

In the distribution of gravitational waves (gravitational fluxes or gravity force lines), most of the gravitational waves are between the star and its planet and a fewer fraction divides between the planet and its moon. It should be noted that gravitational waves have been spread throughout the whole of a system between the sun and planets and their moons as well as planets between each other. In this way, they have formed an interconnected set of gravitational fluxes (Figure 3).

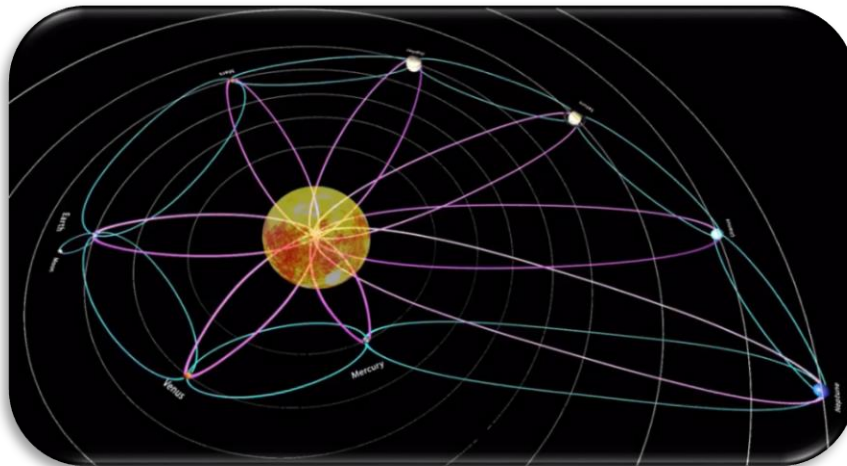


Figure 4. Gravitational waves have formed an interconnected set throughout the whole of a system

3. The possibility of data transmission, tens, hundreds, thousands, ... of times of the light speed in the universe.

According to the continuity of gravitational waves in any system, this continuity can be utilized to transmit data. Gravitational force is always present in solar systems, and gravitational fluxes are always connected and continued from the stars to the planets, the planets to the moons and from the planets to the planets. So data can be transmitted by these fluxes to all parts of solar systems, galaxies, etc.

If we could have a suitable transmitter that has the ability to co-frequency with a particular gravitational wave, we can transfer any kind of information from the transmitter to the gravitational waves and receive them on the other side by the receiver.

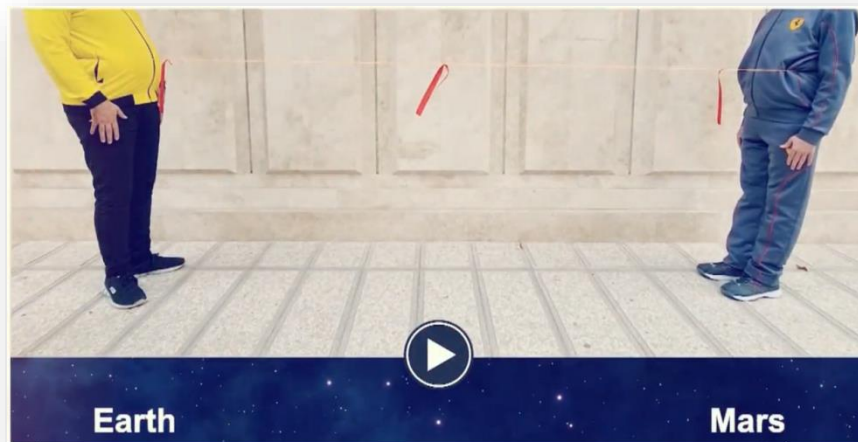


Figure 5. The gravitational flux cable

It can be assumed that the left person is Earth and the right one is Mars. So that, this thin cable can easily withstands two people with a mass of about 100 kg. Suppose this cable is the gravitational flux, which connects the two planets. It is easy to see that the effect that they have on each other is the stable, firm and immortal effect.

The interesting point of this picture is that the gravitational flux cable has the power to transmit data with the least energy and easily. On the other words, due to the continuity of this cable, if we affect anywhere on the path of the gravitational flux cable, it has the power to move and transmit this effect. This cable has the ability to transmit any effect on it, immediately, even in the furthest distance. The interesting thing about gravitational flux is its continuity and its sensitivity, which makes a bunch of these fluxes to reflect easily, cover the whole path and it could establish a transfer in a fraction of a second.

The remarkable thing is that the gravitational waves are continuous and are stretched from planet to planet, like a firm and stable cable. In such a way, that if some information is given to this invisible gravitational cable, it will be transmitted easily in a fraction of a second. It is clear that in this model, even if they are billions of kilometers apart, gravitational waves transmit the given vibrations to these lines, at a speed faster than light.

4. The possibility of creating suitable tools for transferring data from one point of the system to another one by gravitational fluxes

It will be explained

5. The possibility of creating a speed close to the speed of light in spacecraft

Due to the gravity flux, or force lines, that have a specific structure, specific circuit and a specific network wherever the spacecraft could be along these force lines and has a favorable frequency or contrary it can move in the direction of the gravitational force lines or gravitational fluxes at a very high speed.

In fact, it can be said that the set of gravity flux lines is an invisible road for spacecraft. As the gravitational force lines or gravity fluxes move at the speed of light, so they can move the spacecraft at a speed close to the speed of light in a corridor with the size of the surface of a planet.

6. The possibility of creating artificial gravity in spacecraft, to make a suitable gravity for the crew members

It will be explained

7. The possibility of creating vehicles by utilization of anti-gravity force

It will be explained

8. Creating a gravity power plant using gravitational turbines to get strong and clean energy everywhere and everlasting, at any time.

Given that the kinetic energy of the planets has the following relation to the gravitational energy:

$$E_k = \frac{1}{2}mv^2 = nh\theta$$

It can be concluded that the passing energy through the Earth's surface is as follows:

$$\frac{\frac{1}{2}mv^2}{4\pi r_e^2} = \frac{2.3 \times 10^{34}}{5.1 \times 10^{14}} = 5 \times 10^{19} \text{ J/m}^2$$

This is actually the passing gravitational wave energy through the Earth's surface in one square meter. It should be noted that this energy is so large and so efficient. If it can be used, the affordable, clean, everlasting energy can be produced in everywhere and at any time.

8.1. Different methods of using gravitational waves for energy generation:

First Method: Creating the right obstacle

Using metal alloys, a plate can be created that the force lines be able to impulse these plates and generate the energy while passing, such as the wind that strikes turbines and sails.

Second Method: Synchronizing the frequency with the force lines

According to the frequency range of gravitational waves, if we can design a device that oscillates or synchronizes with the gravitational lines and their oscillations when moving it can absorb energy and use it.

Third Method: Production of gravitational network

Knowing that gravitational waves have a special solid lattice, if we can create a similar lattice that its excitation during the passage of the gravitational wave lattice absorbs energy, we can also generate energy.

9. New points about Time and Space

Given the meaning of the word “Time”, it explains how the state of a subject and an act is. Indeed, it can be said that “Time” describes the physical states. For example, when a given object arrived to destination by a specific speed, in fact, we express how the object and the author of the act arrived (quickly, slowly and so on).

If we wanted to observe the global concept of Time we would have to investigate it in an expanse of space where no object exists, i.e., in a vacuum. As there is no mass, no movement and it is absolute silence, we can say that time does not flow. In this case, the word Time cannot be considered. But if there is a mass and it has changed, in other words, it has a process from the past to the future, the word Time can be used.

In view of those who proceed, the “Principles of Time” are as follows:

- I. Existence of mass
- II. Displacement or changes of mass (from micro to macro or from macro to micro)
- III. Imagine the beginning for it, or in other word start

For example, day pulse night is the time that comes from the rotation of the Earth around itself and the year is a time that defined by the complete rotation of the Earth around the Sun. To explain further, we can give the example of the time when the Earth was created and that four and a half billion years before, time did not exist for the Earth.

It should be noted that at various times, galaxies form and some disappear. The same is true of the stars. For example, whenever a material burns, it actually goes from one state to another, and some of its mass increases or decreases. But the Time, knowing that no essence can be attributed to it, it is not possible to establish a principle on it and it is a sub-element parameter and its existence is part of the description made by the world of physics. It has no essence; its measurements do not change. Where, attention must be paid in the calculations.

For further explanation, we can imagine an object that moves in an inclined plane from point “A” to point “B”. There is, therefore, a displacement, an elapsed time, but no modification in the essence of the object. It should be pointed out that in physical equations Time is a sub-element without essence and that is wrong to consider it essential. If there is no mass and also it has no movement, Time does not have any meaning.

In physical phenomena, sometimes the Time has no meaning, such as the beginning of the Big Bang or in the absorption of thermal energy from the Sun, where its distance, its position in relation to the Earth and the parameter of time have no impact. What has been said above about the Time is also attributed to the “Distance”. Take the example of a rock loaded into a vehicle and moved from one place to another. There is a time that has passed; a distance is travelled, but no change in the mass.

It should be noted that the “Distance” is an accessory parameter like Time and that it has no essence. That is, it has no influence on the mass, neither decrease nor increases it. But mass, since it has essence and energy in it, its displacement creates a time and a “Distance”. For example, the Earth's turn around itself creates day and night, but these create no mass. Or the Earth's turn around the Sun is called a year, but this turn has no effect on the Earth's mass. Rather, it is the changes regarding the mass of the Earth that create the year and the month. In other words, speed definition is the ratio of displacement to time changes, which is correct statement but has no effect on mass. Because the ratio of an essence-less to another essence-less is essence-less.

Distance and time do not affect mass, but it is mass that affects distance and time. Therefore, the principle of the stability of the universe is based on mass and issues such as that the faster the speed, the more mass, is meaningless (Figure 4). The principle of survival of the universe is the existence of mass and its outward and inward changes.



Figure 6. Relation between mass and speed

Notice: in conclusion, mass creates Time, position and displacement, whereas Time and displacement cannot create mass.

10. Mathematical and physical explanation of the theory of everything

If we consider a solar system like our System and look at the relation between the Sun and the Earth, we see that the Earth always revolves around the Sun in a closed circular path. Due to this stable structure, the following relations can be considered: So, “The Kinetic Energy = Energy of Gravitational Wave or Gravitational Flux Energy.”

$$\frac{1}{2}mv^2 = nh\nu \Rightarrow E_K = E_G$$

Given that the visible light is actually the same as radiant energy, we can write the following relationship with electromagnetic waves. So, “Radiant Energy = Electromagnetic Energy”

$$\frac{1}{2}m_p(c^2 - r^2\omega^2) = h\nu \Rightarrow E_R = E_\nu$$

As the formula " $E_N = Mc^2$ " is valid in nuclear explosions and it means the total mass converts to photon particles, therefore we can assume that nuclear and radiation energy of photons is equal. So, “Nuclear Energy = Radiation Energy”

$$N \frac{1}{2}m_p(c^2 - r^2\omega^2) = Mc^2 \Rightarrow E_R = E_N$$

Where, “N” is the number of photons in an object with mass M.

In fact, in light bulbs, electrical energy is converted into radiant energy. So, “Radiant Energy = Electrical Energy”

$$n \frac{1}{2}m_p(c^2 - r^2\omega^2) = RI^2t \Rightarrow E_R = E_E$$

Where, “n” is the number of photons emitted from the lamp.

Due to the fact that in transformers, magnetic energy is always converted into electrical energy, so: “Electrical Energy = Magnetic Energy”

$$q(\vec{V} \times \vec{B}) \cdot \vec{d} = RI^2t \Rightarrow E_B = E_E$$

Therefore, it can be said that all energies are equal, equivalent and identical.

$$E_K = E_G = E_R = E_N = E_E = E_B = E_\vartheta = E_U = \dots$$

So, we can write the following comprehensive relation, that we named “Saleh Comprehensive Equation of Theory of Everything or the Equation of the Primary Energy Chart since Big Bang till now” (Figure 5):

$$E_{et} = N^{1/2} m_p (c^2 - r^2 \omega^2) = N' h \vartheta$$

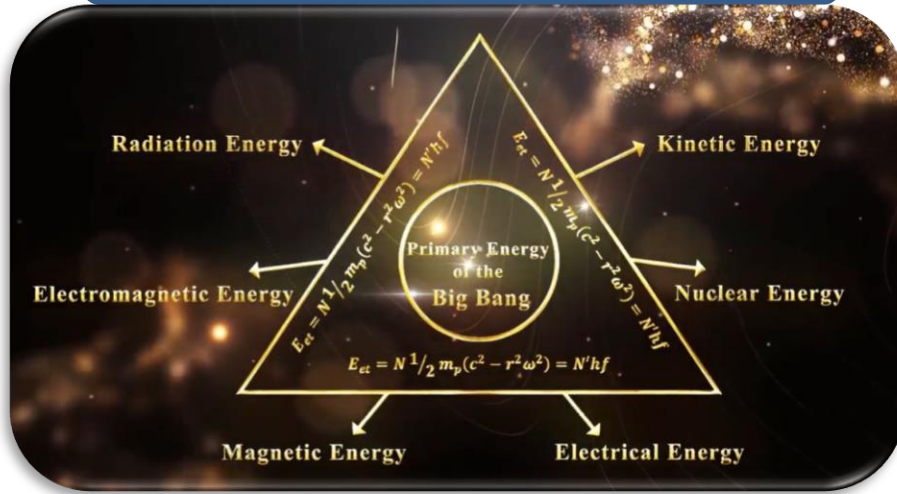


Figure 7. Saleh Comprehensive Equation of Theory of Everything