

The Relation between Gravity and Time 2

(Review Article)

Osama Khalil

Alexandria, Egypt

Abstract Newton showed that Time was separate from space and was considered to be a single line, or railroad track, that was infinite in both directions. Time itself was considered eternal, in the sense that it had existed, and would exist, forever. In addition, Einstein showed in the flat spacetime of special relativity, observers moving at different speeds will have different measures of time. Also, in general relativity, matter-energy curves spacetime and matter moves on geodesics that are determined by the curvature of spacetime. However, there is no explanation of how gravity is related to time. Here I show that there is two types of time theories to relate them with gravity. Newton's theory of time is related to God. Special relativity is related to every creation. In addition there is a new theory of time and it is the more the momentum of rotation of the earth around the sun, the less the time we feel on earth and the time produced on earth will shrink and vice versa. The more the gravity of the sun, the less the distance between the sun and the earth, so the circumference of the orbit will be less and calculation of days and years will be less. So, there is an inversely proportional relation between gravity and time.

Keywords Time, Gravity, Special relativity, General relativity, Atomic model, The creator

1. Introduction

Newton's Theory of Time

In order to relate gravity with time, we have to discuss time first. Stephen Hawking said that "Isaac Newton gave us the first mathematical model for time and space in his Principia Mathematica, published in 1687. Time was separate from space and was considered to be a single line, or railroad track, that was infinite in both directions. Time itself was considered eternal, in the sense that it had existed, and would exist, forever".

Special Relativity

Relativity was born out of attempts to relate the descriptions of electrodynamic phenomena in different inertial frames. Einstein's paper on special theory of relativity, published in 1905, is titled "Electrodynamics of Moving Bodies" [1].

In the flat spacetime of special relativity, observers moving at different speeds will have different measures of time. When velocity increases, time slows down and time dilates, so time is proportional to velocity according to Einstein's special theory of relativity.

Special relativity was the first theory to provide direct

evidence that the physical universe is four-dimensional [2].

General Relativity

Einstein's theory of gravity explains all the successes of Newton's formulation of gravity [3]. Also, Einstein showed that time flow slower for points closer to the star [3].

In addition, the rate of flow of time is fastest in empty space, and slows down in the presence of matter-energy [3].

2. Results and Discussion

A New Theory of Time

Concomitant to the previous study I suggest that there is two types of time theories to relate it with gravity.

The momentum or the velocity of the earth or any object is related to the time because of the more the momentum of rotation of the earth around the sun, the less the time we feel on the earth and the time produced on the earth will shrink and vice versa. The days and years calculation will be the same or will be more, but the feeling of time on earth will go faster. So, you cannot escape from time because any object that circulating about another object or have momentum in space, it generates time. From this explanation, it is concluded that time is inversely proportional to the momentum [4].

Time is the momentum of space (inversely proportional). Momentum is more precise than velocity because the earth is rotating on its axis and that also generates time (days). The mass of any object is added to this equation because it represents the existence of an object in three dimensions

* Corresponding author:

osama_khalil7@yahoo.com (Osama Khalil)

Published online at <http://journal.sapub.org/ijtmp>

Copyright © 2020 The Author(s). Published by Scientific & Academic Publishing

This work is licensed under the Creative Commons Attribution International

License (CC BY). <http://creativecommons.org/licenses/by/4.0/>

and it is affected by gravity of the sun [5]. The mass was also added to the following equation because there is an inversely proportional relation between mass and the velocity as recent studies observed.

If the orbital speed of the earth or any planet increases, time shrinks and events take more time to happen, but if the orbital speed decreases, time dilates and events that happen may not take much longer time to happen [5]. The velocity is a vector, so any changing in the direction changes the quantity related to time. The following equation indicates time for one freely moving object.

$$t = \frac{1}{mv} \quad (1)$$

It is believed that the momentum of any object in space produces time. Without time we cannot have events and we cannot have events without momentum (motion). We can have space but without time we cannot have anything which is believed to be a proof that maybe time is a film that records events. There is no event to happen without motion or movement (momentum). There is no space without time, and there is no time without space [5]. The following equation indicates time for two objects in relation to each other or for an object moving about another object.

$$t = \frac{M}{P} \quad (2)$$

Notice that M is the mass and P is the momentum [7].

The equations (1) and (2) were inspired by the known equation,

$$v = \frac{x}{t} \quad (3)$$

The origin of the universe is time because without time, the events and motion cannot exist. Thanks to time we can have our impacts on the earth and the universe. However, the only function of space is that it is the place that events happen on it, nothing more [5].

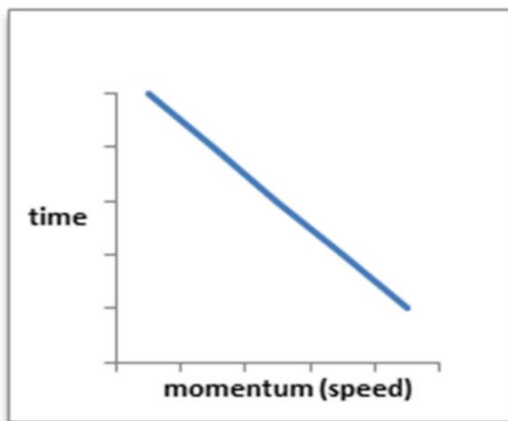


Figure 1. The relation between momentum (speed) and time [5]

The arrow of time cannot back in time because the motion of a planet cannot go back in time to the opposite direction. No one can escape from time because the solar system is rotating about the center of the galaxy and who knows our galaxy is rotating about something else [5].

My Suggested Model for the Atom

To give an explanation for special relativity, we have to discuss a new suggested model for the atom depending on the solar system model which is created by me.

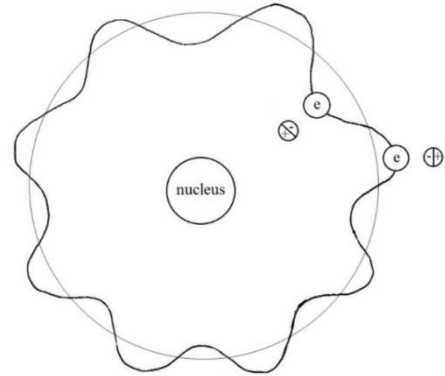


Figure 2. How the electron cannot fall into the nucleus in the suggested atomic model [7]

Photons have no electrical charge, so it has negative and positive charge. It is believed that when the negative part of the photon meets with the electron, the electron cannot fall into the nucleus. It is also suggested because of the controlling motion of the photon the electron cannot leave the atom in addition to the positive charge of the nucleus. In addition, the moon controls the motion of a planet and so as photons with the electron [7].

From this atomic model, it is suggested that the universe is a big model of atoms and atoms are small model of the universe. The universe repeats itself from big into small and from small into big. Like, if it is imagined that there is a grand mirror that reflects other sides of the universe and reflects human being's impressions and acts on the universe. That is why the universe looks the same at all points of space and in all directions. This postulation also may explain what is called the anger of nature [4].

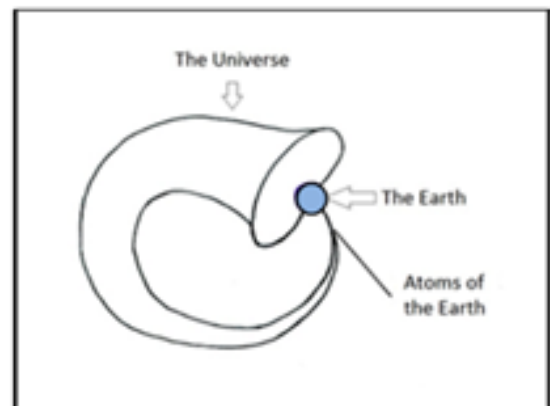


Figure 3. Diagram shows that what happens in the atoms really affects the universe and what happens in the universe affects the earth [4]

To prove that this atomic model is right, it is suggested that the three dimensions of space are reflection of repeating of the universe three times. That is why the universe acquired its three dimensions [4].

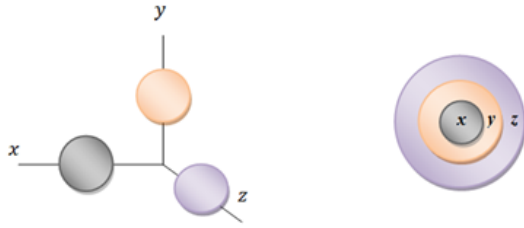


Figure 4. Three dimensions of space are reflections of three worlds inside themselves from small into big and from big into small [4]

My Explanation for Special Relativity

The reason why the calculation of days and years will be more when the momentum or velocity of the electron around the nucleus (the sun) increases is because when the electron gains energy, the electron moves to a higher level for further movement to invest its new energy with a longer distance, so time dilates or time slows down which proves that the solar system model is like the atomic model.

God in Physics and a Study on Number 1

The Newton's time theory gets along with god theory. To explain how Newton's theory matches with god theory, it will be demonstrated next.

The moon rotates about the earth, the earth rotates about the sun and the sun rotates about the black hole in the center of the galaxy and who knows what next. So, everything is rotating about something else and so on. Moreover, every object is rotating about a center and that center and its components rotating about something else until you reach the only completely static thing in the universe that generate time to the whole universe and also generates the gravitational force any system for the universe [5].

In addition, if it is suggested that time is inversely proportional to momentum, so time is direct proportional to static. So, so time is the static state. It is believed that there is no one is eternal other than God which proves his existence, so time is God and God is time. It is concluded that there is God who is eternal and has power to all times and rotating about him everything in the universe. This proves the immortality of God. The next equation explains that God is eternal and he is time [5].

$$T = \text{static} \quad (4)$$

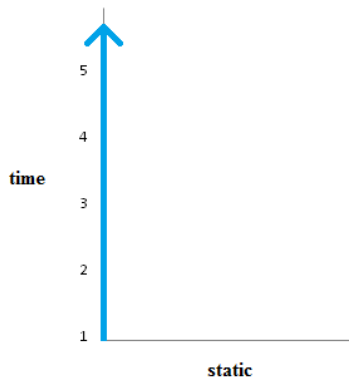


Figure 5. The relation between static and time [6]

It is suggested that if you reached the complete static state, you will be eternal, but this is impossible practically. You cannot escape from time because you cannot be in the static state your whole life or even for one second, and the Earth is rotating about the sun and if you escaped from the solar system, the solar system that we are in it, is rotating about the center of the galaxy and maybe our galaxy is rotating about something else, so to be eternal is some kind of illusion. No one can control time because the one that controls time can control everything and that is a reason why time travel is impossible [5].

In addition, the universe was created in a certain time. However, when the universe exists, God created the universe before any other thing exists before his creation or before spacetime existence. So, the universe sometimes appears to have no beginning [4].

Numbers is a science and we can depend on it to provide information about the universe. To know specific information about God we have to study number 1 because there is only "one" in the universe and that "one" must be God. To describe the theory in numbers, [5]

$1 \times 1 = 1$	There is no two of him.
$1 \div 1 = 1$	There is no two of him. Number one and nothingness do not lead to each other.
$0 \times 1 = 0$	Number one and nothingness do not lead to each other.
$0 \div 1 = 0$	Number one and nothingness do not lead to each other.
$1 + 1 = 2$	The origin of numbers comes to existence because of pluralism, but not anyone will be like the other one because Earth is not like Jupiter or the sun or even the black hole, and not everyone can do the other man's job. Everyone has a function that is no one can ever do.
$2 \div 2 = 1$	The pluralism comes to existence from number 1.
$1000 \div 1000 = 1$	The pluralism comes to existence from number 1.
$1 - 1 = 0$	Without number 1, we or anything in the universe cannot exist from nothing.
$1000 - 1000 = 0$	Without number 1, we or anything in the universe cannot exist from nothing.
$1 \div 0 = \infty$	Infinite power on the universe.
$\sqrt[2]{1} = 1$	There is no two of him. God cannot be divided into two gods.
$\sqrt[3]{1} = 1$	There is no two of him. God cannot be divided into three gods.
$\sqrt[4]{1} = 1$	There is no two of him. God cannot be divided into four gods and so on.
$1^0 = 1$	God and nothingness do not lead to each other and there is an independence between them.
$0^1 = 0$	God and nothingness do not lead to each other and there is an independence between them.
$1^1 = 1$	There is no more than one God. God cannot be multiplied.
$1^2 = 1$	There is no more than one God. God cannot be multiplied or squared.
$1^3 = 1$	There is no more than one God. God cannot be multiplied.
$1^4 = 1$	There is no more than one God. God cannot be multiplied and so on.

My Explanation for General Relativity

To explain the general relativity theory in a different way, assume there is liquid in a container, and the centre of the liquid is representing the sun. When you shake the liquid in the container it produces a hole in the liquid and that represents space-time curvature and also when you shake well and fast the peripheral liquid cannot fall into the centre of the container. In addition, when you shake fast the liquid goes to the peripheral side of the container, so time increases and the calculations of days and years will be more at the peripheral liquid and it is also suggested that the speed of the peripheral liquid will be less, so there is an inversely proportional relation between gravity and velocity [6] as Einstein said.

The electrons being held in a bound state with the nucleus by the electromagnetic force which is mediated by the photon [3]. It is believed that maybe the centrifugal force theory for the atom is true, but it is not because of high speed of the electron about the nucleus, but because of the electric charge of the nucleus or the electric force (gravity of the nucleus) [7].

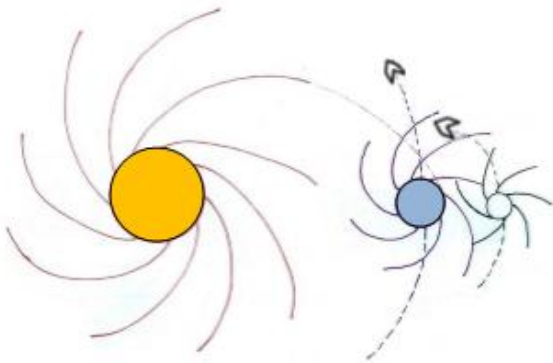


Figure 6. Diagram of spiral arms of each object in space represent shaking in space which is a fundamental for gravitational force. The gravitational force for all planets except Venus and Uranus [6]

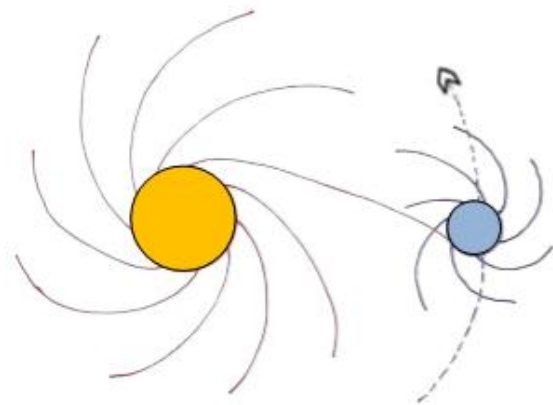


Figure 7. The gravitational force for Venus & Uranus [6]

The mass is producing spacetime curvature according to general relativity and the speed of rotation of the sun on its

axis is producing spacetime curvature also according to my explanation of general theory of relativity.

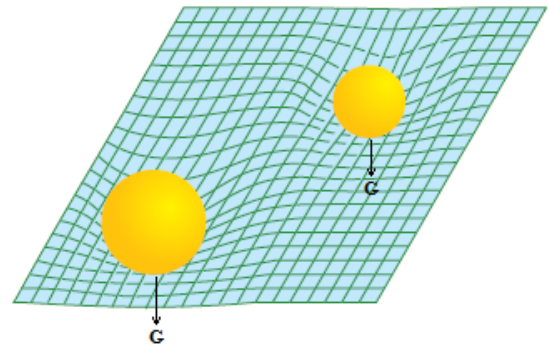


Figure 8. The curvature of space due to two masses [3] (modified). It is believed that it is affected by down gravity [6]

The Relation between My New Theory of Time and Gravity

The more the gravity of the sun, the less the distance between the sun and the earth, so the circumference of the orbit will be less and calculation of days and years will be less. So, there is an inversely proportional relation between gravity and time.

$$t = \frac{1}{F} \quad (5)$$

My Explanation for Newton's Gravity Equation

There is an explanation of why Newton gave R^2 indicate the distance in his famous equation of gravity. The square of R represents that there is R or distance for every object or mass in the equation.

Newton's theory of time represents god or the creator who is time that producing time (special relativity) to every creation in the entire world. My new theory of time for every creation contraindicates with special relativity, but maybe it completes it in a different way which I already explained it in my explanation of special relativity section. Also there is a contraindication between general relativity and the relation between gravity and time which I already explained it in the previous section.

In addition, It is suggested that the heart of human being is near to the left and not in the centre of the body because when the earth is rotating on its axis, it pumps the blood to the right more than to the left, so it needed to be slightly to the left to increase pumping the blood to that side [6].

3. Conclusions

In conclusion, there is two types of time theories to relate them with gravity and they are special relativity theory in a relation with general relativity theory and my new theory of time in a relation with my explanation of the relation between gravity and time.

REFERENCES

- [1] Hindustan Book Agency, 2009. Pankaj Sharan. *Spacetime, Geometry and Gravitation*.
- [2] Springer Science+Business Media, LLC, 2010. Jan C.A. Boeyens. *Chemical Cosmology*.
- [3] World Scientific Publishing Co., 2015. Belal E Baaquie & Frederick H Willeboordse. *Exploring the Invisible Universe from Black Holes to Superstrings*.
- [4] Osama Khalil. "Theoretical Atomic Model and the Theory of Everything". *International Journal of Physics*, Vol. 5, No. 3, 87-91. (2017).
- [5] Osama Khalil, "Time Concept and the Center of the Universe." *International Journal of Physics*, vol. 5, no. 5 (2017).
- [6] O.K. AbouEassa, "The Relation between Gravity and Time." *International Journal of Physics*, vol. 7, no. 1 (2019).
- [7] Osama Khalil, "Theory of Several and Dynamic Dimensions." *International Journal of Physics*, vol. 7, no. 3 (2019).