

# Ultimate Physics Equation: The Last Revolution in Physics (Deluxe)

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**Abstract** *“This scientific paper contains very sensitive theoretical results, be ready before scrolling.”* Theoretical Physics is a very important aspect of Physics and the recently discovered space-time parameter ( $1.50 \times 10^{10} \text{ MeV}/c$ ) is the most important parameter/value in physics. The discovery processes in physics happened gradually and inappropriately to say; gravity was first discovered and known before the word “space-time”. Also, the electron was discovered and known before the word “relativity in physics”, and others. Speaking of relativity in general; if its actual meaning isn’t known, it simply reveals that everything in the universe are related with the presence of space-time. In the view from the fundamental constants, it reveals that all constants are related with the presence of the space-time parameter. With this knowledge of the relationships was how the Ultimate Physics Equation (UPE) was formed with only the space-time parameter in its form. Although discoveries in physics did not happen accordingly, links between certain entities were established to bring physics this far. However, the right sequence of findings is with the discovery of space-time with its parameter alongside gravity first before any other theoretical finding in physics should have happened, this would have resulted to a better understanding of the universe at the early stages. With the right sequence, the laws, entities and equations in physics would have been formed/discovered with ease because everything in the universe exist in/on or through space-time. It’s not late because there are still more to be discovered and confirmed in physics. Hence, with the UPE and the results from the relationships between the fundamental constants and the space-time parameter presented in this paper, the relation between entities and space-time will be revealed to confirm the results from observational and experimental discoveries with this theoretical aspect.

**Keywords** Ultimate Physics Equation, Theory of Everything

## 1. Introduction

In recent years before the arrival of the UPE, theoretical physics has been seriously behind. Theoretical Physics is like a manual/guide in physics. While experimental and observational physics do the actual discovery in reality, theoretical physics already knows the discovery using mathematics. Hence, they both need each other as; one can look at the guide/manual (theoretical physics) and know the discovery links, processes and also how to do the discovery in reality (experimental and observational physics). Perhaps, it hasn’t been like this. Besides the predictions of relativity by Albert Einstein, in most cases, observations and experiments are done before the idea of the related theory is formed. The reason for the lack of progress in theoretical physics all these years was due to the absence of its infinity stone (Theory of Everything/Mathematical Model of Everything/Ultimate Physics Equation). With its arrival as this paper and [21], just before presenting the results from

the UPE, some key observations will be quickly recognized to put the reader up to speed.

## 2. Observation 1 – Dark Energy

Extracted from physics world magazine;

An international group of astronomers has found new evidence that most of the energy in the Universe is in the form of “dark energy”. Kyu-Hyun Chae of the University of Manchester and colleagues in the US, Germany and the Netherlands studied “gravitational lenses” found in the ten year Cosmic Lens All Sky Survey (CLASS). By combining the results of the survey with data on the distribution of galaxies, they showed that most of the energy in the universe is in the form of dark energy (KH Chae et al. 2002 Phys. Rev. Lett. 89 151301).

Dark energy is unlike gravity in that it repels matter and therefore causes the expansion of the universe to accelerate. The first evidence for dark energy came from supernovae observations in 1998 and further evidence arrived from a survey of 250,000 galaxies. The latest evidence comes from observations of gravitational lensing. The discovery of dark energy was recognized by the Nobel Prize in Physics in 2011. Dark energy dominates with about 72 percent. We can see its

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effects on galaxies and the expansion of the universe, but we have yet to identify the underlying source. That may seem unsettling, but to a scientist, it is exciting. There are more great mysteries to explore and solve!

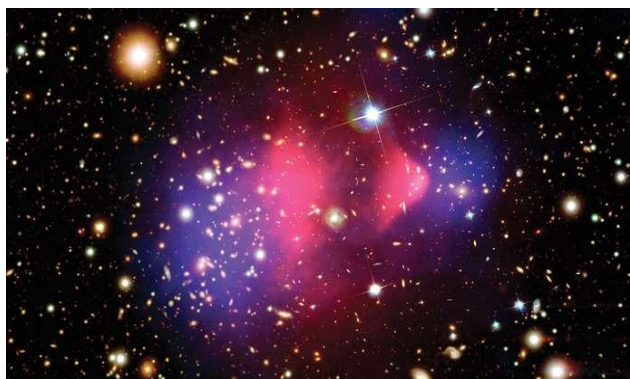
**Comment:** *Dark Energy exists and its increase in amount is related to the cause of expansion of the Universe. It is not so different from the normal energy known and we'll see what the UPE has to say in UPE result 1,5 and 7.*

### 3. Observation 2 – Dark Matter

Extracted from

(<https://www.britannica.com/science/dark-matter>)

Originally known as the “missing mass,” dark matter’s existence was first inferred by Swiss American astronomer Fritz Zwicky, who in 1933 discovered that the mass of all the stars in the Coma cluster of galaxies provided only about 1 percent of the mass needed to keep the galaxies from escaping the cluster’s gravitational pull. The reality of this missing mass remained in question for decades, until the 1970s when American astronomers Vera Rubin and W. Kent Ford confirmed its existence by the observation of a similar phenomenon: the mass of the stars visible within a typical galaxy is only about 10 percent of that required to keep those stars orbiting the galaxy’s center. In general, the speed with which stars orbit the center of their galaxy is independent of their separation from the center; indeed, orbital velocity is either constant or increases slightly with distance rather than dropping off as expected. To account for this, the mass of the galaxy within the orbit of the stars must increase linearly with the distance of the stars from the galaxy’s center. However, no light is seen from this inner mass—hence the name “dark matter.”



**Figure 1.** Galaxy cluster 1E0657-56. Composite image showing the galaxy cluster 1E0657-56, the Bullet cluster. X-ray: NASA/CXC/CfA/M.Markevitch Optical: NASA/STScI; Magellan/U.Arizona/D.Clowe Lensing Map: NASA/STScI; ESO WFI; Magellan/U.Arizona/D.Clowe

Since the confirmation of dark matter’s existence, a preponderance of dark matter in galaxies and clusters of galaxies has been discerned through the phenomenon of gravitational lensing—matter acting as a lens by bending space and distorting the passage of background light. The presence of this missing matter in the centers of galaxies and

clusters of galaxies has also been inferred from the motion and heat of gas that gives rise to observed X-rays. For example, the Chandra X-ray Observatory has observed in the Bullet cluster, which consists of two merging galaxy clusters, that the hot gas (ordinary visible matter) is slowed by the drag effect of one cluster passing through the other. The mass of the clusters, however, is not affected, indicating that most of the mass consists of dark matter.

**Comment:** *As there’s normal energy and dark energy, there’s normal matter and dark matter. The UPE confirms its existence in UPE result 2,4 and 5.*

### 4. Observation 3 – Expansion of the Universe

Extracted from Scientific American

(<https://www.scientificamerican.com/article/the-evolution-of-the-universe/>)

Evolution of the Universe by P. James E Peebles et al;

The evidence for the expansion of the universe has been accumulating for some 60 years. The first important clue is the redshift. A galaxy emits or absorbs some wavelengths of light more strongly than others. If the galaxy is moving away from us, these emission and absorption features are shifted to longer wavelengths—that is, they become redder as the recession velocity increases. This phenomenon is known as the redshift.

Hubble’s measurements indicated that the redshift of a distant galaxy is greater than that of one closer to the earth. This relation, now known as Hubble’s law, is just what one would expect in a uniformly expanding universe. Hubble’s law says the recession velocity of a galaxy is equal to its distance multiplied by a quantity called Hubble’s constant. The redshift effect in nearby galaxies is relatively subtle, requiring good instrumentation to detect it. In contrast, the redshift of very distant objects—radio galaxies and quasars—is an awesome phenomenon; some appear to be moving away at greater than 90 percent of the speed of light.

The acceleration/expansion of the universe was discovered in 1998 by the supernovae cosmology project and the High-z supernovae search team, both with the use of type Ia supernovae to measure the acceleration [7,24]. The method in this project involved a type Ia supernovae with the brightness of a standard candle. This kind of supernova is an explosion of an old compact star like the sun, it emits light as a whole galaxy. As objects go further away, they appear dimmer, we can now use the observed brightness to measure the distances. Nobel laureates Saul Perlmutter and Adam Riess of the U.S and Brian Schmidt of Australia contributed to the discovery that the universe is expanding and speeding up. With the help of the best telescopes in the world, their team found over 40 distant supernovae whose light was weaker than expected indicating that the expansion of the universe was accelerating.

You could take the brightness of a supernova as an indicator of how far away it is; the fainter it is, the further

away it is from us and hence its light has taken more time to reach us. So, with the fainter supernovae, you are looking farther and farther back in time. You can also use the colors of the spectral features of a supernova; a supernova would look blue if it were seen nearby, but when you see it very far away, it looks red. How red it gets tells you how much the Universe has stretched since the supernova exploded, because while the light is travelling to us, its wavelength stretches by the exact same proportion as the Universe stretches (Saul Perlmutter. Nobel Lecture. Rev. Mod. Phys. 88,1127 2012) [25].

*Comment: UPE result 7 for black holes reveals the truth behind the expansion of the universe.*

## 5. Observation 4 – Gravitational Effect by Dark Matter

Extracted from astroedu; (Tran Dong Thai Han et al.)

Gravity allowed scientists to discover dark matter. In 1933, a Swiss astronomer, Fritz Zwicky tried to measure the total mass of a galaxy cluster by summing the mass of each individual visible galaxy in the cluster. He found out that their total mass was not enough to create the observed gravity that holds the galaxies together to form a cluster. With just the gravity created by all of their visible matter, the galaxies would not cluster easily, if at all. Thus, Zwicky concluded that there must be something invisible, inside and around the galaxies. This matter adds the extra mass to create that gravity, strong enough to form a galaxy cluster. Zwicky called this unseen mass, dark matter. More evidence for dark matter has emerged over time. Photographs of galaxies showed that most of their light, i.e. most of their stars, were concentrated near the center of the galaxies. Therefore, most of the mass of a galaxy must be concentrated in its center, meaning that gravity is stronger at the center of a galaxy than in the outskirt. Because of this, it is expected that the stars near the center of the galaxy would move faster than those farther away. However, the measurements indicated that the orbital speed of stars was the same everywhere, regardless of their distance from the center. The conclusion is that there must be invisible matter that spreads throughout a galaxy, such that stars far away from the center will feel the gravitational pull of not only the central material, but all the other matter between them. The extra force of gravity from dark matter can cause them to speed up roughly to the same speed of the stars near the center.

The existence of dark matter is evident through an optical illusion, called gravitational lensing, seen as a result of light being bent by the gravity generated by dark matter. When viewing distant galaxies with telescopes, astronomers observed strange rings and arcs of light coming from a distant source, despite no observation of any mass. Light normally travels straight in space. The presence of mass creates gravity. Einstein discovered that gravity is the same as curvature of space, which causes light to travel along this curvature, instead of going in a straight line, i.e. light is bent.

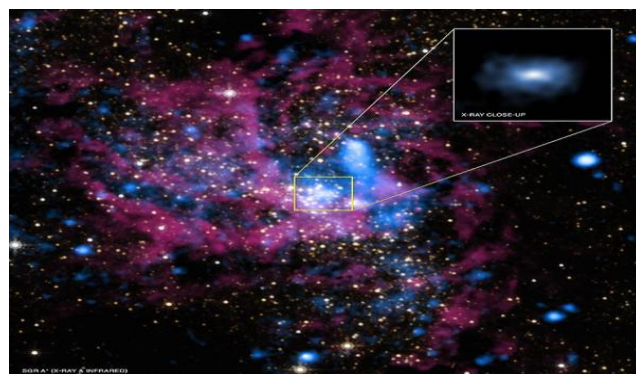
Therefore, the mass acts as a lens, called a gravitational lens, bending any light passing by. This indicates the presence of invisible mass that is creating the gravity and the phenomenon. Hence, dark matter can also be indirectly observed through gravitational lensing.

*Comment: The presence of normal matter can't lead to a gravitational effect unless it causes a curvature on space-time due to pressure by its mass but for dark matter, there's a difference as revealed in UPE result 4.*

## 6. Observation 5 – Black Hole at the Centre of a Galaxy

(How We Discovered the Black Hole at the Center of Our Galaxy)

Article By Erika K. Carlson



**Figure 2.** An image of the area surrounding Sagittarius A\*, the supermassive black hole at the center of the Milky Way galaxy, in X-ray and infrared light. X-ray: NASA/UMass/D.Wang et al.; IR: NASA/STScI

Astronomers announced the first observations of the effect of a black hole's gravitational redshift — light coming from a star in the gravitational field near a black hole looked redder than it would've outside the black hole's influence. The black hole responsible was Sagittarius A\* (pronounced "Sagittarius A-star"), the supermassive black hole at the center of our Milky Way galaxy. Astronomers think that most large galaxies like the Milky Way should have supermassive black holes in their centers, but it wasn't until the past couple decades that they had compelling evidence that Sgr A\* is our supermassive black hole. The discovery of Sgr A\* is credited to two astronomers, Bruce Balick and Robert L. Brown, who published a paper in 1974 describing a bright radio source in a small region at the very center of the Milky Way. Astronomers had known for a while that there were a lot of radio waves coming from near the Milky Way's center. Karl G. Jansky, a physicist working for Bell Telephone Laboratories, was trying to identify sources. Jansky wanted to investigate further to find out why radio waves were coming from interstellar space, but Bell Labs was not interested, and no one else followed up on the discovery for several years.

It was observations of the closest starsly convincing evidence that Sgr A\* contains a supermassive black hole in the early 2000s. Based on the stars' orbits, astronomers



calculated that roughly 4 million times the mass of the sun had to be contained within a region much smaller than the size of our solar system. They realized that whatever was at the heart of Sgr A\* was too dense to be anything but a black hole.

## 7. Observation 6: Dark Matter at the Center of a Galaxy

What if the black hole at the center of the Milky Way is actually a mass of dark matter?

(Article by Bob Yirka, Phys.org.)

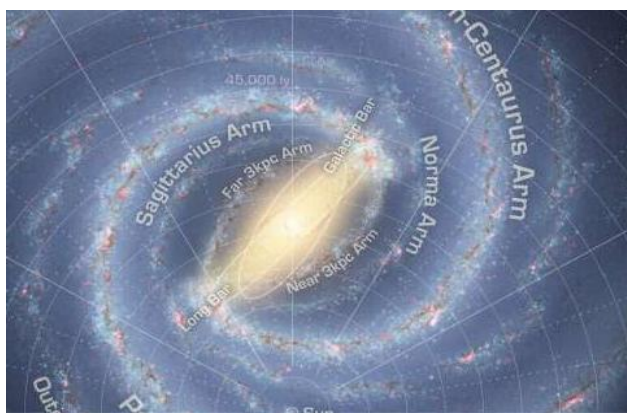


Figure 3. Sgr A\* display

A team of researchers at the International Center for Relativistic Astrophysics has found evidence that suggests Sagittarius A\* is not a massive black hole but is instead a mass of dark matter. In their paper published in the journal *Monthly Notices of the Royal Astronomical Society: Letters*, the group describes the evidence they found and how it has stood up to testing.

For several years the scientific community has agreed that there is a mass at the center of the Milky Way galaxy and that the mass is a supermassive black hole—it has been named Sagittarius A\*. Its presence has never been verified directly, however, instead it has been inferred by noting the behavior of bodies around it. In this new effort, the researchers suggest that another type of mass could produce the same reactions by other bodies and in fact could help explain some anomalies that have been seen.

Back in 2014, astrophysicists were confronted with a problem they could not explain—a gas cloud that had been named G2 moved to a position close enough to Sagittarius A\* that it should have been destroyed and pulled in by the black hole. Instead, the gas cloud continued on its way, unharmed.

The researchers in this new effort suggest the reason G2 was able to survive its journey past Sagittarius A\*, was

because Sagittarius A\* is not a black hole—it is a mass of dark matter. To come to this conclusion, they created a simulation of the Milky Way, where Sagittarius A\* was replaced by a mass of dark matter and then let it run. In so doing, they found the Milky Way could run pretty much the same way it would if there were a black hole at its center—nearby S-stars would behave the same, for example, as would the rotational curve of the Milky Way's outer halo. The researchers went even further, suggesting that such a mass would be composed of darkinos, which would belong to the same group as fermions. If they were to clump together, the simulation showed, they would have characteristics very similar to a black hole—the exceptions being its most extreme features.

**Comment:** The UPE reveals the existence of a different kind of star (mass) located at the center of galaxies and it is responsible for the rotation of energy stars from its gravitational effect. However, is it a black hole or a mass of dark matter or both? UPE result 4 and 7 reveals.

## 8. Observation 7: Muon g-2 Results

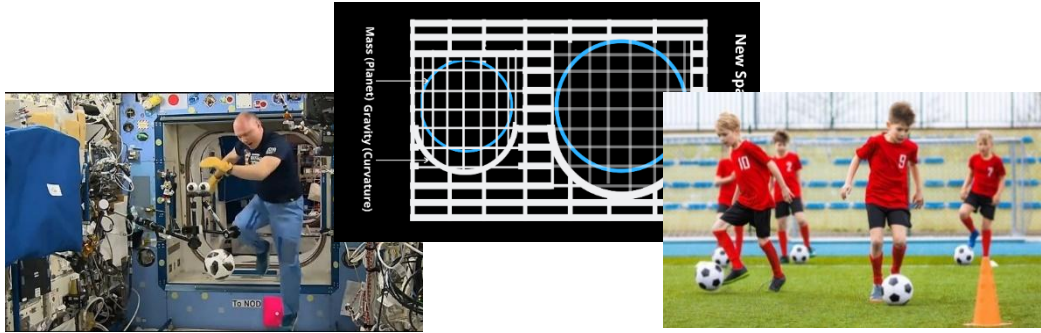
Extracted from University of Washington News (Washington.edu)

First results from Muon g-2 experiment strengthen evidence of new physics; the first results from the Muon g-2 experiment at the U.S. Department of Energy's Fermi National Accelerator Laboratory have revealed that fundamental particles called muons behave in a way that is not predicted by scientists's best theory to date, the Standard Model of particle physics. This landmark result, published April 7 in *Physical Review Letters* confirms a discrepancy that has been gnawing at researchers for decades. The strong evidence that muons deviate from the Standard Model calculation might hint at exciting new physics. The muons in this experiment act as a window into the subatomic world and could be interacting with yet undiscovered particles or forces.

**Comment:** Is it a coincidence that the electron is the official particle of the universe for unification and muons can be termed "fat electrons"? No. The secret behind the behavior of muons is revealed and displayed in UPE result 10.

## 9. Space-Time Parameter

The space-time parameter was introduced in 2019 in a paper titled "space equations" [18]. Explanations and descriptions can be found in [20] and [21] but this is a quick intro for this paper;



**Figure 4.** Different natures of space-time

Without this part, a mathematical model of everything wouldn't be possible. Back in 2019, I imagined that everything that exist had a default form, these things we see didn't just exist like that, there was an original form of everything that exist in the universe. Just like this example; you have a gold wristwatch which is obviously made from gold, gold can be mined from the ground in some areas, and we can also say that gold is matter made up of electrons. The ground itself that contains minerals like gold didn't exist like that, something solidified to form it including other natural resources. The entity that solidified to form the ground was also made up of tiny particles, and so on. Space-time had a default nature at the point of creation of this universe. To get that nature, I imagined that all planets/planetary bodies were formed at that same point even though they won't cool off immediately. Presently, we can observe that the nature of space-time in each of these planets are not the same and are even different from the nature at the outer-space just like the difference between the movement of a ball on earth and ISS (Figure 4). Thus, if these natures of space-time in each of these planets doesn't change and are constant, it means the different space-time natures in these planets were formed at the big bang due to the pressure from each according to their mass and radius to produce different natures in each of them, and these planets formed at that big bang point will rest on that default nature of space-time. All these meant that I could get the value of the default nature of space-time if I use the mass and radius for planets with the value of the nature of space-time presently in these planets. I formed an equation using the idea of a new space-time nature formation in a planet [21] and I got a common result using the mass and radius for different planets, which was its value as its default thickness (density).

g for earth:  $9.8\text{ms}^2$

Mass of earth:  $5.97 \times 10^{24} \text{ kg}$

Radius of earth:  $6.38 \times 10^6 \text{ m}$

$S_{stretc hed}$  of earth  $(1/g): 1/9.8 = 0.102$

$S_{default} : ?$

Using the values for earth, we have;

$$S_{default} = \frac{0.102 \times 5.87 \times 10^{24}}{(6.4 \times 10^6)^2}$$

$$S_{default} = 1.50 \times 10^{10}$$

g for mars:  $3.72\text{ms}^2$

Mass of mars:  $6.46 \times 10^{23} \text{ kg}$

Radius of mars:  $3.39 \times 10^6 \text{ m}$

$S_{stretc hed}$  for mars:  $(1/g) = 1/3.72 = 0.268$

$S_{default} = ?$

Using values for mars, we have;

$$\frac{S_{stretc hed} \times M}{r^2} = S_{default}$$

$$S_{default} = \frac{0.268 \times 6.46 \times 10^{23}}{(3.39 \times 10^6)^2}$$

$$S_{default} = 1.50 \times 10^{10}$$

Due to the mass and radius for planets values not being exact, the exact result would not be gotten but a common result as the default space-time thickness (density) as  $1.50 \times 10^{10} \text{ MeV/c}$  is the fact and is key to establishing the Ultimate Physics Equation as explained in [21].

## 10. Ultimate Physics Equation

It can also be named master equation, God equation and the rest. Whichever way it is addressed, it simply means an equation that describes the word "physics" in general. Also, an equation that describes the universe in general. The fact that everything exist in/on and through space-time is solely behind its structure as introduced in [21]. However, with an explanation from another view for a better understanding; the first entity that was placed in the formation of the universe is space-time i.e. space-time is the universe structure/form itself. Thus, the ultimate physics equation is in three forms as;

**UPE Equation 1;**

$$\frac{S}{[P^1 \cdot P^2 \cdot P^3 \cdot P^4 \dots \dots P^n]} = P^x$$

**UPE Equation 2;**

$$S \cdot [P^1 \cdot P^2 \cdot P^3 \cdot P^4 \dots \dots P^n] = P^x$$

**UPE Equation 3;**

$$\frac{P^1 \cdot P^2 \cdot P^3 \cdot P^4 \dots \dots P^n}{S} = P^x$$

It says, ask the universe (space-time) a question in form of parameters/constants and get a result i.e. form a question with constants/parameters in physics, insert them as  $P^1, P^2, P^3, \dots, P^n$  and get a result ( $P^x$ ). Thus, the fundamental/physical constants is needed for this journey as table 1.

**Table 1.** Formed table of physical constants from 2018 CODATA values (Approx)

Quantity	Symbol	Numerical value	Unit
Speed of light in vacuum	$c$	300000000	$ms^{-1}$
Newtonian constant of gravitation	$G$	$6.67 \times 10^{-11}$	$m^3 kg^{-1} s^{-2}$
Elementary charge	$e$	$1.60 \times 10^{-19}$	$C$
Planck constant	$h$	$6.6 \times 10^{-34}$	$Js$
Planck constant, reduced	$\frac{h}{2\pi}$	$1.05 \times 10^{-34}$ $6.6 \times 10^{-22}$	$Js$ $MeV s$
Electron mass	$m_e$	0.5 $9.10 \times 10^{-31}$	$MeV/c^2$ $kg$
Proton mass	$m_p$	938.27 $1.67 \times 10^{-27}$	$MeV/c^2$ $kg$
Muon Mass	$m_{mu}$	105.65 $1.88 \times 10^{-28}$	$MeV/c^2$ $kg$
Tau Mass	$m_{tau}$	1776.86 $3.17 \times 10^{-27}$	$MeV/c^2$ $kg$
Permittivity of free space	$\epsilon_0$	$8.85 \times 10^{-12}$	$Fm^{-1}$
Permeability of free space	$\mu_0$	$12.56 \times 10^{-7}$	$N A^{-2}$
Fine structure constant	$\alpha$	0.0072	
Classical electron radius	$r_e$	$2.81 \times 10^{-15}$	$m$
Compton Wavelength/ $2\pi$	$\lambda_e$	$3.86 \times 10^{-13}$	$m$
Bohr radius	$a_\infty$	$0.53 \times 10^{-10}$	$m$
Bohr Magnetron	$\mu_B$	$5.79 \times 10^{-11}$	$MeV T^{-1}$
Nuclear Magnetron	$\mu_N$	$3.15 \times 10^{-14}$	$MeV T^{-1}$
Electron cyclotron freq./field	$\frac{w_{cycl}}{B}$	$1.76 \times 10^{11}$	$rad s^{-1} T^{-1}$
Proton cyclotron freq./field	$\frac{w_{cycl}^p}{B}$	$9.60 \times 10^7$	$rad s^{-1} T^{-1}$

*“Use exact values for constants in UPE result 11 for accurate result”*

I released some results from the UPE in [21]. Coupled with more results, methods from using the UPE will be addressed from a different view for better understanding.

*Search for “Highlights of Prince Jessii’s discoveries” on Google or any web browser or at princejessii.academia.edu, this article will put the reader up to speed on what I’ve been*

*doing since 2018. It is also required that the previous article [21] be read before this paper.*

To conclude this introduction, from the relation between theoretical and experimental/observational physics, it simply means to quote that; “Regardless of whichever instrument and method/technique used in a discovery, if an electron can be seen/discovered on space-time in reality, an electron can be presented on space-time theoretically/mathematically, same with other entities/phenomenon. This is what the “Ultimate Physics Equation” exist for. Hence, let the journey begin.

**UPE result 1: Dark Energy and Energy**

There’s space-time and there are others, but it starts with space-time. The fan, table, chairs in homes are made from somewhere, they didn’t just exist on their own. Even the planets formed from somewhere, I want the reader to have this understanding at hand. Everything originated from space-time as the root. A wooden chair is made from wood gotten from trees, trees grow from the ground which is part of a planet, all known as matter. The planets cooled from energy, energy is a form of dark energy as the superior, dark energy is the energy of space-time. Thus, trace everything that exists to its root, you’ll get to space-time. This means that the arranged sequence is how the universe was created according to the structure of the UPE, I’ll show you.

After space-time, the next thing is dark energy. Why? The speed of light proves it. I classified the speed of light as an ultimate constant, I noticed that it is more than a fundamental constant because it is involved in everything just like the space-time parameter. Thus, both the space-time parameter and the speed of light are ultimate constants. About inserting the speed of light in the UPE, it is the only parameter/value that can directly interact with the space-time parameter i.e. the speed of light can stand on its own in the UPE as the only inserted parameter to give a known result. Also, the results can interact with space-time to result back to the speed of light, but no other fundamental constant can do that. If any other fundamental constant is inserted as the only parameter, an unknown result will be produced. Hence, they have to be combined with a fellow fundamental constant in the right way.

→ Dark energy;

Inserting  $c$  in UPE 2

$$S \cdot [P^1 \cdot P^2 \cdot P^3 \cdot P^4 \dots \dots P^n] = P^x$$

$$S \cdot [c] = P^x$$

$$1.50 \times 10^{10} \cdot [3 \times 10^8] = 4.5 \times 10^{18}$$

$$S \cdot [c] = E_d$$

The result as  $4.5 \times 10^{18}$  is the dark energy default photon value in MeV, its value is not yet known and measured in physics but this is what happens when theoretical physics becomes one step ahead with the Theory of Everything. The difference between the dark dimension and the visible dimension is 100, meaning that the difference between dark energy default photon value and energy (EM radiation) default photon value is 100.

Thus, dividing the value  $4.5 \times 10^{18}$  by 100 to get  $4.5 \times 10^{16}$  as energy (EM radiation) default photon value.

The sequence continues; from space-time to dark energy to energy. So, we can simply say;

$$S \cdot [P^1 \cdot P^2 \cdot P^3 \cdot P^4 \dots \dots P^n] = P^x$$

$$\frac{S \times c}{100} = P^x$$

$$\frac{(1.50 \times 10^{10}) \cdot (3 \times 10^8)}{100} = 4.5 \times 10^{16}$$

$$\frac{S \times c}{100} = E$$

The result as  $4.5 \times 10^{16}$  is energy default photon value in MeV. This value is not known in physics because it was also a hidden secret associated with the creation of visible entities in the universe during the big bang [21]. Energy is a form of dark energy and vice versa. The UPE also displays the fact as another combination using UPE 1;



Figure 5. Superior and Inferior dimension description

$$\frac{S}{[P^1 \cdot P^2 \cdot P^3 \cdot P^4 \dots \dots P^n]} = P^x$$

$$\frac{S}{[\mu_0 \cdot \varepsilon_0 \cdot c]} = P^x$$

$$\frac{(1.50 \times 10^{10})}{[(12.566 \times 10^{-7}) \times (8.85 \times 10^{-12}) \times (3 \times 10^8)]} = 4.5 \times 10^{18}$$

$$\frac{S}{[\mu_0 \cdot \varepsilon_0 \cdot c]} = E_d$$

*“Use exact values for constants in UPE result 11 for accurate result”*

The combination as the denominator ( $\mu_0 \cdot \varepsilon_0 \cdot c$ ) is energy related (Electromagnetic), why is the result dark energy? As I explained in [21], this is because dark energy is a form of energy that is attached to space-time. Hence, the difference is; energy exists on its own and rests on space-time while dark energy is the energy of space-time itself, it exist as its attachment or we can say that it is embedded in space-time, figure 5 is the best description (look closely). Therefore, if the combination as the denominator is inserted in the UPE, the result will be dark energy simply because space-time will only recognize its own form of energy (dark energy) which is also the same as the other (energy). Thus, to get the energy value from the combination, we have to tweak space-time as; In [21], to tweak space-time, instead of dividing the result by 100 which is the difference between both major dimensions, “2” as the number of major dimensions in the universe representing the dimension to be tweaked will be used. The superior dimension is first, the inferior is second.

Tweaking space-time;

$$\frac{S}{[P^1 \cdot P^2 \cdot P^3 \cdot P^4 \dots \dots P^n]} = P^x$$

$$\frac{S}{2[\mu_0 \cdot \varepsilon_0 \cdot S]} = P^x$$

$$\frac{(1.50 \times 10^{10})}{2[(12.566 \times 10^{-7}) \times (8.85 \times 10^{-12}) \times (1.50 \times 10^{10})]} = 4.5 \times 10^{16}$$

*“Use exact values for constants in UPE result 11 for accurate result”*

The equation changes to;

$$\frac{1}{2[\mu_0 \cdot \varepsilon_0]} = E$$

$$\frac{1}{2[(12.566 \times 10^{-7}) \times (8.85 \times 10^{-12})]} = 4.5 \times 10^{16}$$

*“Use exact values for constants in UPE result 11 for accurate result”*

The superior dimension (dark dimension) is the main dimension of the universe, it is space-time’s dimension and that’s why space-time can recognize the combination involving the electric and magnetic constant as dark energy. As the results are released, more information will be revealed.

## UPE result 2: Dark Matter and Matter

The next in the sequence is the fact that both energies will result to their solidified form using the same speed of light. Inserting the speed of light, but this time, it’s the solidified forms,  $c^2$  will be used.

→ Dark Matter

$$S \cdot [P^1 \cdot P^2 \cdot P^3 \cdot P^4 \dots \dots P^n] = P^x$$

$$\frac{S \times c}{c^2} = P^x$$

$$\frac{S}{c} = P^x$$

$$\frac{(1.50 \times 10^{10})}{(3 \times 10^8)} = 50$$

The result is the default mass of dark matter in MeV/c<sup>2</sup>.  
With the difference between both dimensions as 100;

→ Matter

$$S \cdot [P^1 \cdot P^2 \cdot P^3 \cdot P^4 \dots \dots \dots P^n] = P^x$$

$$\frac{S \times c}{100 \times c^2} = P^x$$

$$\frac{S}{100 \times c} = P^x$$

$$\frac{(1.50 \times 10^{10})}{100 \times [3 \times 10^8]} = 0.5$$

The result is the default mass of matter (electron) in MeV/c<sup>2</sup>. Perhaps, the solidified forms (dark matter and matter) can be gotten from their energies using the energy-matter relation, E=Mc<sup>2</sup> discovered by Albert Einstein.

Using E=Mc<sup>2</sup> for energy to matter conversion;

$$\frac{(4.5 \times 10^{16})}{[3 \times 10^8]^2} = 0.5$$

Using the same relation for dark energy to dark matter;

$$\frac{(4.5 \times 10^{18})}{[3 \times 10^8]^2} = 50$$

With the field constants;

$$S \cdot [P^1 \cdot P^2 \cdot P^3 \cdot P^4 \dots \dots \dots P^n] = P^x$$

$$S \cdot [\mu_0 \times \varepsilon_0 \times c] = P^x$$

$$(1.50 \times 10^{10}) \cdot [(12.566 \times 10^{-7}) \times (8.85 \times 10^{-12}) \times (3 \times 10^8)] = 50$$

$$S \cdot [\mu_0 \times \varepsilon_0 \times c] = M_d$$

Again, space-time will only recognize its attached form of matter (dark matter). To get matter, tweaking is needed;

$$\frac{S \cdot \mu_0 \cdot \varepsilon_0 \cdot c^2}{2S} = P^x$$

$$\frac{(1.50 \times 10^{10}) \times (8.85 \times 10^{-12}) \times (12.566 \times 10^{-7}) \times (3 \times 10^8)^2}{2 \times (1.50 \times 10^{10})} = 0.5$$

Both “S” cancel out to give main equation as;

$$\frac{\mu_0 \cdot \varepsilon_0 \cdot c^2}{2} = P^x$$

$$\frac{(8.85 \times 10^{-12}) \times (12.566 \times 10^{-7}) \times (3 \times 10^8)^2}{2} = 0.5$$

$$\frac{\mu_0 \cdot \varepsilon_0 \cdot c^2}{2} = m_e$$

“Use exact values for constants in UPE result 11 for accurate result”

The mass of electron is gotten as the mass of matter because it was found in [21] that the electron is the official

particle for unification of the universe. This means that the value 50 as the mass of dark matter is an electron equivalent as a dark electron. From my previous papers, I explained that; switching a dark dimension result to a visible dimension result, the result should be divided by the dimension difference as 100 or use the value “2” to manipulate (tweak) space-time as there are two major dimensions in the universe (dark dimension and visible dimension). Perhaps, the secret behind the value “2” for tweaking space-time is;

$$\frac{1}{m_e} = 2$$

Have this formula in mind for easy calculations with the UPE, using the above formula is just to confirm the idea behind tweaking to know the root. Since I’ve revealed the secret behind “2” as  $\frac{1}{m_e}$ , it means that all the tweaking done before has a final equation as presented previously;

$$\frac{1}{2[\mu_0 \cdot \varepsilon_0]} = E$$

$$\frac{1}{2[(12.566 \times 10^{-7}) \times (8.85 \times 10^{-12})]} = 4.5 \times 10^{16}$$

“Use exact values for constants in UPE result 11 for accurate result”

Inserting “2” as  $\frac{1}{m_e}$  in energy tweaked equation;

$$\frac{1}{\frac{1}{m_e} [\mu_0 \cdot \varepsilon_0]} = E$$

$$\frac{m_e}{[\mu_0 \cdot \varepsilon_0]} = E$$

$$\frac{0.5}{[(12.566 \times 10^{-7}) \times (8.85 \times 10^{-12})]} = 4.5 \times 10^{16}$$

“Use exact values for constants in UPE result 11 for accurate result”

For matter;

$$\frac{\mu_0 \cdot \varepsilon_0 \cdot c^2}{2} = P^x$$

$$\frac{(8.85 \times 10^{-12}) \times (12.566 \times 10^{-7}) \times (3 \times 10^8)^2}{\frac{1}{m_e}} = 0.5$$

$$0.5 \times (8.85 \times 10^{-12}) \times (12.566 \times 10^{-7}) \times (3 \times 10^8)^2 = 0.5$$

$$m_e \cdot \mu_0 \cdot \varepsilon_0 \cdot c^2 = m_e$$

“Use exact values for constants in UPE result 11 for accurate result”

The above combination result is produced by the fact that  $\mu_0 \cdot \varepsilon_0 \cdot c^2 = 1$ , that’s how to tweak space-time using “2” as the number of major dimensions. To get the final link, you then put “2” as 1/me to test.

**Discussion (Figure 5):** The space-time parameter is its density (default). As the universe expands, its density at the outer-space decreases over time. The density of the space-time inside planets like earth is very much lower [18,20]. To reduce the density of space-time at the line of pressure from pressure by a mass of matter, is one of the functions of gravity. One on hand, we say gravity is the



reason why objects are attracted to the planet's center but it's also due to the low density of space-time which is unable to keep the objects floating, so it falls down to the center which has a more dense nature of space-time. This very dense nature of space-time at the core of these planets is similar to the nature at the outer space and it's what keeps the grounds intact to the planet, if otherwise, the grounds are also meant to fall through. Thus, as the nature of space-time at the outer-space is very dense, it keeps the planets floating rather than falling. All these explanation means that; by the fact that dark energy and dark matter exists inside space-time, it will be more difficult to observe the dark entities in a less dense space-time nature than in a denser space-time. Dark energy and dark matter exists around us, in the streets, in the houses etc., but it won't be noticed because the space-time density on earth is very much lesser than the nature at the outer-space. Thus, at the outer-space (around the planets/planetary bodies), the effects of dark matter and dark energy will be noticed and be quite normal to observe than on earth/inside planets but very difficult to observe in general.

Note: I've been using CODATA values for these constants in this paper and previous papers for a reason. Using a scientific calculator, it is noticed that the exact result isn't gotten. This is due to the presence of errors in these CODATA values. The exact values of these constants to give exact results are revealed and presented in UPE result 11.

### UPE result 3: Gravity

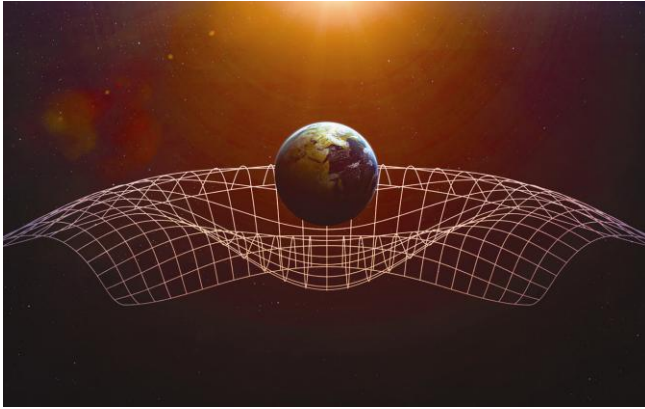


Figure 6. Curvature of space-time description

It should be remembered that the root (space-time) exist with a phenomenon that occurs when a mass rests on itself, it is called gravity. Gravity occurs from space-time, it is an effect from space-time whenever masses (dark matter and matter) are in/on space-time. Space-time and gravity are one. Gravity is an effect from space-time but in the view from the mass of matter, gravity is simply the curvature of space-time (Figure 6).

Inserting G in UPE 1;

$$S \cdot [P^1 \cdot P^2 \cdot P^3 \cdot P^4 \dots \dots \dots P^n] = P^x$$

$$S \cdot [G] = P^x$$

$$[(1.50 \times 10^{10}) \cdot (6.67 \times 10^{-11})] = 1$$

$$S \cdot [G] = 1$$

*“Use exact values for constants in UPE result 11 for accurate result”*

The above calculation explains the situation of space-time and gravity together, when a mass of matter applies pressure on space-time, it releases its alternate form as gravity;

$$\frac{1}{[S]} = G$$

Thus  $\frac{1}{[S]}$  is the mathematical representation of “curvature of space-time” i.e. space-time at the denominator. This curvature on space-time (space-time at the denominator) can only happen when matter is involved and it's also dependent on the density of space-time, e.g. matter can't curve space-time on earth because the space-time nature here doesn't even show a thickness. Hence, if gravity is the curvature of space-time, the relations from Newton's gravitational theory can be presented in terms of space-time displaying the presence of a curvature due to the pressure from the matter mass.

$$\frac{M}{Sr^2} = g \text{ (Curvature present)}$$

$$\frac{M_1 M_2}{Sr^2} = F \text{ (Curvature present)}$$

See next result for more.

### UPE result 4: Gravitational Effect (Dark Matter and Matter)

Using UPE Equation 1;

$$\frac{S}{[P^1 \cdot P^2 \cdot P^3 \cdot P^4 \dots \dots \dots P^n]} = P^x$$

$$\frac{S}{M_d \times G} = P^x$$

$$\frac{(1.50 \times 10^{10})}{50 \times (6.67 \times 10^{-11})} = 4.5 \times 10^{18}$$

$$\frac{S}{M_d \times G} = E_d$$

*“Use exact values for constants in UPE result 11 for accurate result”*

Unlike energy which can be at specific places or as rays from the sun but not everywhere, dark energy exist all around the universe as the energy of space-time just as space-time is everywhere, Dark-matter exist also in the same dimension (environment) as the matter of space-time. However, the presence of dark-matter causes a natural gravitational effect in space-time which has its own energy (dark energy). Thus, the presentation is clear; dark energy is present in a dark matter-gravitational field. The other way round gives the gravitational effect by dark matter prove as;

$$\frac{S}{M_d \times E_d} = G$$

$$\frac{(1.50 \times 10^{10})}{50 \times (4.5 \times 10^{18})} = 6.67 \times 10^{-11}$$

*“Use exact values for constants in UPE result 11 for accurate result”*

This gravitational effect by dark matter is natural, it goes with a combined name as dark matter-gravitational field as proved in UPE result 5, dark matter exist in space-time, it doesn't give any pressure in space-time because it is attached inside space-time, its presence in space-time produces the same gravitational effect according to its mass that would be similar to an equivalent mass of matter causing a curvature by its presence on space-time. Unlike matter which is not of space-time, matter rests on space-time to cause a curvature before a gravitational effect can occur. Note the use of "in" and "on" for the description. See calculations below;

Again, to tweak;

$$\frac{S}{2[m_e \times S^2]} = G$$

$$\frac{(1.50 \times 10^{10})}{2[0.5 \times (1.50 \times 10^{10})^2]} = 6.67 \times 10^{-11}$$

$$\frac{1}{2[m_e \times S]} = G(\text{Curvature present})$$

$$\frac{1}{2[0.5 \times (1.50 \times 10^{10})]} = 6.67 \times 10^{-11}$$

Already, with space-time at the denominator, it shows that a curvature is present but splitting the equation to reveal using 2 as  $\frac{1}{m_e}$ ;

$$\frac{1}{\frac{1}{m_e} [m_e \times S]} = G$$

$$\frac{1}{[S]} = G$$

From the above equation, it is seen that it results to the curvature of space-time description. The only way matter can cause a gravitational effect is by applying pressure on space-time to cause a curvature. Thus, the equation is;

$$\frac{1}{2[m_e \times S]} = G(\text{Curvature present})$$

This means that, if noticed that space-time is at the denominator, just know that a curvature is present. Inserting "2" as  $\frac{1}{m_e}$  is to check for the root equation meaning, in most cases, it is better to leave it as "2".

Is this quantum gravity mathematical description? Yes it is. (See UPE result 10)

Back on the gravitational effect by dark matter description, it can also be proven using the formula for a black-hole from a dark star at the center of a galaxy as explained in [21]. I've always said that the way these visible things like the planets, the stars, an animal etc. are seen, it is the same way the invisible (dark) things are, just that they cannot be seen or observed with our eyes or just any equipment. A dark star is a star in the dark dimension, it is dark matter possessing dark energy just like the stars we see is matter possessing energy.

With the presence of that star as a combination of dark matter and dark energy, the field will be present to result to a gravitational effect from its presence on space-time.

With the straightforward equation using UPE equation 2;

$$\frac{S}{[M_d \times c]^2} = G$$

$$\frac{(1.50 \times 10^{10})}{[50 \times (3 \times 10^8)]^2} = 6.67 \times 10^{-11}$$

A gravitational effect by dark matter is also proven. To explain better; eyes should be at below the division line which says  $[M_d \times c]^2$ . There's  $E = [Mc^2]$  but this one is  $[Mc]^2$ , for the case of matter.  $[Mc]^2$  isn't known in physics. Perhaps, I can introduce it.

If we are to mathematically convert a planet (matter) to energy, we simply use  $E = Mc^2$ . The question is; if we are to mathematically convert a star (matter) to energy, how can it be done?

A star is matter possessing an energy already, if you use  $[Mc^2]$ , you get it wrong. This is the point  $[Mc]^2$  comes in. With an example as;

The Sun (star) with a present mass of  $1.99 \times 10^{30}$ , to convert to energy;

$$E = [M \times c^2]$$

$$E = [(1.99 \times 10^{30}) \times (3 \times 10^8)^2]$$

$$\times E = 1.79 \times 10^{47}$$

This can't be the total energy of the sun because instead of converting matter to energy, the matter part possesses an energy already. Perhaps,  $[Mc]^2$ .

$$E = [M \times c]^2 = [(1.99 \times 10^{30}) \times (3 \times 10^8)]^2$$

$$\checkmark E = 3.56 \times 10^{77}$$

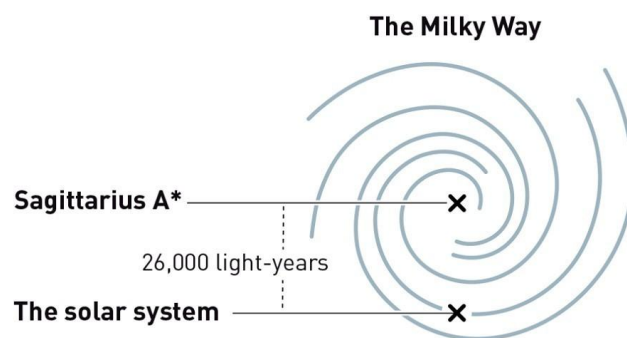


Figure 7. Sagittarius A\* description

This would be useful throughout the interpretation. With eyes at below the division line as  $[M_d \times c]^2$  and this calculation I've just displayed, a star is the next thing that comes to the mind. The gravitational constant as the result from the expression is simply saying that; "Dark matter which is in space-time will cause a very strong gravitational effect but the dark matter that causes this strong gravitational effect is no ordinary dark-matter. A planet is matter, a star is also matter but unlike planets, they possess electromagnetic radiation i.e. they possess energy. This kind of dark matter that causes a strong gravitational effect is similar to a star, it is a star in the dark dimension, I want you to imagine a star that you can't see but this time the star is not matter possessing energy, rather this star is dark matter possessing dark energy (Dark Star - father of all stars).

Matter can be converted back to energy, this means that;

as matter can apply pressure/stress on space-time, energy can equally apply pressure/stress on space-time. Stars are still matter that possess energy but when they die and collapse at the end of their life-span, all their matter part becomes radiation. Energy is the default state of matter i.e. there was nothing like matter at the creation of this universe, energy is what solidified to form matter. Now, matter (mass) is not allowed to tear/rip space-time until it becomes energy totally. If it becomes energy, it can now tear/rip space-time. There are two major things involved in black hole theory/calculation;

- 1.) The Energy (radiation) from a black hole
- 2.) The Gravitational effect (pull) from a black hole

The energy from a black-hole is the energy of a dead star. When a star dies, its matter part is totally transformed into energy (radiation).

This is why I presented the total energy of a star as  $E_{star} = [M \times c]^2$

Therefore, the energy from a black-hole is given as  $E_{black\ hole} = [M \times c]^2$

If a star with a present mass of  $1.99 \times 10^{30}$  reaches its lifespan and collapses to cause a black-hole on space-time, the energy from that black-hole will be;

$$E_{black\ hole} = [M \times c]^2 = [(1.99 \times 10^{30}) \times (3 \times 10^8)]^2$$

$$E_{black\ hole} = 3.56 \times 10^{77} J$$

Note: This energy value is for a newly formed black-hole. As time passes, the energy from a black-hole changes.

However, this energy value of this black-hole will play a role in determining its gravitational pull. The main function of gravity is to reduce the thickness of space-time at the line of pressure whenever a mass applies pressure on space-time, and also as an attractive effect.  $G$  is the constant that represents that function.  $G$  is  $6.67 \times 10^{-11}$ . This time, an energy is applying pressure to rip space-time.  $G$  has given us a hint that the value that'll represent the gravitational pull of a black-hole will be  $10^{-x}$  to show the nature of gravity. However, once space-time is torn/ripped,  $G$  becomes  $G_{black\ hole}$  to show its strong gravitational pull.

It's straight, from earlier in this paper, the formula used for determining the value of a stretched space-time by the effect of gravity is;

$$\frac{S_{default} \times r^2}{M} = S_{stretc\ hed}$$

Remember, it is energy applying pressure not mass (matter). Also, the pressure by energy caused space-time to tear/rip. Therefore,  $S_{stretc\ hed}$  will change to  $G_{black\ hole}$  and  $M$  and  $r^2$  will be replaced by the energy from the dead star ( $E_{black\ hole}$ ).

The gravitational pull from a black-hole is given as;

$$\frac{S_{default}}{E_{black\ hole}}$$

With  $S$  as  $1.50 \times 10^{10}$  and  $E_{black\ hole}$  as  $3.56 \times 10^{77} J$  from the example,

The gravitational pull of the black-hole formed is;

$$\frac{(1.50 \times 10^{10})}{(3.56 \times 10^{77})} = 4.21 \times 10^{-68}$$

Also, I've made emphasis on the fact that the value  $1.50 \times 10^{10}$  represents the default space-time that was present at the big bang. The space-time at the outer space has been expanding (stretching) (Expansion of the Universe), this means that the nature of space-time present at the outer-space is not as thick as it used to be long ago at the creation of this universe.

Therefore, the value representing that space-time is no more  $1.50 \times 10^{10}$ , its value should be lesser but not too far from  $1.50 \times 10^{10}$ . So when calculating for the gravitational pull from a black-hole, have in mind that the value is not accurate due to the expansion of the universe that resulted into the stretching of  $S_{default}$ . If the formula is used for a black-hole that was formed at a period where the universe was <100 years old, then it's accurate.

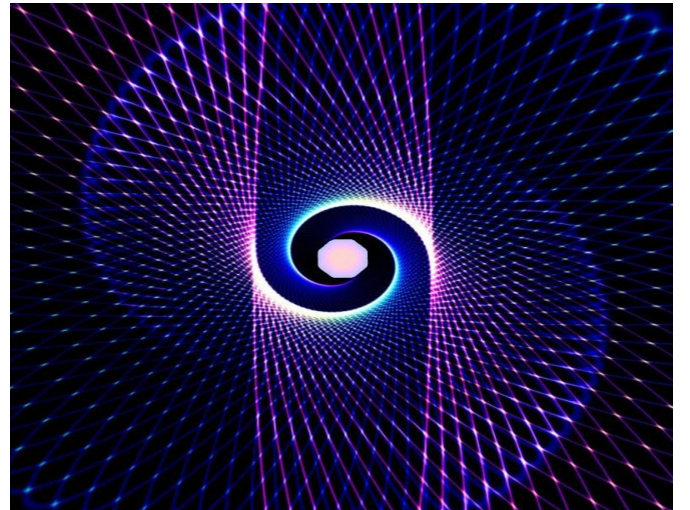
From the black hole calculation, a black-hole formula/expression is generally as;

$$\frac{S}{[M \times c]^2} = G_{black\ hole}$$

Sometimes, an interpretation using the UPE can be straight forward or long like this one.

**Table 2.** Dark Energy-Dark matter and Normal Energy-Matter Black-hole Equation Description

Equation (X)	Equation (Y)
$\frac{S}{[M_d \times c]^2} = G$ <p><math>S</math> = Space-time, <math>M_d</math> = Mass of dark matter  <math>c</math> = speed of light, <math>G</math> = Gravitational constant</p>	$\frac{S}{[M \times c]^2} = G_{blackhole}$ <p><math>S</math> = Space-time, <math>M</math> = Mass of matter  <math>c</math> = speed of light, <math>G_{black\ hole}</math> = Gravitational constant as a pull from a black hole</p>



**Figure 8.** Dark star/black-hole effect description

This similarity in both equation (X and Y) shown in table 2, proves that the description as;  $\frac{S}{[M_d \times c]^2} = G$ , is a

dark-matter (dark star) in space-time producing a black-hole gravitational effect (Figure 8). This is the situation at the center of galaxies in order to govern the rotation of energy stars which are attracted to the dark stars. Hence, at Sgr A\*, a dark matter is present and a black hole gravitational effect is present. See UPE result 7 for more.

Note: Constants are used in equation X to result to G from dark matter. In equation Y, not all are constants, if M is constant, to result to G as a constant showing the gravitational effect from matter, a curvature will appear to prove that matter is present.

**UPE result 5: Energy in a magnetic-electric field is equivalent to a dark-matter gravitational field**

Energy fades. The presence of space-time in the universe is so important that it hides the actual inferior nature of energy. Without space-time, energy disappears/shrinks/fades in less than a second. Energy as its default form is behind the creation/formation of all matter in the universe and you can already notice from your surroundings that nothing last forever. The fact that they even get to last as long as possible is due to the presence of space-time. However, energy has an indestructible/superior form called dark energy, I've always said in my papers that dark energy is just the indestructible form of energy, the form that can never fade. It exists as an attachment to space-time that hides the actual nature of its inferior form. To reveal;

$$\begin{aligned}\mu_0 \cdot \epsilon_0 \cdot c &= 3.33 \times 10^{-9} \\ [(12.566 \times 10^{-7}) \times (8.85 \times 10^{-12}) \times (3 \times 10^8)] \\ &= 3.33 \times 10^{-9} \\ M_d \times G &= 3.33 \times 10^{-9} \\ [50 \times (6.67 \times 10^{-11})] &= 3.33 \times 10^{-9}\end{aligned}$$

*"Use exact values for constants in UPE result 11 for accurate result"*

I found  $3.33 \times 10^{-9}$  as what I call "The Universe field value". The calculation above is the mathematical prove that energy in an electromagnetic field is equivalent to energy in a dark matter-gravitational field (dark energy). Another way of saying it is that dark energy and energy are the same. Dark energy is present in a dark-matter – gravitational field. Whereas energy is present in an electromagnetic field, it is seen that both gave the same field value showing that energy and dark-energy are the same. Perhaps, not exactly the same because space-time says so. With the UPE, space-time can only identify the superior one (dark energy).

Regardless of the combination of parameters as your ( $3.33 \times 10^{-9}$ ), if the field value is put in the UPE;

$$\frac{(1.50 \times 10^{10})}{(3.33 \times 10^{-9})} = 4.5 \times 10^{18}$$

Dark Energy is the result simply because space-time will only identify the superior form which is its attached form of energy. This is to say that the other one (energy) is a duplicate and a scam. I know it, the reader now is aware, it's clear and I always say that the life we are living is a scam from the actual life we are supposed to be living. "In" is the supposed and not "on" (Figure 5). Things don't last here in

this dimension, maybe at a point people will begin to take the game seriously.

Also, the space-time recognition of the field value also applies to dark matter as;

$$[(1.50 \times 10^{10}) \cdot (3.33 \times 10^{-9})] = 50$$

Well, another secret; for the first combination ( $\mu_0 \cdot \epsilon_0 \cdot c$ ), the magnetic and electric constant together is behind the word "electromagnetism", and electromagnetism is all about energy which are in photons known for their speed as ( $c = 3 \times 10^8$ ). Therefore, the magnetic and electric constants are like add-ons, you don't really need them to show the field value. Photons moving with their common speed are the entity behind the electromagnetic field as the fact.

Hence, the field value can be simply gotten as the inverse of the speed of light ( $1/c$ )

$$\frac{1}{c} = \frac{1}{(3 \times 10^8)} = 3.33 \times 10^{-9}$$

Perhaps, this is one of the reasons I classified c as an ultimate constant, it is more than a fundamental constant because it doesn't just represent the speed of energy, it also represent the speed of dark energy. Therefore, the general way to get the field value is with the inverse of the speed of light but individually i.e. in their respective dimensions, you can get the field value from ( $\mu_0 \cdot \epsilon_0 \cdot c$ ) for electromagnetic (energy) field and  $M_d \times G$  for dark-matter-gravitational field (dark energy). Thus, the field value ( $3.33 \times 10^{-9}$ ) can be inserted as any of the combinations I listed in the UPE. However, energy and dark energy are the same but dark energy is the form of energy that exists inside space-time.

**UPE result 6: Fine structure**

The fine structure constant  $\alpha$ , is a dimensional constant that characterizes the strength of electromagnetic interaction between charged elementary particles, a precise determination of  $\alpha$  allows for a test of the standard Model of particle physics.

Perhaps, one wouldn't know, which is why I displayed the secret behind this in [21]. To reveal;

$$\begin{aligned}\frac{k}{hc} \times e &= \alpha \\ \frac{(9 \times 10^9)}{(6.6 \times 10^{-16}) \times (3 \times 10^8)} \times (1.60 \times 10^{-19}) \\ &= 0.0072 \\ (4.5 \times 10^{16}) \times (1.60 \times 10^{-19}) &= 0.0072\end{aligned}$$

*"Use exact values for constants in UPE result 11 for accurate result"*

$4.5 \times 10^{16}$  is the default energy value (pack-photon), E. The above equation simply says ( $E \times e$ ). In the equation  $k/hc \times e$ , e is signifying elementary particles but also saying that it has to be through an electron as the official particle. Therefore e in the equation  $ke/hc$  is representing an electron and indirectly representing other elementary particles. You can know that it's an electron through an experiment but the mathematical way of knowing is to convert an electron to a photon i.e. (convert matter to energy) and multiply with e.



Converting electron to energy (photon);

$$0.5 \times (3 \times 10^8)^2 = 4.5 \times 10^{16}$$

Multiplying with e;

$$(4.5 \times 10^{16}) \times (1.60 \times 10^{-19}) = 0.0072$$

The full equation can be written as;

$$m_e \cdot e \cdot c^2 = \alpha$$

$$0.5 \times (1.60 \times 10^{-19}) \times (3 \times 10^8)^2 = 0.0072$$

Just to prove to you that e represents an electron and indirectly for other particles. So e x E simply says; an electron absorbing a photon to become a photon. After the electron becomes a default photon through absorption, the default energy photon value changes to a new value which is the fine structure constant value. This is behind the creation of energy stars and this is a secret now revealed. See [17] for full information on this default energy photon (pack-photon).

From the UPE 1;

$$\frac{S \times c \times e}{100} = \alpha$$

$$\frac{(1.50 \times 10^{10}) \times (3 \times 10^8) \times (1.60 \times 10^{-19})}{100} = 0.0072$$

The above equation reverse as;

$$\frac{S \times c \times e}{\alpha} = 100$$

The above equation is the secret to the subatomic world.

#### UPE result 7: Black holes

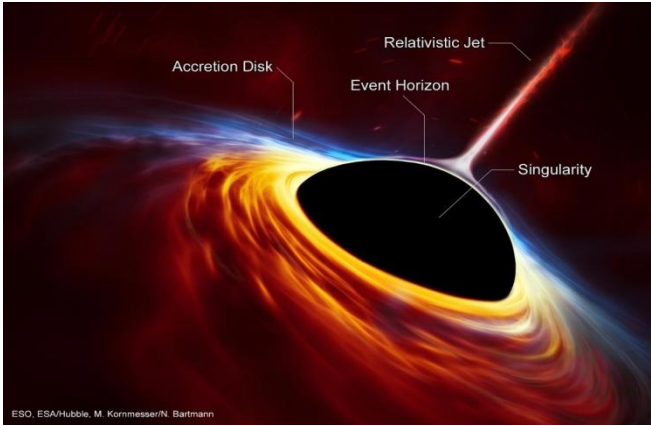


Figure 9. Black-hole description

Continuation from [21]. Black holes are all about the difference between both dimensions as 100. To get the full details behind the 100, the tweaked energy equation and the dark energy equation will interact as;

$$\frac{S}{[\mu_0 \cdot \epsilon_0 \cdot c]} = E_d = \frac{S}{2[\mu_0 \cdot \epsilon_0 \cdot S]} = E$$

$$\frac{2[\mu_0 \cdot \epsilon_0 \cdot S^2]}{[\mu_0 \cdot \epsilon_0 \cdot c \cdot S]}$$

$$2 \left[ \frac{S}{c} \right]$$

$$2 \left[ \frac{1.50 \times 10^{10}}{3 \times 10^8} \right]$$

$$= 100$$

The resulting equation is;

$$2 \left[ \frac{S}{c} \right]$$

This equation is simply about what happens through a black hole with two sides. One side of the hole at the inferior dimension and the other side of the hole at the superior dimension (Tearing/ripping of space-time to enter into space-time's world [dark dimension]) i.e. leaving the “on” to enter the “in”.  $2 \left[ \frac{S}{c} \right]$  is basically the tunnel regardless of what happens around a black-hole (radiation and gravitational pull).

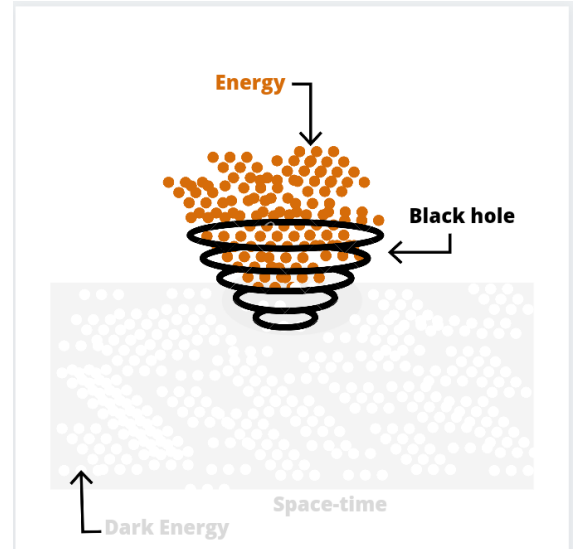


Figure 10. Black hole description

Thus, put energy through the tunnel and see what happens on the other side, dark energy.

$$E \cdot 2 \left[ \frac{S}{c} \right]$$

$$(4.5 \times 10^{16}) \cdot 2 \left[ \frac{(1.50 \times 10^{10})}{(3 \times 10^8)} \right] = 4.5 \times 10^{18}$$

Once energy/matter enters or passes through the hole, they become their superior form (dark matter and dark energy). There is a close relation between dark matter and black holes in this way; the formula to result to the mass of dark matter value from the space-time parameter is  $S/c$  and the presentation of a black-hole with two sides regardless of what happens around it (radiation and gravitational effect) is  $2[S/c]$ . It means we can substitute dark matter directly as  $2[M_d]$ . One would have to understand the unification part of the theory of everything very well to realize that with the calculations I presented, we can substitute dark matter value into the black-hole equation to get the same result, meaning that the function of black-hole can be in a way replaced by dark matter, which also means that dark matter is behind the existence of black holes. However, this is what the similarity says;

Dark matter moves with the speed of light in space-time from  $M_d \times c = S$ .

Moving through a black hole is moving with the speed of light from  $2 \left[ \frac{S}{c} \right]$

Let's try matter moving with the speed of light through space-time;

$$\frac{(1.50 \times 10^{10})}{0.5 \times (3 \times 10^8)} = 100$$

$$\frac{S}{m_e \times c} = 100$$

The above equation simply reveals that 100 as the flip between dimensions simply means that if matter can move with the speed of light, then it is above the law, meaning that by being able to move with the speed of light, it becomes dark matter (which is why a curvature isn't present in the equation). Energy and dark energy already moves with the speed of light, dark matter can also, only matter is left out. Thus, with the existence of black-holes displaying the hint, it won't be left out, therefore the main reason behind black holes is dark matter, as the universe requires matter to move with the speed of light and break the rules to become dark matter. The black-hole calculation also reveals that the initial dark energy in the universe was at a certain level but with stars collapsing to form black holes, the amount of dark energy increased over time as black holes is an event on space-time that changes either matter or energy to their superior forms (dark-matter and dark energy). Energy from death stars around the black hole changes to increase dark energy, dark energy is increasing, dark matter is not doing the same, and both are required to be at a certain level for a stable universe. Matter is the entity required to change into dark matter but how will enough matter change into dark matter from a black-hole? Except the planets volunteers but before they enter, they must have been consumed by the radiation to become all energy. As dark energy increases, the effect of gravity which is reducing the density of space-time, increases, leading to expansion. Remember, both dark energy and dark matter are involved with gravity in the field description. Saying that dark energy stretches space-time (expansion of the universe) is because gravity is involved in the field description, increase in dark energy without increase in dark matter will result to increase in gravitational effect as I've always said that the main function of gravity is to reduce the density of space-time at a line of pressure.

$$\frac{S}{M_d \times E_d} = G$$

This is the key to a stable universe; more amount of dark matter is required to match the level of dark energy in the universe, this will stop the expansion of the universe on one hand and merge both dimensions on the other hand. Since black-holes are caused by energy, and matter will be consumed by energy as they try to enter the black-hole, this means that there's no normal hope for a stable universe meaning that the density of space-time at the outer space will be reducing gradually by the increased effect of gravity over time, the density of space-time at the outer space will then get to a point where it can't keep the planets floating and we

all know what that will result to (destruction; demise of the visible part of the universe). What can be done? There's an alternative and it is the reason why the game was created solely behind the existence of humans (Read [15]).

Perhaps, black holes are caused by dead stars. In the inferior dimension, energy stars will have to collapse (die) for a black-hole to form on space-time but in the superior dimension, dark energy and dark matter are indestructible, the presence of a dark star is supposed to cause a black-hole, more matter is required to change into dark matter rather than dark matter changing to matter through the hole. Thus, at the point where a dark star is present, the hole is closed so that the dark entities won't change into the inferior entities (energy and matter) but it will seem like a black hole is present because the gravitational effect is the black-hole kind. This is how the universe is built. Hence, a dark matter mass (dark star) and a black-hole gravitational effect is present at Sgr A\* (center of a galaxy).

#### UPE result 8: Field constants relationship

Using UPE 1;

$$\frac{S \times c}{\alpha} = P^x$$

$$\frac{(1.50 \times 10^{10}) \times (3 \times 10^8)}{0.0072} = 6.25 \times 10^{20}$$

$$\frac{S}{c \times m_e \times e} = P^x$$

$$\frac{(1.50 \times 10^{10})}{(3 \times 10^8) \times 0.5 \times (1.60 \times 10^{-19})} = 6.25 \times 10^{20}$$

$$\frac{S}{c \times \mu_o \times \varepsilon_o \times \alpha} = P^x$$

$$\frac{(1.50 \times 10^{10})}{(3 \times 10^8) \times (12.56 \times 10^{-7}) \times (8.85 \times 10^{-12}) \times 0.0072} = 6.25 \times 10^{20}$$

"Use exact values for constants in UPE result 11 for accurate result"

It's all about the combination at the denominator, to reveal;

$$\frac{\alpha}{c} = c \times m_e \times e = c \times \mu_o \times \varepsilon_o \times \alpha$$

It can be reduced to;

$$\frac{\alpha}{c^2} = m_e \times e = \mu_o \times \varepsilon_o \times \alpha$$

Energy in the field direct conversion to an electron;

$$\frac{S}{E \times \mu_o \times \varepsilon_o} = P^x$$

$$\frac{(1.50 \times 10^{10})}{(4.5 \times 10^{16}) \times (12.56 \times 10^{-7}) \times (8.85 \times 10^{-12})} = 3 \times 10^{10}$$

"Use exact values for constants in UPE result 11 for accurate result"

$$\frac{S}{m_e} = P^x$$

$$\frac{(1.50 \times 10^{10})}{0.5} = 3 \times 10^{10}$$

$$E \times \mu_o \times \varepsilon_o = m_e$$

$$(4.5 \times 10^{16}) \times (12.56 \times 10^{-7}) \times (8.85 \times 10^{-12}) = 0.5$$

*“Use exact values for constants in UPE result 11 for accurate result”*

#### UPE result 9: Mass Conversion from kg to MeV/c<sup>2</sup>

The space-time parameter was recently found and in MeV/c, before its arrival, the mass of the subatomic particles are also presented in MeV/c<sup>2</sup>, just that the space-time parameter is been discovered recently, it is solely the reason why the mass value for particles are presented in MeV/c<sup>2</sup>. The mass value in kg doesn't align with space-time and it can't unlock the secrets, one must use the corresponding values that align with space-time.

To reveal; converting a mass in kg to MeV/c<sup>2</sup>, it is done by dividing the mass of the particle in kg by 1MeV/c<sup>2</sup>;

$$eV = 1.6 \times 10^{-19}$$

$$MeV = (1.6 \times 10^{-19}) \times 1000000 = 1.6 \times 10^{-13}$$

$$\frac{MeV}{c^2} = \frac{(1.6 \times 10^{-13})}{(3 \times 10^8)^2} = 1.7777777778 \times 10^{-30}$$

The formula behind the value from space-time is;

$$\frac{S^3 e^4 c}{\alpha^3} = P^x$$

$$\frac{(1.50 \times 10^{10})^3 \times (1.60 \times 10^{-19})^4 \times (3 \times 10^8)}{0.0072^3} = 1.7777777778 \times 10^{-30}$$

Naming the MeV/c<sup>2</sup> constant as;

$$B^x = \frac{S^3 e^4 c}{\alpha^3} = 1.7777777778 \times 10^{-30}$$

The conversion constant (B<sup>x</sup>) is not just for conversion, it shows that there's a relation between space-time and each of the subatomic/elementary particles existing, just like the key;

$$\frac{S \times c \times e}{\alpha} = 100$$

(See UPE result 10)

Using the conversion constant for the mass of an electron;

$$0.5MeV/c^2 \times (1.7777777778 \times 10^{-30}) = 8.8888888889 \times 10^{-31} kg$$

Perhaps, there's an issue between theoretical and experimental results to say, experimental results are not precise, they are close but not exact. Theoretical results are exact and this means that errors are present in the mass values for particles from measurement.

#### UPE result 10: The Standard Model

Due to the release of the results from the muon g-2 experiment, I decided to release the subatomic section of the “Theory of Everything”. Getting the accurate (exact) result from measurement as regards to microscopic particles is very hard if not impossible. Also, in creating the universe, entities didn't just exist on their own, they emerged from a root and there is a sequence of values, this is to say that; regarding the subatomic particles, the most important feature is their mass as it affects space-time. Therefore there's a relation and these particles can't have masses with random values, there is a pattern within their values. Table 3 shows the theoretical value (exact) of the subatomic particles from the “Theory of Everything”.

**Table 3.** Exact mass values for particles

Particle	Experimental Value (MeV/c <sup>2</sup> )	Theoretical Value (exact) MeV/c <sup>2</sup>	Theoretical Value (exact) kg
Up quark	2.2 <sup>+0.5</sup> <sub>-0.4</sub>	1.875	3.3333333333 × 10 <sup>-30</sup>
Down quark	4.7 <sup>+0.5</sup> <sub>-0.3</sub>	5	8.8888888889 × 10 <sup>-30</sup>
Charm quark	1275 <sup>+25</sup> <sub>-35</sub>	1250	2.2222222222 × 10 <sup>-27</sup>
Strange quark	93 <sup>+3</sup> <sub>-2</sub>	93.75	1.6666666667 × 10 <sup>-28</sup>
Top quark	172760 <sup>+300</sup> <sub>-300</sub>	187500	3.3333333333 × 10 <sup>-25</sup>
Bottom quark	4650 <sup>+30</sup> <sub>-30</sub>	5000	8.8888888889 × 10 <sup>-27</sup>
Electron	0.510	0.5	8.8888888889 × 10 <sup>-31</sup>
Muon	105.66	100	1.7777777778 × 10 <sup>-28</sup>
Tau	1776.86 <sup>+12</sup> <sub>-12</sub>	1875	3.3333333333 × 10 <sup>-27</sup>
Electron neutrino	< 1.1 × 10 <sup>-6</sup>	1 × 10 <sup>-6</sup>	1.7777777778 × 10 <sup>-36</sup>
Muon neutrino	0.19	0.1875	3.3333333333 × 10 <sup>-31</sup>
Tau neutrino	18.2	18.75	3.3333333333 × 10 <sup>-29</sup>
Proton	938.27	937.5	1.6666666667 × 10 <sup>-27</sup>
Neutron	939.56	937.5	1.6666666667 × 10 <sup>-27</sup>
W boson	80379 <sup>+12</sup> <sub>-12</sub>	93750	1.6666666667 × 10 <sup>-25</sup>
Z boson	91188 <sup>+23</sup> <sub>-31</sub>	93750	1.6666666667 × 10 <sup>-25</sup>
Higgs Boson	125100 <sup>+14</sup> <sub>-14</sub>	125000	2.2222222222 × 10 <sup>-25</sup>

Experimental values could differ from other sources. Although the experimental values are not far from the exact values, the exact values are needed to reveal the connection. Table 3 shows the exact mass value for particles in kg and MeV/c<sup>2</sup>. In the case of the behavior of muons from the recent experimental results, there's no big deal in the sense that muons are similar to electrons which is the official particle of the universe. Therefore, its behavior is expected and it's to be checked theoretically.

$$(1.777777778 \times 10^{-28}) \div (1.777777778 \times 10^{-30}) = 100 \text{ MeV}/c^2$$

100MeV/c<sup>2</sup> is the exact muon mass result. You can see the similarity between the conversion constant and the mass of muon in kg in that the difference is its exact value in MeV/c<sup>2</sup>. The value of the mass of a muon in MeV/c<sup>2</sup> is the same with the flip value representing the difference between the two major dimensions of the universe. It bears the value of the universe and it can be seen that the muon already seems like a bridge. The fact that the muon exists with the universe value means that the muon mass value points at the "Theory of Everything". The universe is a puzzle and there are hints/clues, see equation below;

$$(1.777777778 \times 10^{-28}) \div (8.888888889 \times 10^{-31}) = 200$$

The above result involving the electron from interpretation can mean (x2) i.e. electron x2 = muon (see figure 13), but it shows that there's a link. How? The numerator and denominator is the mass of a particle, looking at both results as 100 and 200, the first thing that comes to the mind is the combination of the mass of particles. At this point, I introduce a missing theory in particle physics called "Particle Tree".

The particle tree is simply the relation between the existence of subatomic particles by their masses on space-time. There exist an unknown fact that If the mass of two particles are combined mathematically, the result is the mass of another particle in MeV/c<sup>2</sup> which aligns with space-time (role played by the conversion constant), this can only happen for specific combination of masses and the reason is key to interpretation for the purpose of constructing the particle tree. Whether the combination of the particles is done with kg values or MeV/c<sup>2</sup> values for particles from table 3, the result which is the mass of a particle, will be in MeV/c<sup>2</sup> (role played by the conversion constant).

→ Primary Results

Proton

$$1. \frac{1.666666667 \times 10^{-27}}{3.333333333 \times 10^{-31}(\text{muon neutrino})} = 5000 (\text{Bottom quark})$$

$$2. \frac{1.666666667 \times 10^{-27}}{3.333333333 \times 10^{-27}(\text{Tau})} = 0.5(\text{Electron})$$

W Boson

$$3. \frac{1.666666667 \times 10^{-25}}{1.666666667 \times 10^{-27}(\text{Proton})} = 100(\text{Muon})$$

$$4. \frac{1.666666667 \times 10^{-25}}{3.333333333 \times 10^{-25}(\text{top quark})} = 0.5(\text{Electron})$$

5.

$$\frac{1.666666667 \times 10^{-25}}{3.333333333 \times 10^{-29}(\text{tau neutrino})} = 5000(\text{Bottom quark})$$

Strange Quark

$$6. \frac{1.666666667 \times 10^{-28}}{3.333333333 \times 10^{-29}(\text{tau neutrino})} = 5(\text{Down quark})$$

$$7. \frac{1.666666667 \times 10^{-28}}{1.666666667 \times 10^{-30}(\text{Unknown})} = 100(\text{Muon})$$

Higgs Boson

$$8. \frac{2.222222222 \times 10^{-25}}{2.222222222 \times 10^{-27}(\text{charm quark})} = 100 (\text{Muon})$$

Top Quark

$$9. \frac{3.333333333 \times 10^{-25}}{3.333333333 \times 10^{-27}(\text{Tau})} = 100(\text{Muon})$$

Muon Neutrino

$$10. \frac{3.333333333 \times 10^{-31}}{3.333333333 \times 10^{-25}(\text{Top quark})} = 1 \times 10^{-6}(\text{Electron Neutrino})$$

Tau Neutrino

$$11. \frac{3.333333333 \times 10^{-29}}{3.333333333 \times 10^{-31}(\text{Muon Neutrino})} = 100(\text{Muon})$$

Tau

$$12. \frac{3.333333333 \times 10^{-27}}{3.333333333 \times 10^{-29}(\text{Tau neutrino})} = 100(\text{Muon})$$

Z Boson

$$13. \frac{1.666666667 \times 10^{-25}}{1.666666667 \times 10^{-27}(\text{Neutron})} = 100(\text{Muon})$$

From the result, it is observed that if we categorize the particles at the numerator as "branch", then it takes two branch particles to produce a result. Perhaps, among the primary results, no combination involved the "Up quark", this implies that there's a missing particle in the sequence which is not yet discovered. Discovering that particle theoretically will lead to a mass value of 0.9375MeV/c<sup>2</sup> and 1.666666667 x 10<sup>-30</sup> kg and this result involves the Up quark. Perhaps, the electron has a special role and can act as a branch particle.

Unknown Particle

$$14. \frac{1.666666667 \times 10^{-30}}{3.333333333 \times 10^{-31}(\text{muon neutrino})} = 5 (\text{Down quark})$$

$$15. \frac{1.666666667 \times 10^{-30}}{8.888888889 \times 10^{-31}(\text{Electron})} = 1.875(\text{Up quark})$$

Still on the results, there are secondary results by the fact that some combinations resulted to ½ a particle;

→ Secondary results

Charm quark

$$16. \frac{2.222222222 \times 10^{-27}}{8.888888889 \times 10^{-31}(\text{Electron})} = 2500 (\frac{1}{2} \text{ Bottom quark})$$

Strange quark

$$17. \frac{1.666666667 \times 10^{-28}}{3.333333333 \times 10^{-30}(\text{Up quark})} = 50 (\frac{1}{2} \text{ Muon})$$



W Boson

$$18. \frac{1.666666667 \times 10^{-25}}{3.333333333 \times 10^{-27} (\text{Tau})} = 50 \left( \frac{1}{2} \text{ Muon} \right)$$

Proton

$$19. \frac{1.666666667 \times 10^{-27}}{3.333333333 \times 10^{-29} (\text{Tau neutrino})} = 50 \left( \frac{1}{2} \text{ Muon} \right)$$

Bottom quark

$$20. \frac{8.888888889 \times 10^{-27}}{1.777777778 \times 10^{-28} (\text{Muon})} = 50 \left( \frac{1}{2} \text{ Muon} \right)$$

→ Steps to construct the particle tree

The results are basically the keys for construction.

**Step 1:** Use the combinations with muon as its result i.e. combinations (3,7,8,9,11,13) and insert the branch particles involved in each combination (opposite each other) as shown in Figure 11, draw a center line representing  $\frac{1}{2}$  muon.

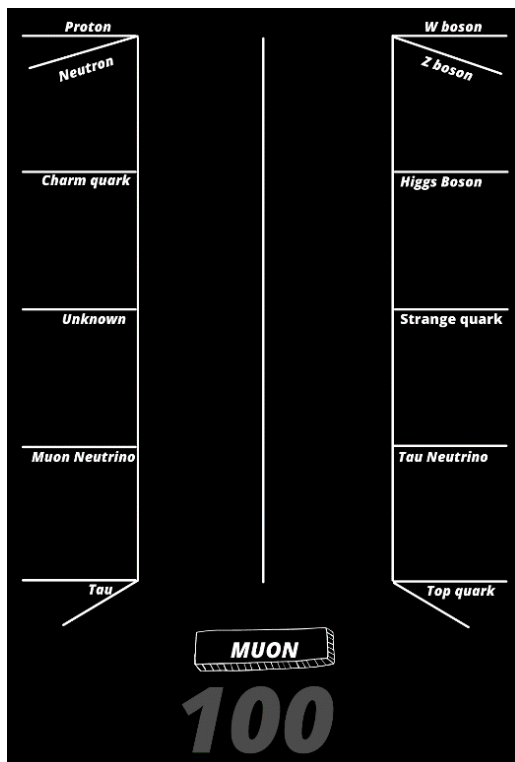


Figure 11

(Used: 3,7,8,9,11,13) (Un-used: 1,2,4,5,6,10,12,14,15,16,17,18,19,20)

**Step 2:** Result 11 and 12 is a double link i.e tau neutrino linked with both muon neutrino and tau through the muon, a pink line is used to trace the link as shown in figure 12.

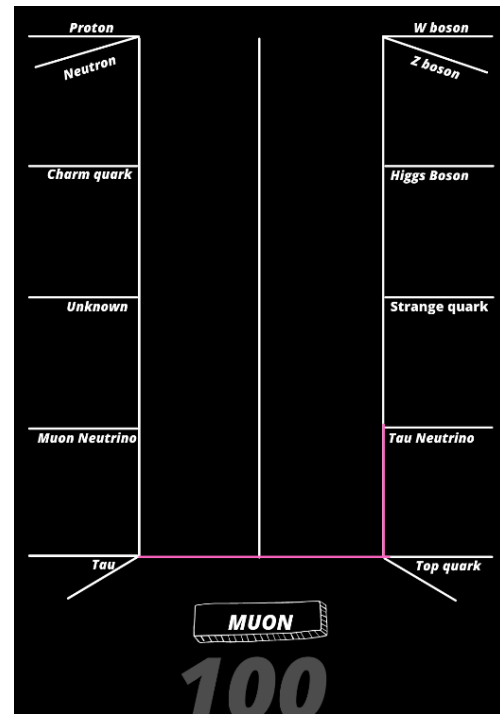


Figure 12

(Used: 3,7,8,9,11,12,13) (Un-used: 1,2,4,5,6,10,14,15,16,17,18,19,20)

**Step 3:** Trace the electron link with combination 2 and 4 (Blue lines)

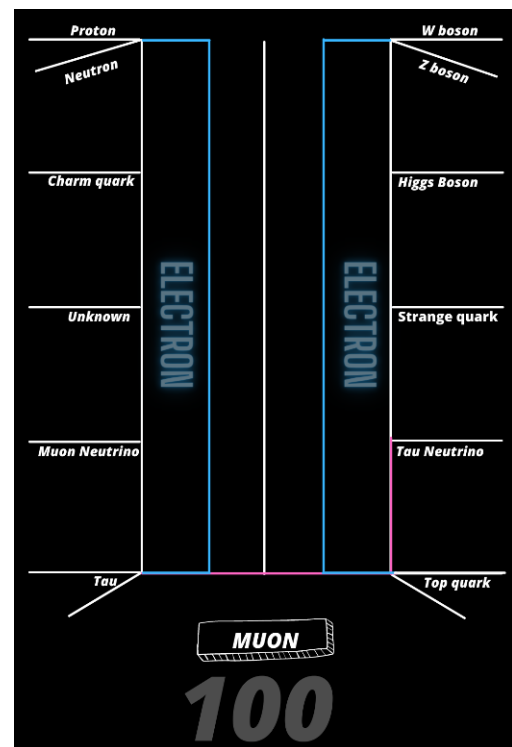


Figure 13

(Used: 2,3,4,7,8,9,11,12,13) (Un-used: 1,5,6,10,14,15,16,17,18,19,20)

**Step 4:** To ease understanding with interpretation using combination 1,5 and 20 (Green lines) as;

Proton

1.

$$\frac{1.666666667 \times 10^{-27}}{3.333333333 \times 10^{-31} (\text{muon neutrino})} = 5000 (\text{Bottom quark})$$

W Boson

5.

$$\frac{1.666666667 \times 10^{-25}}{3.333333333 \times 10^{-29} (\text{Tau neutrino})} = 5000 (\text{Bottom quark})$$

Bottom quark

$$20. \frac{8.888888889 \times 10^{-27}}{1.777777778 \times 10^{-28} (\text{Muon})} = 50 \left( \frac{1}{2} \text{ Muon} \right)$$

It is seen that secondary combinations are to assist in constructing with primary combinations.

The interpretation says; from combination 20 which is secondary, the line to form the bottom quark from combination 1 and 5 must pass through the middle line (50) to form the bottom quark section as shown in figure 14.

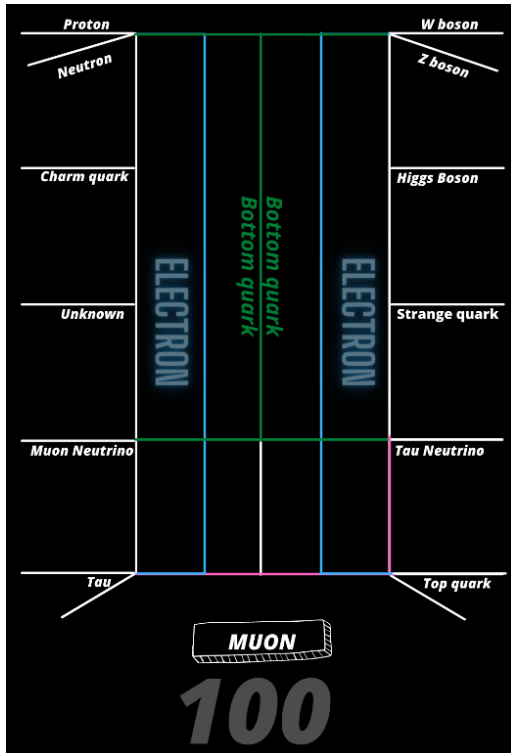


Figure 14

(Used: 1,2,3,4,5,7,8,9,11,12,13,20) (Un-used: 6,10,14,15,16,17,18,19)

**Step 5:** Form this point, it is “acquiring a territory” and “closing spaces” starting with the combination resulting to electron neutrino as 10 (yellow line), and with secondary combination 18 and 19 shown in figure 15.

W Boson

$$18. \frac{1.666666667 \times 10^{-25}}{3.333333333 \times 10^{-27} (\text{Tau})} = 50 \left( \frac{1}{2} \text{ Muon} \right)$$

Proton

$$19. \frac{1.666666667 \times 10^{-27}}{3.333333333 \times 10^{-29} (\text{Tau neutrino})} = 50 \left( \frac{1}{2} \text{ Muon} \right)$$

The interpretation says; trace from w boson to tau through the middle line, trace from proton to tau neutrino through the middle line and check for unclosed gap.

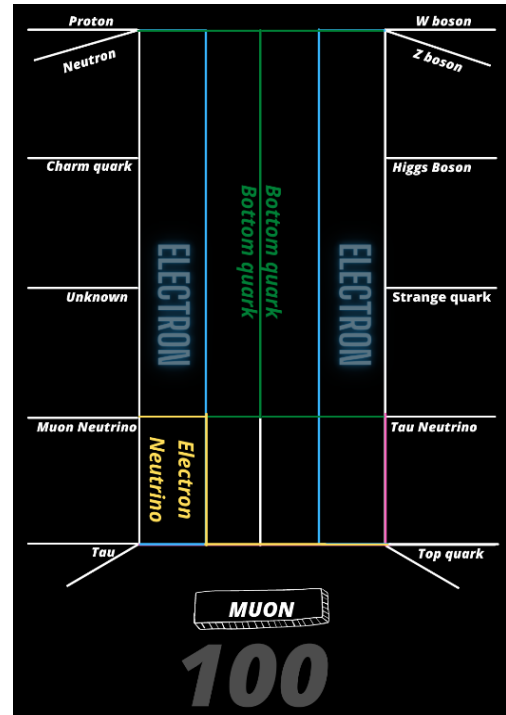


Figure 15

(Used: 1,2,3,4,5,7,8,9,10,11,12,13,18,19,20) (Un-used: 6,14,15,16,17)

**Step 6:** using combination 6 and 14 to form the down quark section (Red lines).

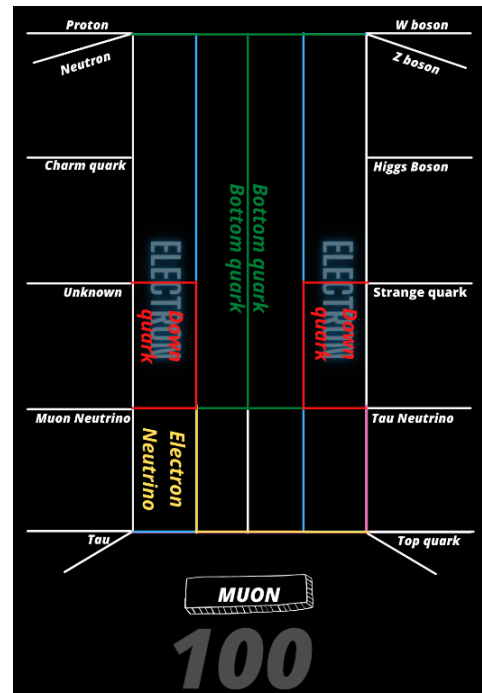


Figure 16

(Used: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,18,19,20)  
(Un-used: 15,16,17)

**Step 7:** Another interpretation task using combination 15 and 17 to form the up quark section (orange line).

Unknown Particle

$$15. \frac{1.666666667 \times 10^{-30}}{8.888888889 \times 10^{-31}(\text{Electron})} = 1.875(\text{Up quark})$$

Strange quark

$$17. \frac{1.666666667 \times 10^{-28}}{3.333333333 \times 10^{-30}(\text{Up quark})} = 50\left(\frac{1}{2} \text{ Muon}\right)$$

The interpretation says that the unknown particle extends to the electron line to form the up quark line and strange quark shoots through the middle line to join with up quark (Figure 17).

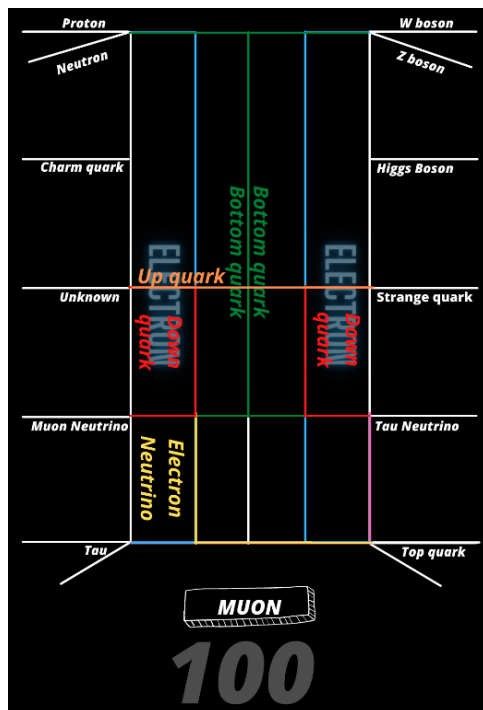


Figure 17

(Used: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,17,18,19,20)  
(Un-used:16)

**Step 8:** The charm quark confirms all that has been done with secondary result combination 16;

Charm quark

$$16. \frac{2.222222222 \times 10^{-27}}{8.888888889 \times 10^{-31}(\text{Electron})} = 2500\left(\frac{1}{2} \text{ Bottom quark}\right)$$

It says charm quark extend to electron line which is half of bottom quark section as shown in figure 18;

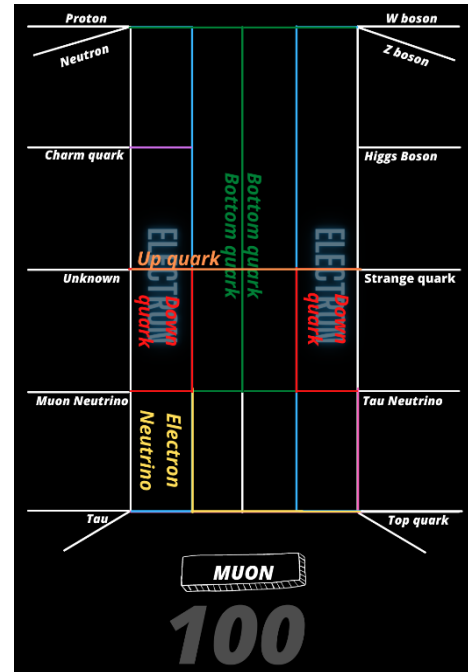


Figure 18

(Used: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20)  
(Un-used: none)

**Step 9:** Constructed Particle Tree

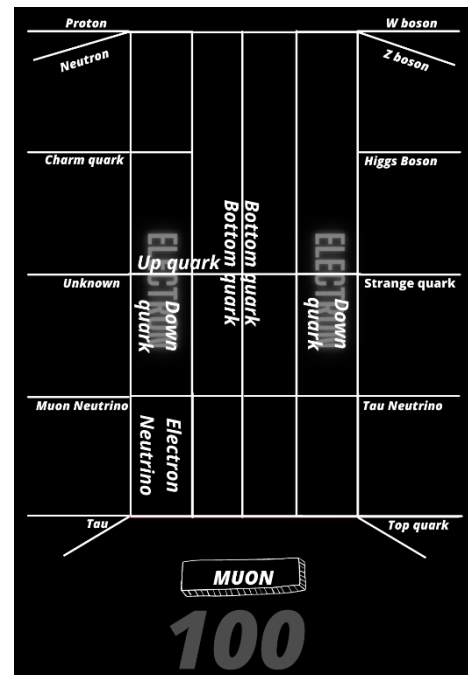


Figure 19

## 11. Discussion

This is the subatomic section of the “Theory of Everything” (ToE) as the particle tree. The whole concept of the universe as the fact that its present value is 100 which is the difference between both major dimensions at the moment unless both dimensions merge, is also applied to the existence of these

subatomic particles. As there are two major dimensions in the universe (dark dimension and visible dimension) and their difference is 100 which is the value of the universe at the moment, if everything of the visible becomes the dark, i.e. all energy changes to dark energy and all matter changes to dark matter, there will be no difference as both are in unity and the particles will exist in their dark form, the value of the universe will be 1 if that happens [20,21]. Presently, both dimensions are not merged, there is a difference as 100 (present value of the universe). Thus, as the subatomic particles is a small world under the universe, the root that will give birth to that world must carry the present value of the universe (100) from a hint as  $\frac{S_{ce}}{\alpha} = 100$ , it turned out to be that it was a particle carrying the value as the root to the sub-atomic world. As I've said, the mass of these particles affect space-time even at the smallest scale. Hence, their values can't be just any value at random, they follow a sequence according to the ToE. The mathematical combination of the mass of two particles in the branch particle group results to the mass of another particle (stem particles). If the results are traced, it leads to a root particle as the "muon" which forms the stem structure itself. In Figure 13, it is observed clearly that the electron which is the official particle for unification of the universe forms the inner stem. So, it can be said that the electron and muon are the pillar and foundation (root) of the standard model respectively. The nickname for muons as fat electrons isn't bad at all. However, the essence of the particle tree construction is to show the links/relation between the particles by their masses and regardless of the fact that these particles can exist or be created at certain occasions, they were initially formed/created through the connections from a root and are all linked with the presence of space-time shown by the particle tree. A lot can be dug out from its representation and results, for example; there is a line that flows from proton to tau to form the electron line in the presence of the muon. The same tau is linked to tau neutrino and muon neutrino in which the electron neutrino's territory is formed around the tau and muon neutrino branch, this electron neutrino territory formed directly on the electron's section, strange quark line extends to meet the Up quark line produced from an unknown particle (from the branch particle sequence, the unknown particle is most likely to have a charge of 0), the up and down quark lines are connected together. Perhaps, I wouldn't know exactly what the scientists behind the muon g-2 results are seeing but whatever happens, it should be known that they're dealing with the root/foundation of the standard model and yes it is the window to the subatomic world as confirmed by the ToE.

Parameters representing an entity must be related to its quantum form. This is why the default states of matter, energy, dark matter and dark energy are in their quantum form. We can't have a parameter that uniquely represents matter/energy/dark matter/dark energy in its classical form. This is also a method that can be used in the ultimate physics equation, for example, in the equation;

$$\frac{S}{[M_d \times c]^2} = G$$

The equation deals with constants to show the link between dark matter, gravity and space-time but it also means we can insert a mass of dark matter in classical form with a space-time nature in a planet to get a corresponding gravitational effect by the particular dark matter object, this is how to create an equation using the ultimate physics equation. Get the link using constants/parameter, this will tell if your equation is correct, just like Albert Einstein's equation ( $E=Mc^2$ ) turned out to be correct when constants are used.

However, if big masses of matter create curvature on space-time to cause gravity, small/tiny masses will do the same but the difference is that we wouldn't notice the gravitational effect because it would be a very tiny one. This means, we can prove the existence of subatomic particles through gravity and space-time.

Inserting parameters using UPE equation 1;

$$\frac{S}{2[G \times S^2 \times m_{particle}]} = \frac{m_e}{m_{particle}}$$

The existence of subatomic particles can also be proven.

$2[G \times S^2 \times m_{particle}]$  as the denominator was initially how I tried to enter into the quantum realm from tweaking. Perhaps, in math; S as the numerator will cancel out a S in  $S^2$  in the denominator to give what I call the quantum realm equation as;

$$\frac{1}{2[G \times S \times m_{particle}]} = \frac{m_e}{m_{particle}}$$

The ratio between the mass of electron and the mass of muon is;

$$\frac{0.5}{100} = 5 \times 10^{-3}$$

$$\frac{1}{2[G \times S \times m_{muon}]} = P^x$$

$$\frac{1}{2[(6.67 \times 10^{-11}) \times (1.50 \times 10^{10}) \times 100]} = 5 \times 10^{-3}$$

*"Use exact values for constants in UPE result 11 for accurate result"*

The ratio between the mass of electron and the mass of tau is;

$$\frac{0.5}{1875} = 2.666666667 \times 10^{-4}$$

$$\frac{1}{2[G \times S \times m_{tau}]} = P^x$$

$$\frac{1}{2[(6.67 \times 10^{-11}) \times (1.50 \times 10^{10}) \times 1875]} = 2.666666667 \times 10^{-4}$$

*"Use exact values for constants in UPE result 11 for accurate result"*

The ratio between the mass of electron and the mass of proton is;

$$\frac{0.5}{937.5} = 5.333333333 \times 10^{-4}$$



$$\frac{1}{2[G \times S \times m_{proton}]} = P^x$$

$$\frac{1}{2[(6.67 \times 10^{-11}) \times (1.50 \times 10^{10}) \times 937.5]} = 5.333333333 \times 10^{-4}$$

“Use exact values for constants in UPE result 11 for accurate result”

Tiny masses of matter can cause a tiny curvature on space-time.

#### UPE result 11: Accuracy

“Check around this paper for similarity in values.”

Table 1 contains values from CODATA 2018 [3], I used those values initially because I didn't want to disregard the efforts of the scientists behind the experimental findings but again there exist exact values. Using a scientific calculator to confirm some of the calculations I did with approximate values from CODATA, the result isn't the exact as it is meant to be but I still presented the exact result regardless, this is because I used experimental values (approx.) not the exact (theoretical).

Apart from the constants I discovered, the accuracy of others is to be checked.

For example; In  $\mu_0 \cdot \varepsilon_0 \cdot c^2 = 1$ , if the experimental values are used and inserted in a calculator, 1 as the exact result won't be gotten because there are slight errors in most of these values.

Constant	Value	Accuracy Checkbox
Electric Constant (F/m)	$8.8888888889 \times 10^{-12}$	✓
Magnetic Constant (H/m)	$12.5 \times 10^{-7}$	✓

Test;

$$\mu_0 \cdot \varepsilon_0 \cdot c^2 = 1 \rightarrow (12.5 \times 10^{-7}) \times (8.8888888889 \times 10^{-12}) \times (3 \times 10^8)^2 = 1.$$

$$\frac{S}{[\mu_0 \cdot \varepsilon_0 \cdot c]} \rightarrow \frac{(1.50 \times 10^{10})}{[(12.5 \times 10^{-7}) \times (8.8888888889 \times 10^{-12}) \times (3 \times 10^8)]} = 4.5 \times 10^{18} (E_d)$$

$$E \times \mu_0 \times \varepsilon_0 = m_e \rightarrow (4.5 \times 10^{16}) \times (12.5 \times 10^{-7}) \times (8.888888889 \times 10^{-12}) = 0.5$$

All accuracy test should be confirmed with a scientific calculator and the use of experimental values should cease henceforth. If noticed, it is seen that the electric constant follows the same value pattern as the mass of electron, bottom quark and down quark in kg. Throughout this paper, similarities in values for constants will be seen, check around.

For the Newton gravitational constant, CODATA value reads  $6.67430(15) \times 10^{-11}$ .

$$\frac{1}{c} \rightarrow \frac{1}{(3 \times 10^8)} = 3.333333333 \times 10^{-9}$$

$$(8.888888889 \times 10^{-12}) \times (12.5 \times 10^{-7}) \times (3 \times 10^8) = 3.333333333 \times 10^{-9}$$

$$(12.56 \times 10^{-7}) \times (8.85 \times 10^{-12}) \times (3 \times 10^8)^2 = 1.00404$$

The speed of light as  $3 \times 10^8$  is its accurate value, a lesser value could be gotten from measurement. The accuracy sequence can be traced from the space-time parameter.

The space-time parameter is accurate, if it is combined with the speed of light, it gives the accurate value of the default dark energy photon value, energy photon value, dark matter mass, matter mass.

Constant	Value	Accuracy Checkbox
Space-time parameter	$1.5 \times 10^{10}$	✓
Dark Energy Photon (default)	$4.5 \times 10^{18}$	✓
Energy Photon (default)	$4.5 \times 10^{16}$	✓
Dark Matter Mass (default)	50	✓
Matter Mass (default)	0.5	✓
Speed of light (ms <sup>-1</sup> )	$3 \times 10^8$	✓

$$\frac{(1.50 \times 10^{10})}{[(12.566 \times 10^{-7}) \times (8.85 \times 10^{-12}) \times (3 \times 10^8)]} = 4.496034947 \times 10^{18}$$

The combination above is supposed to result to the dark energy default photon value, but the above result is gotten because of the presence of error in both the magnetic and electric constant. To fix, the theory of everything says

But,

$$50 \times [6.67430(15) \times 10^{-11}] = 3.33715 \times 10^{-9}$$

The exact field value is supposed to be the result from dark matter mass and the gravitational constant combination. From the Theory of Everything, the gravitational constant and universe field value is;

Constant	Value	Accuracy Checkbox
Gravitational Constant (c/MeV)	$6.666666667 \times 10^{-11}$	✓
Universe field value (c <sup>-1</sup> )	$3.333333333 \times 10^{-9}$	✓



$$2\pi = 6.25$$

$$2 \times 3.125 = 6.25$$

$$4\pi = 12.5$$

$$4 \times 3.125 = 12.5$$

$$8\pi = 25$$

$$8 \times 3.125 = 25$$

$$16\pi = 50$$

$$16 \times 3.125 = 50$$

$$32\pi = 100$$

$$32 \times 3.125 = 100$$

They are essential in the formation of physics and math formulas and the reason behind formulas like  $4\pi\epsilon_0, \frac{8\pi r_e^2}{3}, 2\pi\hbar c^2$  and the rest, they were discovered before I was born but I'm telling the secret. Scientists used pi to create their formulas from a fact that all constants using the UPE represent entities used in creation of the universe, the constants are secretly justified by pi and its extension values but one wouldn't know. Pi connects these constants (everything) together as well as connecting the entities together in their respective areas during creation of the universe. Imagine trying to fix these entities represented by constants in their respective areas during creation and there's someone to assist you (pi). It's also the reason behind the fact that planetary bodies/planets are spherical/circular, it all happened due to pi's involvement in creation as the assist value.

Hence, the related formulas with pi can be expressed in another form but using pi makes the expression easier and shorter just like in creation. Just because pi is the assist value and for the sake of "similarity in values check" in this paper, listing pi values from 1-12;

$$\pi = 3.125$$

$$2\pi = 6.25$$

$$3\pi = 9.375$$

$$4\pi = 12.5$$

$$5\pi = 15.625$$

$$6\pi = 18.75$$

$$7\pi = 21.875$$

$$8\pi = 25$$

$$9\pi = 28.125$$

$$10\pi = 31.25$$

$$11\pi = 34.375$$

$$12\pi = 37.5$$

*"Check around this paper for similarity in values."*

Combination of all constants using the UPE is secretly justified (connected) by pi values. For example, by reading this paper, one would know that;

$$\frac{1}{M_d \times G} = c$$

To show pi's presence, the above equation can be written

as;

$$\frac{1}{16\pi \times G} = c$$

$$\frac{1}{(16 \times 3.125) \times 6.6666666667 \times 10^{-11}} = 3 \times 10^8$$

This one is quite easy to know. In a case where the connection between the planck constant and the electric constant through pi is to be revealed as in;

$$h = \epsilon_0$$

$$6.6666666667 \times 10^{-16} = 8.8888888889 \times 10^{-12}$$

How can it be done and how the hell can the planck constant and the electric constant be connected if not knowing through substitution from formulas. Since pi is the assist (ease) value, we can say;

$$\frac{h}{24\pi} = \frac{6.6666666667 \times 10^{-16}}{(24 \times 3.125)} = 8.8888888889 \times 10^{-18}$$

Cheat code applied. The planck constant in use is in eV.s, multiply by 1M;

$$8.8888888889 \times 10^{-18} \times 1000000 = 8.8888888889 \times 10^{-12}$$

The result is the electric constant. 1M can also be written as  $(32\pi)^3$ .

The creator of the universe is aware of these ultimate and fundamental constants and if they are not exact as related to creation and also just random values without a sequence, the universe wouldn't be as planned. Even an output of random numbers has a sequence behind.

The Faraday constant from the Theory of Everything reads;

Constant	Value	Accuracy Checkbox
Faraday constant (C.mol <sup>-1</sup> )	96000	✓

The Faraday constant, F is equal to;

$$N_A \times e$$

$N_A$  is the Avogadro constant;

$$N_A = \frac{F}{e}$$

$$N_A = \frac{96000}{(1.6 \times 10^{-19})} = 6 \times 10^{23} \text{ mol}^{-1}$$

The Gas constant (R) from the ToE reads;

Constant	Value	Accuracy Checkbox
Gas constant (J.K <sup>-1</sup> .mol <sup>-1</sup> )	8	✓

$$R = N_A k$$

The Boltzmann constant k is given as;

$$k = \frac{R}{N_A}$$

$$k = \frac{8}{(6 \times 10^{23})} = 1.333333333 \times 10^{-23} J.K^{-1}$$

Constant	Value	Accuracy Checkbox
Avogadro constant	$6 \times 10^{23}$	✓
Boltzmann constant (k)	$1.333333333 \times 10^{-23}$	✓

Stefan Boltzmann constant;

$$\frac{k^2 4\pi e}{Sh^2} = \frac{(1.333333333 \times 10^{-23})^2 \times 4 \times (3.125) \times (1.6 \times 10^{-19})}{(1.50 \times 10^{10}) \times (6.666666667 \times 10^{-34})^2} = 5.333333333 \times 10^{-8} W.m^{-2}.K^{-4}$$

“The actual Stefan-boltzmann constant formula is out of range”, the above is the equation from space-time.

Constant	Value	Accuracy Checkbox
Stefan Boltzmann constant	$5.333333333 \times 10^{-8}$	✓

As the exact values of these constants are now revealed, the accurate value of any other constant can be gotten by simply inserting the accurate values in their formula.

$$\frac{\mu_0}{4\pi \times 10^{-7}} = 1$$

It's only with the exact values that it result to exactly 1. CODATA value reads 1.0000000055(15) and more. Using the exact;

$$\frac{12.5 \times 10^{-7}}{4 \times 3.125 \times 10^{-7}} = 1$$

Wavelength of 1eV/c particle with exact values;

$$\frac{hc}{1eV} = \frac{(6.666666667 \times 10^{-34}) \times (3 \times 10^8)}{(1.6 \times 10^{-19})} = 1.25 \times 10^{-6} m$$

Rydberg Constant;

$$R_\infty = \frac{c\alpha^2 m_e}{2h} = \frac{(3 \times 10^8) \times 0.0072^2 \times (8.888888889 \times 10^{-31})}{2 \times (6.666666667 \times 10^{-34})} = 10368000 m^{-1}$$

Quantum circulation;

$$\frac{h}{2m_e} = \frac{(6.666666667 \times 10^{-34})}{2 \times (8.888888889 \times 10^{-31})} = 3.75 \times 10^{-4} m^2.s$$

1<sup>st</sup> Radiation Constant;

$$\frac{2\pi hc^2}{1} = \frac{2 \times (3.125) \times (6.666666667 \times 10^{-34}) \times (3 \times 10^8)^2}{1} = 3.75 \times 10^{-16} W.m^2$$

Impedance of vacuum  $Z_0$ ;

$$\sqrt{\frac{\mu_0}{\epsilon_0}} = \sqrt{\frac{(12.5 \times 10^{-7})}{(8.888888889 \times 10^{-12})}} = 375 \Omega$$

2<sup>nd</sup> Radiation constant;

$$\frac{hc}{k} = \frac{(6.666666667 \times 10^{-34}) \times (3 \times 10^8)}{(1.333333333 \times 10^{-23})} = 0.015 m.K$$

Charge/Quantum Ratio;

$$\frac{e}{h} = \frac{(1.6 \times 10^{-19})}{(6.666666667 \times 10^{-34})} = 2.4 \times 10^{14} A/J$$

Josephson constant  $K_J$ ;

$$\frac{2e}{h} = \frac{2 \times (1.6 \times 10^{-19})}{(6.666666667 \times 10^{-34})} = 4.8 \times 10^{14} Hz/V$$

Magnetic flux quantum  $\phi_0$ ;

$$\frac{h}{2e} = \frac{(6.666666667 \times 10^{-34})}{2 \times (1.6 \times 10^{-19})} = 2.083333333 \times 10^{-15} Wb$$

Electron Molar Mass;

$$m_e N_A = (8.888888889 \times 10^{-31}) \times (6 \times 10^{23}) = 5.333333333 \times 10^{-7} kg.mol^{-1}$$

Molar Planck constant;

$$h N_A = (6.666666667 \times 10^{-34}) \times (6 \times 10^{23}) = 4 \times 10^{-10} J.s/mol$$

Quantum/charge Ratio;

$$\frac{h}{e} = \frac{(6.666666667 \times 10^{-34})}{(1.6 \times 10^{-19})} = 4.166666667 \times 10^{-15} J/A$$

Without someone stating the fact, as accurate values are used, it is observed that there is a pattern and similarity existing within these values. Again, the creator of the universe is aware of these ultimate and fundamental constants and if they are not exact and also just random values without a sequence, the universe wouldn't be as planned. See UPE result 12 and 13 for more.



Constant	Value	Accuracy Checkbox
Rydberg constant	10368000	✓
Quantum of circulation	$3.75 \times 10^{-4}$	✓
1 <sup>st</sup> Radiation Constant	$3.75 \times 10^{-16}$	✓
2 <sup>nd</sup> Radiation constant	0.015	✓
Impedance of vacuum $Z_0$	375	✓
Wavelength of 1eV/c particle	$1.25 \times 10^{-6}$	✓
Magnetic flux quantum $\Phi_0$	$2.083333333 \times 10^{-15}$	✓
Quantum/charge Ratio	$4.166666667 \times 10^{-15}$	✓
Electron Molar Mass	$5.333333333 \times 10^{-7}$	✓
Molar Planck constant	$4 \times 10^{-10}$	✓
Charge/Quantum ratio	$2.4 \times 10^{14}$	✓
Josephson constant	$4.8 \times 10^{14}$	✓

### UPE result 12: Electron radius/ Compton wavelength/ Bohr Radius (Accuracy)

→ Electron Radius

$$r_e = \frac{ke^2}{m_e c^2} = \frac{(9 \times 10^9) \times (1.6 \times 10^{-19})^2}{(8.888888889 \times 10^{-31}) \times (3 \times 10^8)^2} = 2.88 \times 10^{-15} m$$

→ Electron radius from space-time;

$$B^X = \frac{S^3 e^4 c}{\alpha^3} = 1.777777778 \times 10^{-30}$$

$$r_e = \frac{k\alpha^3}{m_e S^3 e^2 c^3} = \frac{ke^2}{m_e B^X c^2} = P^x$$

$$r_e = \frac{(9 \times 10^9) \times (1.6 \times 10^{-19})^2}{0.5 \times (1.777777778 \times 10^{-30}) \times (3 \times 10^8)^2} = 2.88 \times 10^{-15} m$$

→ Compton wavelength

$$\lambda_e = \frac{\hbar}{m_e c} = \frac{(1.066666667 \times 10^{-34})}{(8.888888889 \times 10^{-31}) \times (3 \times 10^8)} = 4 \times 10^{-13} m$$

$$\lambda_e = r_e \alpha^{-1} = 2.88 \times 10^{-15} \times 0.0072^{-1} = 4 \times 10^{-13} m$$

→ Compton wavelength from space-time

$$B^X = \frac{S^3 e^4 c}{\alpha^3} = 1.777777778 \times 10^{-30}$$

$$\lambda_e = \frac{\hbar \alpha^3}{m_e S^3 e^4 c^2} = \frac{\hbar}{m_e B^X c} = P^x$$

$$\lambda_e = \frac{(1.066666667 \times 10^{-34})}{0.5 \times (1.777777778 \times 10^{-30}) \times (3 \times 10^8)} = 4 \times 10^{-13} m$$

→ Bohr Radius

$$a_\infty = \frac{\hbar^2}{k m_e e^2} = \frac{(1.066666667 \times 10^{-34})^2}{(9 \times 10^9) \times (8.888888889 \times 10^{-31}) \times (1.6 \times 10^{-19})^2}$$

$$= 5.555555556 \times 10^{-11} m$$

$$a_\infty = r_e \alpha^{-2} = (2.88 \times 10^{-15}) \times 0.0072^{-2} = 5.555555556 \times 10^{-11} m$$

$$a_\infty = \frac{\alpha}{4\pi R_\infty} = \frac{0.0072}{4 \times (3.125) \times (10368000)} = 5.555555556 \times 10^{-11} m$$

→ Bohr Radius from space-time

$$B^X = \frac{S^3 e^4 c}{\alpha^3} = 1.777777778 \times 10^{-30}$$

$$a_\infty = \frac{\hbar \alpha^2}{m_e S^3 e^4 c^2} = \frac{\hbar^2}{k m_e B^X e^2} = P^x$$

$$a_\infty = \frac{\hbar^2}{k m_e B^X e^2} = \frac{(1.066666667 \times 10^{-34})^2}{(9 \times 10^9) \times 0.5 \times (1.777777778 \times 10^{-30}) \times (1.6 \times 10^{-19})^2} = 5.555555556 \times 10^{-11} m$$

Just in case it's been imagined how the formula above  $\frac{\hbar \alpha^2}{m_e S^3 e^4 c^2}$  was formed.

The actual formula from  $\frac{\hbar^2}{k m_e B^X e^2}$  is supposed to result to  $\frac{\hbar^2 \alpha^3}{k m_e S^3 e^6 c}$ , but the resulting formula has to be reduced because  $e^6$  is out of range.

To reduce the supposed equation;

$$\frac{\hbar^2 \alpha^3}{k m_e S^3 e^6 c} \times \frac{1}{k m_e S^3 e^6} \times \frac{1}{c} \left[ \frac{ke^2}{\hbar \alpha} = c \right] = \frac{\hbar^2 \alpha^3}{k^2 m_e S^3 e^8 / \hbar \alpha} \left[ \frac{ke^2}{\hbar \alpha} = c \right] = \frac{\hbar^3 \alpha^4}{k^2 m_e S^3 e^8} \times \frac{\hbar^2 \alpha^2}{m_e S^3 e^4} \times \frac{\hbar^2 \alpha^2}{k^2 e^4}$$

If  $\frac{ke^2}{\hbar \alpha} = c$ , then  $\frac{\hbar^2 \alpha^2}{k^2 e^4} = \frac{1}{c^2}$ . Thus;

$$\frac{\hbar^3 \alpha^4}{m_e S^3 e^4} \times \frac{1}{c^2} = \frac{\hbar^2 \alpha^2}{m_e S^3 e^4 c^2}$$

That's how the equation was gotten.

Constant	Value	Accuracy Checkbox
Electron Radius	$2.88 \times 10^{-15}$	✓
Compton Wavelength	$4 \times 10^{-13}$	✓
Bohr Radius	$5.555555556 \times 10^{-11}$	✓

### UPE result 13: Cyclotron Frequency/Magnetron (Accuracy)

→ Electron cyclotron frequency

$$w_{cycl}^e/B = \frac{e}{m_e} = \frac{(1.6 \times 10^{-19})}{(8.8888888889 \times 10^{-31})} = 1.8 \times 10^{11} rad s^{-1} T^{-1}$$

→ Electron cyclotron frequency from space-time

$$w_{cycl}^e/B = \frac{\alpha^3}{m_e S^3 e^3 c} = \frac{e}{m_e \times B^X} = \frac{(1.6 \times 10^{-19})}{0.5 \times (1.7777777778 \times 10^{-30})} = 1.8 \times 10^{11} rad s^{-1} T^{-1}$$

→ Proton cyclotron frequency

$$w_{cycl}^p/B = \frac{e}{m_p} = \frac{(1.6 \times 10^{-19})}{(1.6666666667 \times 10^{-27})} = 9.6 \times 10^7 rad s^{-1} T^{-1}$$

→ Proton cyclotron frequency from space-time

$$B^X = \frac{S^3 e^4 c}{\alpha^3} = 1.7777777778 \times 10^{-30}$$

$$w_{cycl}^p/B = \frac{\alpha^3}{m_p S^3 e^3 c} = \frac{e}{m_p \times B^X} = \frac{(1.6 \times 10^{-19})}{937.5 \times (1.7777777778 \times 10^{-30})} = 9.6 \times 10^7 rad s^{-1} T^{-1}$$

→ Bohr Magneton

$$\mu_B = \frac{eh}{2m_e}$$

$$\mu_B = \frac{(1.6 \times 10^{-19}) \times (6.6666666667 \times 10^{-22})}{2 \times (8.8888888889 \times 10^{-31})} = 6 \times 10^{-11} MeV T^{-1}$$

→ Bohr Magneton from space-time

$$B^X = \frac{S^3 e^4 c}{\alpha^3} = 1.7777777778 \times 10^{-30}$$

$$\mu_B = \frac{h\alpha^3}{S^3 e^3 c} = \frac{eh}{2m_e \times B^X} = \frac{(1.6 \times 10^{-19}) \times (6.6666666667 \times 10^{-22})}{2 \times (0.5) \times (1.7777777778 \times 10^{-30})} = 6 \times 10^{-11} MeV T^{-1}$$

Converting to J.T<sup>-1</sup>

$$(6 \times 10^{-11}) \times 1000000 \times (1.6 \times 10^{-19}) = 9.6 \times 10^{-24} J.T^{-1}$$

→ Nuclear Magneton

$$\mu_N = \frac{eh}{2m_p}$$

$$\mu_N = \frac{(1.6 \times 10^{-19}) \times (6.6666666667 \times 10^{-22})}{2 \times (1.6666666667 \times 10^{-27})} = 3.2 \times 10^{-14} MeV T^{-1}$$

→ Nuclear Magneton from space-time

$$B^X = \frac{S^3 e^4 c}{\alpha^3} = 1.7777777778 \times 10^{-30}$$

$$\mu_N = \frac{h\alpha^3}{2m_p S^3 e^3 c} = \frac{eh}{2m_p \times B^X} = \frac{(1.6 \times 10^{-19}) \times (6.6666666667 \times 10^{-22})}{2 \times (937.5) \times (1.7777777778 \times 10^{-30})} = 3.2 \times 10^{-14} MeV T^{-1}$$

Converting to J.T<sup>-1</sup>

$$(3.2 \times 10^{-14}) \times 1000000 \times (1.6 \times 10^{-19}) = 5.12 \times 10^{-27} J.T^{-1}$$

Bohr Magneton is a physical that expresses the magnetic moment of an electron caused by either its orbital or spin angular momentum

Nuclear magneton is the magnetic dipole moment for heavier particles like protons, atomic nuclei etc.

Constant	Value	Accuracy Checkbox
Electron Cyclotron Frequency	$1.8 \times 10^{11} rad s^{-1} T^{-1}$	✓
Proton Cyclotron Frequency	$9.6 \times 10^7 T^{-1}$	✓
Bohr Magneton	$6 \times 10^{-11} MeV T^{-1}$	✓
Nuclear Magneton	$3.2 \times 10^{-14} MeV T^{-1}$	✓

The explanations of these constants are already known which is why I didn't include their explanation but with the now revealed accuracy of these constants including the mass of subatomic particles, the accurate value of any other constant can be gotten if its formula involves a combination of any of them. Any calculation done before this section and in previous papers with the approximate values of the constants from CODATA, I did it to not disregard the efforts of the scientists behind them but the actual values of these constants from the Theory of Everything should be used to get exact results. Corrections should be effected on the next CODATA table and other areas immediately.

Note; If the space-time parameter is linked to these important constants, it also means that the space-time parameter is linked to other minor constants in physics not mentioned in this paper, using B<sup>X</sup>.

#### UPE result 14: Caution!

It is important to watch out for the obvious equations from links when using the UPE, it is expected that the equation be reduced to its final form to know the actual expression. Using four examples to describe;

First;

$$M_d \times c \times G = 1$$

As  $S = M_d \times c$ , the equation can be reduced to;

$$S \times G = 1$$

Second;

$$M_d = \frac{1}{G \times c}$$

As  $S = \frac{1}{G}$ , the equation can be reduced to;

$$M_d = S \times c$$

Third;

$$e = \frac{c^2 \times \alpha \times (\epsilon_0 \times \mu_0)^2}{m_e}$$

As,  $c^2 \times \epsilon_0 \times \mu_0 = 1$ , the equation can be reduced to;

$$e = \frac{\alpha \times \epsilon_0 \times \mu_0}{m_e}$$

Fourth;

$$E_d = \frac{SE}{cm_e}$$

As  $\frac{S}{c} = M_d$  and  $\frac{E}{m_e} = c^2$ , the equation can be reduced to;

$$E_d = M_d \times c^2$$

The “caution” section is done just in case the UPE is used and a formula is produced while there is a shorter or actual expression due to the equation not being reduced. The reduced version gives the actual meaning but the formed equations shows the link.

## 12. Conclusions and Recommendations

### → Conclusion

With the arrival of theoretical physics’ infinity stone (Ultimate Physics Equation), theoretical physics has now become its original form, the results from the UPE states the reality, there’s no time for false predictions and guessing. All the individuals complicating physics just to create a theory can stop now. Physics is straightforward, the UPE reveals the links of the universe. Everything is related and unified with the presence of space-time, every physical constant is related with the presence of the space-time parameter. The details displayed in this paper are some of the results I found in 2019 from discovering the Theory of Everything (UPE) with the space-time parameter. One can observe that the more a certain entity or requirement deviates from space-time, the more parameters involved in its formation using the UPE. The arrival of the space-time parameter to form the Ultimate Physics Equation was/is the missing piece in physics right from start. Let it be known that I’ve accomplished my first task on earth by delivering the “Theory of Everything” to the world.

### → Recommendation

1. The Theory of Everything should be studied in schools as basic physics.
2. The exact values of the fundamental constants should be updated immediately, this will lead to changes in physics textbooks, websites, centers etc.
3. The space-time parameter and the speed of light should be classified as ultimate constants and the rest in use as fundamental/physical constants.

All theoretical discoveries from the UPE results in this paper are novel, discovered and proposed by Prince C. Igbojesi.

**Statement:** This paper should be spread rapidly in order to revive physics quickly. This is the last revolution in physics; a student should tell a fellow student, teachers should teach students. Everyone should study the “Theory of Everything”.

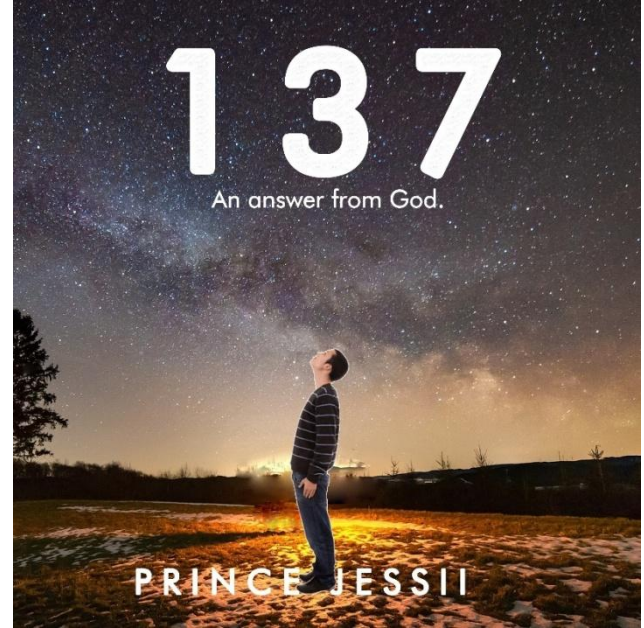


Figure 21

*The Book (137: An answer from God) on Amazon covers the other side of the Theory of Everything that is not science.*

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