EXTENDED VERSION OF DARK MATTER (VETHON) AND ITS RELATION WITH GOD PARTICLES (YOGON) AND CLIMATE CHANGE CRAVE FOR GREEN ENERGY TECHNOLOGY

Kannan Jegathala Krishnan

'Research Scientist & Coordinator – University Education,' The World Community Service Centre (WCSC), India
(Geographical Locations: South Eastern Countries)
'University Coordinator,' Kalasalingam University, Madurai, India
(Geographical Locations: South Eastern Countries)
'Authorised Representative,' Bharath University, India
(Geographical Location: Australia)

Abstract–**Newton's greatest achievement was the discovery of gravitational force (interaction between two particles); followed by Einstein, who discovered the interaction between two particles and the surrounding space comprised of the gravitational force. This then extended Newtonian physics with a different concept of gravity (as a distortion of space-time). Vethathiri discovered that not only mass acts on space but also space acts over the mass and named space as a Unified Force, which is defined as 'Self-Compressive Surrounding Pressure Force' as shown in Fig. 1.**

The Standard Model of Particle Physics answers many of the questions about the structure and stability of matter (Quarks, Leptons and Force-Carrier particles) but still there are many unanswered questions about Dark Matter, Dark Energy, mass and other phenomena. Even though the Standard Model of physics has discovered Higgs Boson (God Particle), it is still an incomplete theory. The new model of physics, which is named the 'Super-Standard Model' by the author of this paper, is also referred to as 'Vethathiri Model of the Universe' and extends modern physics (Quantum Mechanics and Relativity) with something totally new and explains Dark Matter, Dark Energy, mass and other phenomena and refines Einstein's Landmark Energy-mass equation $\underline{E=mc^2}$ to $\underline{E=mw^2}$.

The author of this paper concludes that the 'Unified Force' which is defined as 'Self-Compressive Surrounding Pressure Force' is the '$\underline{Dark\ Matter}$.' So far in physics, nobody has been able to explain what the 'Dark Matter' is. The author of this paper also concludes that '$\underline{Up\ Quark}$' should be the God Particle as per the Super-Standard Model and not Higgs Boson as predicted by the Standard Model of Particle Physics and names Dark Matter as '$\underline{Vethon}$' and God Particles as '$\underline{Yogon}$.' Repulsive Force is generated due to the friction between Dark Matter (Vethon) and the God Particles (Yogon) and the volume occupied in space by both 'Self-Compressive Surrounding Pressure Force' and Repulsive Force known as '$\underline{Dark\ Energy}$,' which was one of the most famous and most embarrassing problems in physics so far. The author of this paper names the Dark Energy as '$\underline{Sathyon}$' and Repulsive Force as '$\underline{Revathon}$.'

In the Super-Standard Model, mass is defined as 'Association of God Particles,' an atom is defined as 'Repulsive Force and its associated fluctuations' and the Down Quark is defined as 'Association of two God Particles (Up Quarks).' The author of this paper names the mass as '$\underline{Radhigon}$,' an atom as '$\underline{Vetha\text{-}Sathya\text{-}Kannon}$,' and the Down Quark as '$\underline{Sathya\text{-}Kannon}$.' The author has discovered that there are three electrons in protons and three electrons in neutrons, which are described in this paper. The Cosmological Movement of the Universe which is not understood so far in physics is explained in this paper, and the author concludes that the Universe is not expanding at an accelerating rate, only Dark Energy (Sathyon) is expanding and names the expansion of Dark Energy as '$\underline{Vetha\text{-}Sathyon}$' and the Cosmological Movement of the Universe as '$\underline{V\text{-}S\text{-}K\ Movement\ of\ the\ Universe}$.'

The author of this paper points out that Dark Matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force,' $\underline{PUSHES}$ the increased H_2O level, due to the warming of the Earth, towards the continents and islands initiating 'Climate Change,' which now leads to the discovery of a new definition and names 'Climate Change' as '$\underline{Akhtar\text{-}Kannan\ Change}$.' Some of the benefits of green energy technology are drastically reduced pollution and production of Hydrogen Energy from multiple sources throughout the Earth, burning of biodiesel that recycles CO_2 emissions; economic independence and eradication of 'Climate Change.'

The new model of physics which is named as the 'Super-Standard Model' by the author of the paper under the supervision of Senior Professor Sathyamurthy Mahalingiah from the World Community Service Centre, Aliyar, Pollachi, India will be the backbone for the change of science and technology in this 21st Century.

***Index Terms** – Dark Matter (Vethon), God Particles (Yogon), Dark Energy (Sathyon), Repulsive Force (Revathon), Mass (Radhigon), Atom (Vetha-Sathya-Kannon).*

This paper is an extended version of the paper titled, "Unified Force (Vethon) and its Relation with God Particles (Yogon) and Global Warming Crave for Green Energy Technology," published in the International Journal of Emerging Technology in Computer Science & Electronics (IJETCSE), ISSN: 0976-1353 Volume 12 Issue 2 – JANUARY 2015.

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I. INTRODUCTION

Newton, in his second letter to Bentley dated January 17, 1692-93 **deny** gravity and replies to Bentley: "You sometimes speak of gravity as essential and inherent to matter. Pray do not ascribe that notion to me, for the cause of gravity is what I do not pretend to know, and therefore would take more time to consider of it" [1].

Einstein was a great scientist in writing, and a philosopher in his thinking. Einstein says, **"Science without religion is lame and religion without science is blind"**. The limitations of gravitational repulsive force which puzzled Newton continued to puzzle Einstein. This is clearly seen in his famous saying, "When I compare all our theories to the mighty reality, they all are trash. However, they are the most precious ones that we have today." Einstein also says that better theories are yet to come and they should come [2].

Newton's gravity, Einstein's gravity and the Super-Standard Model (Vethathiri Model of the Universe) are discussed in Section II since all three models include space and the outline of Section II is shown in Fig. 2. Section II of the paper explains Dark Matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force,' the **evolution** of God Particles (Yogon), and the **generation** of Repulsive Force (Revathon) due to the **friction** between Dark Matter (Vethon) and God Particles (Yogon), which now lead to the refinement of Einstein's Landmark Energy-mass Equation $(E=mc^2)$ to $(E=mw^2)$ [1]; Time dilation and Length contraction in the Theory of Special Relativity.

The Standard Model of Particle Physics and the Super-Standard Model of Particle Physics are explained in Section III and the outline of Section III is shown in Fig. 8.

Section IV points out Dark Matter (Vethon) and its relation with 'Climate Change' craves for green energy technology. Section IV also reveals the discovery of a **new definition** for 'Climate Change,' and the outline of Section IV is shown in Fig. 19. The factors seeking green energy technologies to eradicate 'Akhtar-Kannan Change' are highlighted in Section IV. The conclusion and future work are discussed in Section V.
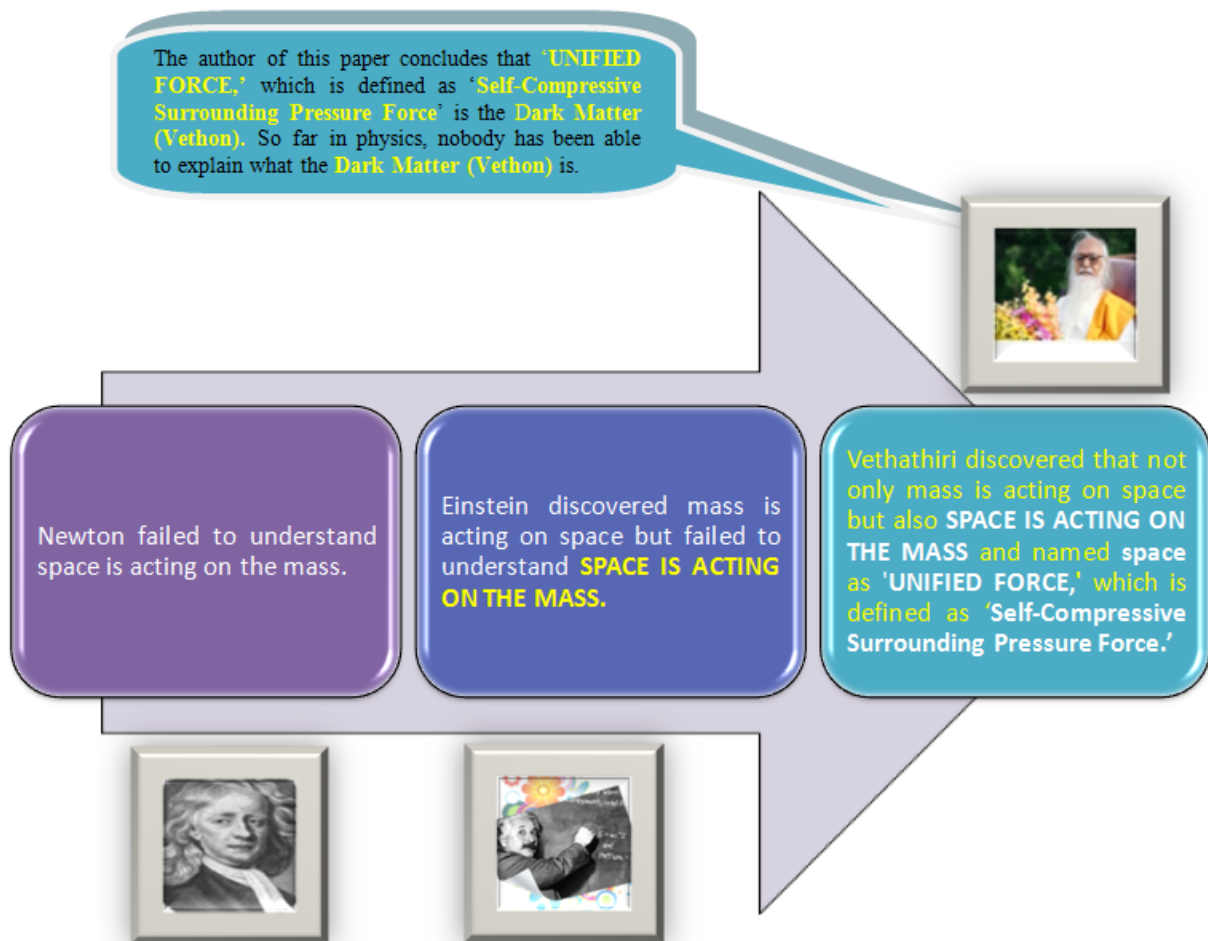

Fig. 1 **UNIFIED FORCE** which is defined as **'Self-Compressive Surrounding Pressure Force'** is the '**Dark Matter (Vethon)**.' So far in physics, nobody has been able to explain what the **Dark Matter (Vethon)** is.
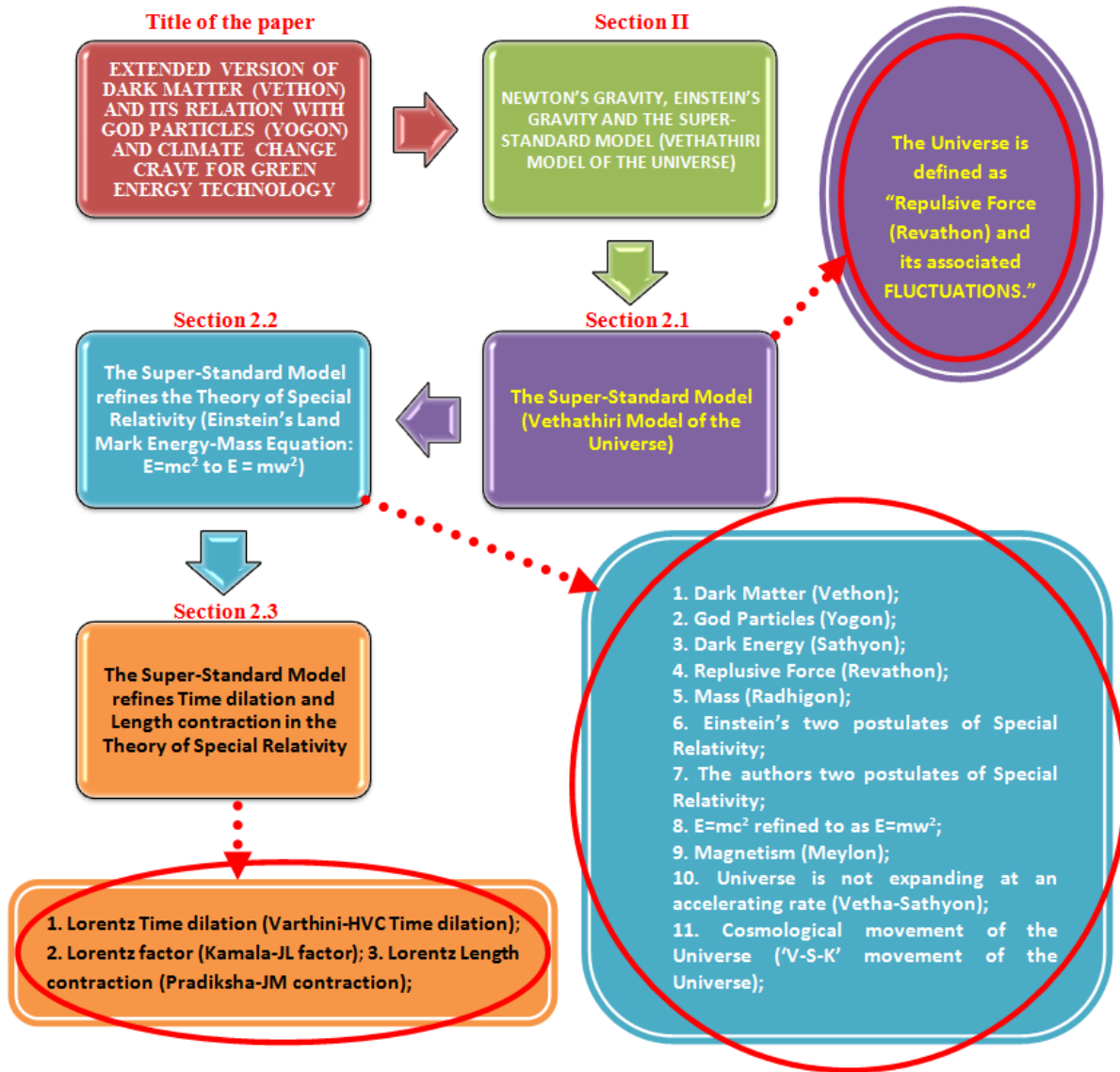
Fig. 2 Outline of Section II - Newton's Theory of Gravity, Einstein's Theory of Gravity and the Super-Standard Model (Vethathiri Model of the Universe).

II. NEWTON'S THEORY OF GRAVITY, EINSTEIN'S THEORY OF GRAVITY AND THE SUPER-STANDARD MODEL (VETHATHIRI MODEL OF THE UNIVERSE)

The most common and widely held explanations of the two theories of gravity are Newton's Theory of Gravity and Einstein's Theory of Gravity. Newton defined gravity as a *"force"* and Einstein defined gravity as a *"result of distortion of space-time"* [1]. Newton publicized that gravity is a force, which acts on all matter in the Universe (a function of both mass and distance) in his Theory of Universal Gravitation in 1680, as shown in equation (1) [3-5].

Gravitational Force = $(G \times m_1 \times m_2)/(d^2)$ .... (1)

Where: G = the gravitational constant, m_1 and m_2 = the masses of the two objects to calculate the force, and 'd' = the distance between the centres of gravity of the two masses.

Einstein who won a Noble Prize in physics in 1921 offered a very different explanation from Newton's Law of Gravity. It was from the General Theory of Relativity that gravity is a curvature in the shape of space-time, and gravity is not a force at all, according to Einstein [4-6]. Particles that start off on parallel paths should always remain parallel, but the fact is they do meet. Newton's theory says this can occur because of gravity, a force attracting those objects to one another or to a single, third object, but Einstein says this occurs because gravity is not a force but a curve in space-time [3-5]. **So far in physics, gravitational force is not understood to the root.**

Vethathiri [1] says that, eternal space is not nothingness; it is unlimited power of '**Unified Force**,' which is defined as '**Self-Compressive Surrounding Pressure Force**', which is the basis of all pervasive forces. Vethathiri names space as '**Unified Force**' and he says that there is **no void** in space.

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2.1 The Super-Standard Model (Vethathiri Model of the Universe)

Both Newton and Einstein's model of Gravity begin with particles but the new model of physics, which is named as the Super-Standard Model by the author of this paper **begins with space** and it begins from the beginning (primordial limitless state) and leads to new results in physics [1]. Scientists and engineers are concentrating on electrons and protons but **not on space** (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force.' Science and engineering begin from proton and an electron base but the Super-Standard Model **begins from space**. If gravity is true, all galaxies should come together. However, this is not possible since a void is not possible because **'Self-Compressive Surrounding Pressure Force' permeates everywhere in space.**

The Universe can be defined as "Repulsive Force (Revathon) and its associated fluctuations." The 'Net Force (N)' from the God Particles (Yogon) to everything in the Universe can be defined as: the product of the volume between any object occupied in space and the difference between the 'Self-Compressive Surrounding Pressure Force i.e. **Attractive Force (E)**' and Repulsive Force (w) as shown in Fig.3 and in equation (2).

Net Force (N) = Volume x [Self-Compressive Surrounding Pressure Force (E) – Repulsive Force (w)] …………………………………………………….. (2)

'Self-Compressive Surrounding Pressure Force (E)' is **constant**, whereas Repulsive Force (w) **varies** due to the time factor [2]. Mass (Radhigon) is directly proportional to the product of the volume of the object occupied in space and the difference between the 'Self-Compressive Surrounding Pressure Force (E)' and the Repulsive Force (w) as shown in equation (3).

$$m \, \alpha \, V \, x \, [E-w] \, …………………........................ (3)$$

Where 'm' is the mass of the object; 'V' refers to the volume of any object occupied in space, which can be measured from God Particles to everything in the Universe.

For example, Total Grip Strength (N) is also referred to as Net Force (N) as shown in equation (4).

Total Grip Strength (N) = V x [E-w]……………………. (4)

Any mass or object with more Grip Strength will be too tough to move and with lower Grip Strength will be easier to move. The density of Gold (Au) is 19.32 g/cm^3 approximately, seven times greater than the density of Aluminium (Al) of 2.70 g/cm^3 [6] and therefore Grip Strength of gold (Au) will be seven times greater than Grip Strength of Aluminium (Al). The Grip Strength of Earth will be less compared to most of the planets because the weight of other planets is greater than that of Earth.
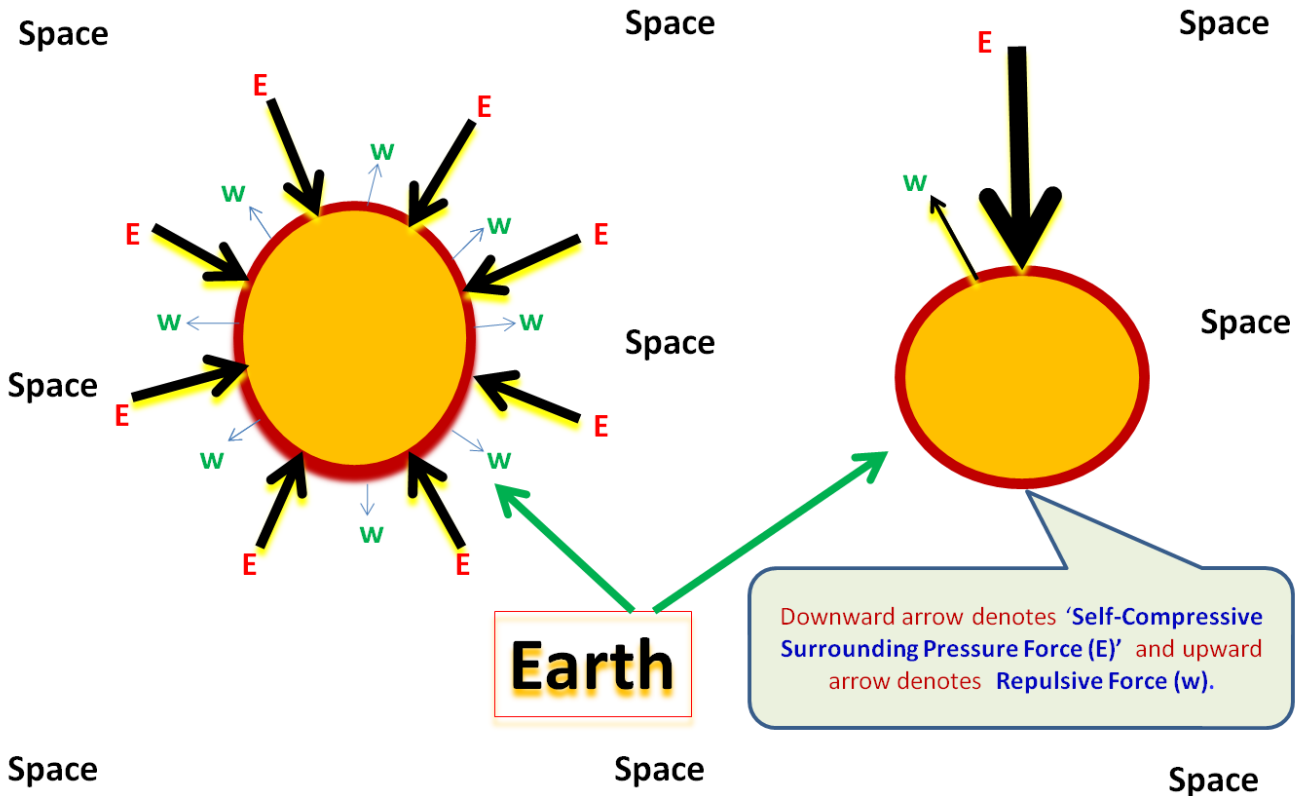

Fig. 3 Downward arrow denotes 'Self-Compressive Surrounding Pressure Force (E)' and upward arrow denotes 'Repulsive Force (w).'

2.2 The Super-Standard Model refines the Theory of Special Relativity (Einstein's Land Mark Energy-Mass Equation: $E=mc^2$ to $E = mw^2$)

The Super-Standard Model (Vethathiri Model of the Universe), explains the first four stages of its evolution diagrammatically as shown in Fig. 4. During the first stage of evolution, the **God Particles (Yogon)** have **expelled** due to the overlapping (Global/Spherical Form) of **space (Dark Matter/Vethon)** by its inherent **quality** of **constant** 'Self-Compressive Surrounding Pressure Force'. The God Particles (Yogon) have the innate capacity to **resist** space (Dark Matter/Vethon), which is defined as **'Self-Compressive Surrounding Pressure Force.'** Therefore,

everything in the Universe is made up of waves starting from **zero.** Every God Particle (Yogon) is a wave, **expelled** from a tiny portion of space (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' and every God Particle (Yogon) is in **rotation** due to overlapping (Global/Spherical Form) of space (Dark Matter/Vethon) by its inherent **quality** of **constant** 'Self-Compressive Surrounding Pressure Force.' Due to the **friction** between the God Particles (Yogon) and **space (Dark Matter/Vethon)**, which is defined as 'Self-Compressive Surrounding Pressure Force,' innumerable tiny waves are **constantly generated** from space (Dark Matter/Vethon), which is known as **Repulsive Force (Revathon)** [1], [2].
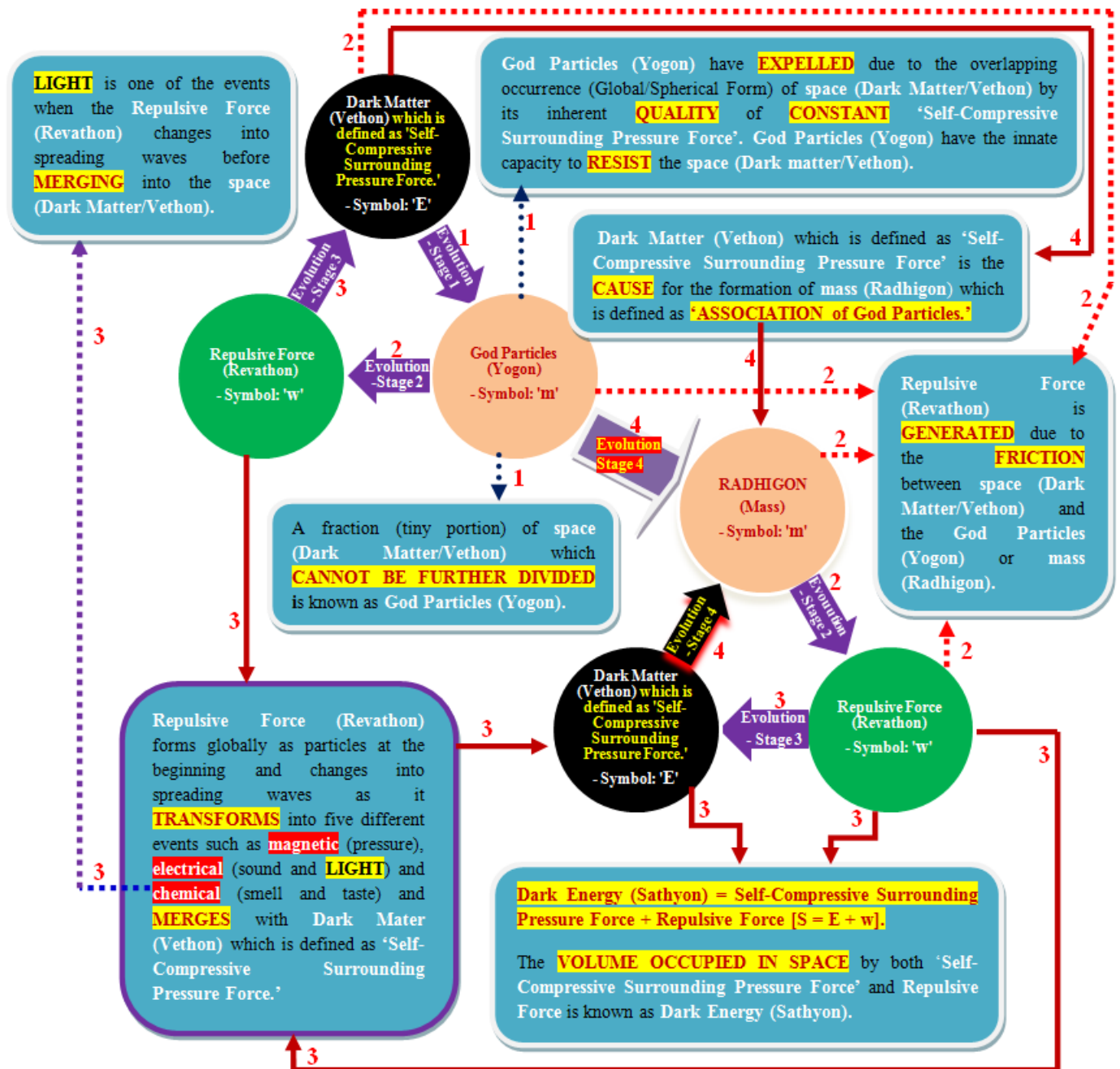

Fig. 4 The Super-Standard Model (First four stages of Evolution - stage one to four are represented in numbers, 1 to 4).

Attraction is caused by space (Dark Matter/ Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' (which never changes) and **repulsion** is caused by the whirling motion of God Particles (Yogon) via Repulsive Force (Revathon) and **fluctuations** occur only in Repulsive Forces (Revathon). Therefore, this Repulsive Force **cannot with stand** the space (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' for a long time and it folds, curves, twists and **merges** back into the space (Dark Matter/Vethon). The Repulsive Force (Revathon) initially becomes global-shaped particles because of the space (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force.' Whenever the Repulsive Force (the compressed, intensified force) extends itself, then it is regarded as 'Magnetism.' The author of this paper names magnetism as '**Meylon**.' According to the **intensity** of the mass, the Repulsive Force (Revathon) forms globally as particles at the beginning but changes into spreading waves as it **transforms** into five different events such as **magnetic** (pressure), **electrical** (sound and light) and **chemical** (smell and taste) waves [2].

Light is one of the events when the Repulsive Force (Revathon) changes into spreading waves before **merging** into the space (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force,' as shown in Fig. 5a & 5b**.** Therefore, the author concludes that space (Dark Matter/Vethon), the God Particles (Yogon), Repulsive Force (Revathon) which change into spreading waves before **merging** into the space (Dark Matter/Vethon), all are nothing but '**waves**' [1], [2].

Vethathiri says there is **no void** in space (Dark Matter/Vethon) and '**Self-Compressive Surrounding Pressure Force**' permeates throughout the space (Dark Matter/Vethon) [1], [2]. The discovery of Higgs Boson, which is the last particle of the Standard Model of physics, confirms that a new field exists that would permeate all of space and support the Super-Standard Model (Vethathiri Model of the Universe**)** [7].

Physicists were able to take measurements with amazing accuracy. To be precise, light travels at c = 299792458 ms^{-1} or approximately 300000 km per second. Light covers the distance to the moon at the speed of c = 299792458 ms^{-1} roughly in 1.3 seconds! Physicists also discovered new particles, such as electrons that could travel at incredible speeds [8].

Since there is **no void** in space (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' there will be lots of obstacles for the light to pass through space (Dark Matter/Vethon) due to 'Self-Compressive Surrounding Pressure Force,' which permeates throughout space (Dark Matter/Vethon) [1]. As shown in Fig. 5b the light emitted from the lantern on a dark night could seem bright, but the light quickly fades to almost nothing just a short distance away because there are lots of obstacles for the light to pass through space due to the 'Self-Compressive Surrounding Pressure Force,' which permeates throughout space (Dark Matter/Vethon).

For instance, a knife can be sharpened by speedily rotating a stone wheel. Thousands of fiery sparks emerge from the knife due to the **friction** between the rolling stone (grinding stone) and the knife, and the sparks disappear and dissolve into space (Dark Matter/Vethon) in a very short time [2]. Therefore, the author of this paper concludes that light is one of the events when the Repulsive Force (Revathon) changes into spreading waves before **merging** into space (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force.

Fig. 5a & 5b **Light** is one of the events; it dissolves and merges with **space** (Dark Matter/ Vethon) which is defined as
'**Self-Compressive Surrounding Pressure Force.**'

Einstein's two postulates of special relativity [8]:

- "Einstein agreed with Galileo that the laws of physics are the same in all the inertial (non-accelerated) frames of reference."
- "The speed of light has a constant value for all observers regardless of their motion or the motion of the source."

But without doubt the famous equation $E = mc^2$ was the world's most famous equation of Einstein which is based upon the speed of light in vacuum as shown in equation (5) [1].

Energy = Mass x Speed of the light squared…………. (5)

Where E = Energy (J); m = mass (kg); c = speed of light (ms^{-1}).

Einstein was wrong in his hypothesis that nothing can travel faster than light. The author of this paper has predicted that the speed of the 'Self-Compressive Surrounding Pressure Force' is **infinity (∞). Nothing can travel faster than the speed of the 'Self-Compressive Surrounding Pressure Force (E)'in the Universe and nothing is stronger than the space (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force (E)'** [1].

For example, **space** is holding the planet Earth and the Sun. The Sun weighs about 333,000 times as much as Earth. Therefore, the Sun is stronger than the Earth. But space is holding up both the Earth and the Sun and therefore the space is stronger than the Earth and the Sun. Since space is holding all the objects in the Universe, it is stronger than everything in the Universe [1].

The author of this paper has also predicted that Repulsive Force (Revathon) covers the distance to the stars roughly less than $1/10^{th}$ (< 0.1 sec) of a second and the speed of Repulsive Force (Revathon) is completely outside the realm of human experience. The speed of the Repulsive Force (Revathon) will be greater than the speed of light and less than the speed of the 'Self-Compressive Surrounding Pressure Force' and will be incorporated in future work. This paper will encourage physicists to work on calculating the exact speed of the Repulsive Force (Revathon). Therefore, Einstein's Energy-mass equation $E = mc^2$ is refined to $E = mw^2$ as shown in equation (6) by the author of this paper.

Two postulates of special relativity by the author of this paper:

- The author agrees with both Galileo and Einstein's first postulate that the laws of physics are the same in all the inertial (non-accelerated) frames of reference [8]. The author **does not agree with Einstein's second postulate** that "the speed of light has a constant value for all observers regardless of their motion or the motion of the source."
- The author added the second requirement: that the speed of the Repulsive Force (Revathon) is **not constant**. The speed of the Repulsive Force (Revathon) is greater than the speed of light and less than the speed of the 'Self-Compressive Surrounding Pressure Force (E).' At one stage the Repulsive Force **merges** with space (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' and its frequency will become **zero** as shown in Figs. 6a & 6b.

In Fig. 7 we see:

1. Scientists have experimentally proved that the time Earth takes to travel around the Sun once is 365.25 days [1].
2. The Earth also spins as it orbits the Sun [1].
3. Why does the Earth take 365.25 days to go around the Sun once? Why doesn't the Earth take 400 days or 200 days to travel around the Sun once?
4. Why does the Earth spin as it orbits the Sun?

Energy (E) can be defined as ability to do work [9]. The Earth is constantly in motion, the Sun is constantly in motion and also the Galaxy is constantly in motion [10]. Some kind of **Energy (E) or inexhaustible stock force** is required to keep the Earth, the Sun and the Galaxy in motion. Therefore, the author of this paper concludes that space (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' the source of all forces which is acting in **all directions** and in **all degrees** (360^0 degrees) is the **Energy (E)** or **inexhaustible stock force** which keeps the Earth, the Sun and the Galaxy orbiting and spinning without changing polarity (direction of motion).

For example, if you have a ball and give it a force in a forward direction it will go forward; if you give it a force towards the left it will go towards the left; and if you give a force towards the right it will move to the right. But the author of this paper has predicted that if you give **equal pressure in all directions** it will move in an **elliptical path** and the theory may successfully put to the test as shown in equation (6).

Equal pressure in all directions = Elliptical path..... (6)

The Earth, the Sun and the Galaxy are not moving on their own. They are **forced to move** by space (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force.' This can be called the Cosmological Movement of the Universe which is not understood so far in physics. The author names the Cosmological Movement of the Universe as **'V-S-K Movement of the Universe'** s shown in Fig. 7.
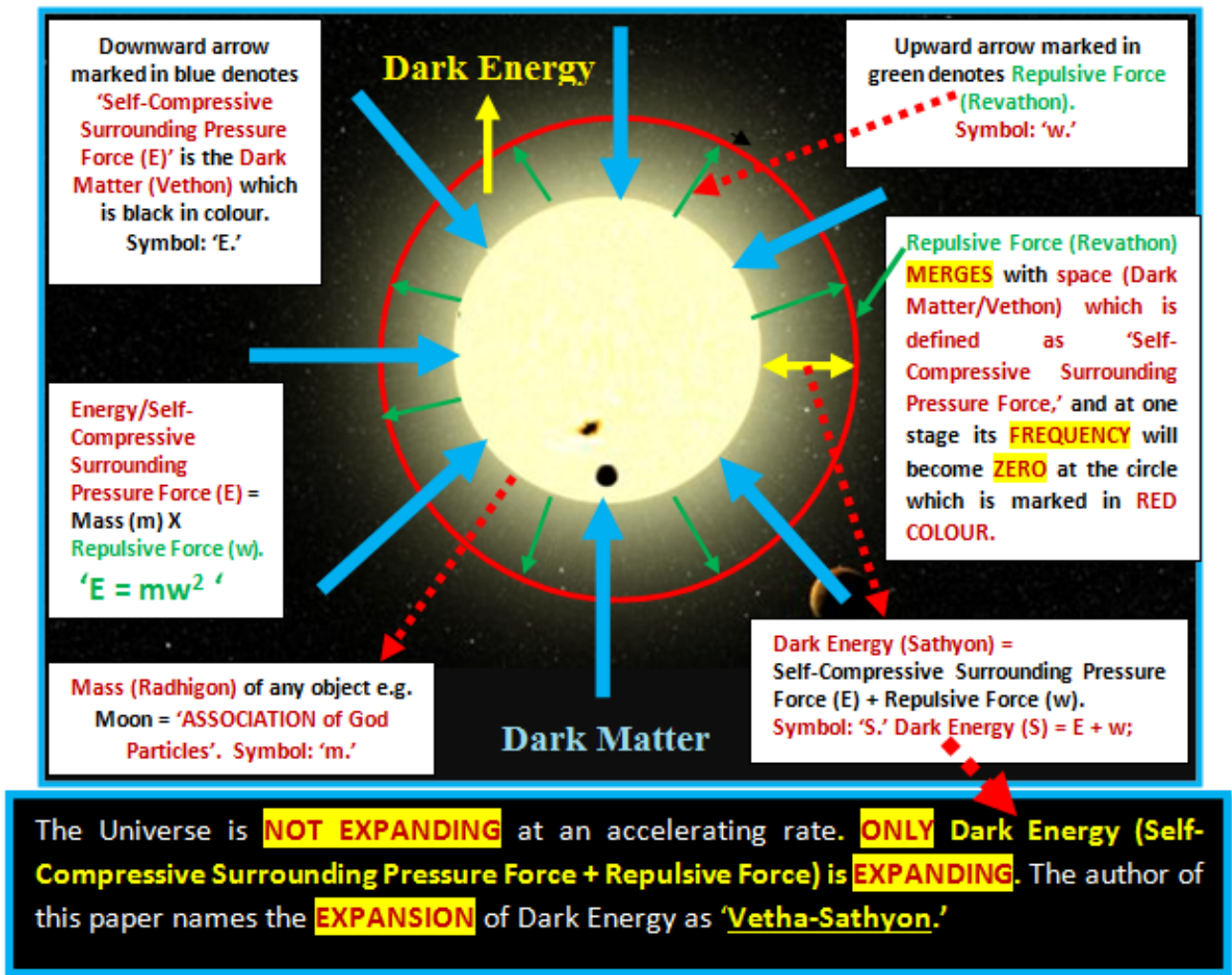
Downward arrow marked in blue denotes 'Self-Compressive Surrounding Pressure Force (E)' is the Dark Matter (Vethon) which is black in colour. Symbol: 'E.'

Dark Energy

Upward arrow marked in green denotes Repulsive Force (Revathon). Symbol: 'w.'

Repulsive Force (Revathon) MERGES with space (Dark Matter/Vethon) which is defined as 'Self-Compressive Surrounding Pressure Force,' and at one stage its FREQUENCY will become ZERO at the circle which is marked in RED COLOUR.

Energy/Self-Compressive Surrounding Pressure Force (E) = Mass (m) X Repulsive Force (w).

'E = mw²'

Mass (Radhigon) of any object e.g. Moon = 'ASSOCIATION of God Particles'. Symbol: 'm.'

Dark Energy (Sathyon) = Self-Compressive Surrounding Pressure Force (E) + Repulsive Force (w). Symbol: 'S.' Dark Energy (S) = E + w;

Dark Matter

The Universe is NOT EXPANDING at an accelerating rate. ONLY Dark Energy (Self-Compressive Surrounding Pressure Force + Repulsive Force) is EXPANDING. The author of this paper names the EXPANSION of Dark Energy as 'Vetha-Sathyon.'

Fig. 6a Dark Matter (Vethon), which is defined as Self-Compressive Surrounding Pressure Force; [Dark Energy (Sathyon) = Self-Compressive Surrounding Pressure Force + Repulsive Force]; [Mass (Radhigon) - Association of God Particles]; and [Vetha-Sathyon - Universe is **not expanding** at an accelerating rate, **only Dark Energy** (Sathyon) is **expanding**];

Dark Energy
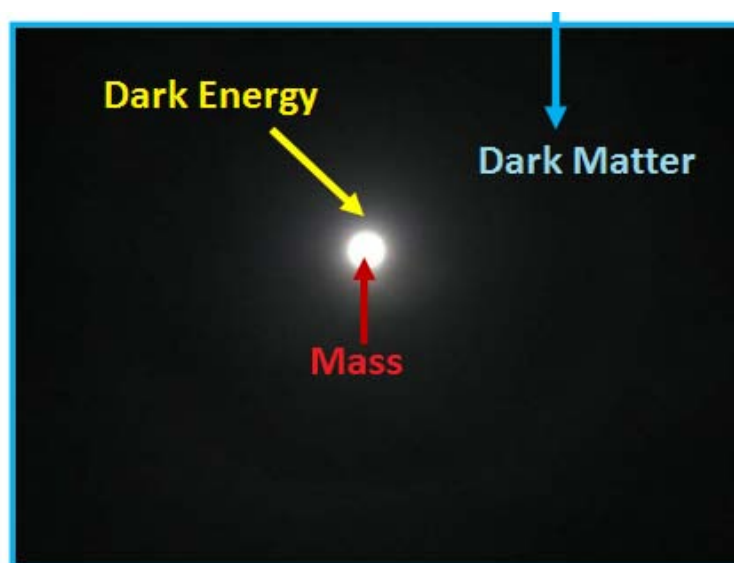
Dark Matter

Mass

Fig. 6b Dark Matter (Vethon), Dark Energy (Sathyon) and Mass (Radhigon).

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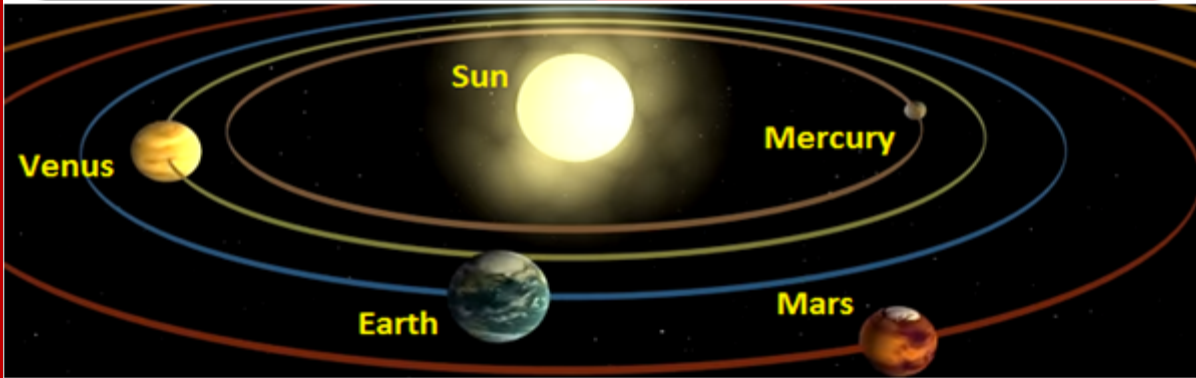
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1. Scientists have experimentally proved that the time Earth takes to travel around the Sun once is 365.25 days.

2. The Earth also spins as it orbits the Sun.

SOLUTION FOR THE QUESTIONS:

Dark Matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force,' the source of all forces which is acting in ALL DIRECTIONS and in ALL DEGREES (360^0 degrees) is the ENERGY (E) or INEXHAUSTIBLE STOCK FORCE which keeps the Earth, the Sun and the Galaxy orbiting and spinning without changing polarity (direction of motion). The Earth, the Sun and the Galaxy are NOT MOVING on their own. They are FORCED TO MOVE by Dark Matter (Vethon). This can be called the Cosmological Movement of the Universe which is not understood so far in Physics. The author names the Cosmological Movement of the Universe as 'V-S-K' movement of the Universe.

3. Why does the Earth take 365.25 days to travel around the Sun once? why dosen't the Earth take 400 days or 200 days to travel around the Sun once?

4. Why does the Earth spin as it orbits the Sun?

5. ENERGY (E) can be defined as the ABILITY TO DO WORK.

6. The Earth is constantly in motion, the Sun is constantly in motion and also the Galaxy is constantly in motion.

Dark Matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' is the product of Mass (Radhigon) and Repulsive Force (Revathon).

$$'E = mw^2'$$

where E = Energy/ Dark Matter/ Vethon/ Self-Compressive Surrounding Pressure;

m = mass (Radhigon) and w = repulsive force (Revathon);

7. Some kind of ENERGY (E) or INEXHAUSTIBLE STOCK FORCE is required to keep the Earth, the Sun and the Galaxy in motion.

8. Dark Matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force,' the source of all forces which is acting in ALL DIRECTIONS and in ALL DEGREES (360^0 degrees) is the ENERGY (E) or INEXHAUSTIBLE STOCK FORCE which keeps the Earth, Sun and Galaxy in motion.

Fig. 7 The **constant motion** of the Earth, the Sun and the Galaxy is the **experimental evidence** for Dark Matter (Vethon) as it proves that the **quality** of Dark Matter (Vethon) is 'Self-Compressive Surrounding Pressure Force.'

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Energy/Self-Compressive Surrounding Pressure Force = Mass x Speed of the Repulsive Force squared…………………………………….................... (7)

Where **E = Energy/Space /Dark Matter/Vethon**, which is defined as 'Self-Compressive Surrounding Pressure Force measured' in Joules (J); **m = Mass (Radhigon)**, which is defined as 'Association of God Particles' measured in kilograms (kg); and **w = Repulsive Force (Revathon)** which is measured in meters/second (ms^{-1}).

The **constant motion** of the Earth, the Sun and the Galaxy is the **experimental evidence** for Dark Matter (Vethon) as it proves that the **quality** of space (Dark Matter/Vethon) is 'Self-Compressive Surrounding Pressure Force,' the source of all forces which is acting in **all directions** and in **all degrees** (360^0 degrees) and keeps the Earth, the Sun and the Galaxy orbiting and spinning without changing polarity (direction of motion). Therefore, the author of this paper concludes that the Universe is **not expanding** at an accelerating rate; only Dark Energy (Self-Compressive Surrounding Pressure + Repulsive Force) is **expanding** and names the expansion of Dark Energy (Sathyon) as 'Vetha-Sathyon.'

2.3 The Super-Standard Model refines Time dilation and Length contraction in the Theory of Special Relativity

2.3.1 Time dilation and Length contraction in the Theory of Special Relativity

Time dilation: According to the Theory of Special Relativity, Time dilation describes the slowing of time by clocks between two events moving relative to an observer. The formula $t = t_0/$ "sqrt $(1-v^2/c^2)$" or $t = t_0\gamma$ enables us to determine the time interval between two events in a reference frame moving relative to an observer, where *gamma* (γ) = "sqrt $(1-v^2/c^2)$" and is always greater than 1. The time t_0 is the time measured in a frame of reference where the events occur at the same points in space, and the time t is the time measured in a frame of reference where the events occur at different points in space. *The time t will be greater than t_0 and hence the Time dilation.* The expression "sqrt $(1-v^2/c^2)$" is known as the *Lorentz factor*, and it is simply called *gamma* (γ) [5], [8].

Length contraction: It is essentially the same as Einstein's experiment used to derive the Time dilation equation, but the Length contraction is measured from the reference frame in motion relative to an object. *The Length contraction is the shortening of an object in its direction of motion.* The formula $L = L_0$"sqrt $(1-v^2/c^2)$" is known as the *Lorentz contraction formula*. The length L_0 is the length measured in the rest frame of an object and the length L is measured from an inertial reference frame relative to the object travelling at a velocity v. According to the Theory of Special Relativity, the Lorentz contraction is less than one percent (1%) at a relative speed of ten percent (10%) of the speed of light and the Length contraction is negligible at velocities we commonly experience. However, it was predicted for speeds beyond 0.1c that the contraction increases and the length becomes zero at relative speed c [5, 8].

2.3.2 Time dilation and Length contraction in the Super-Standard Model

Einstein predicted Time dilation (slowing of time for moving clocks) and Length contraction (shortening of a moving object in its direction of motion) but failed to understand the **cause** for Time dilation and Length contraction because he failed to understand that space is acting on the mass. Therefore, Einstein was wrong in his hypothesis that photons do not age, as they do not experience time passing, and was also wrong in his hypothesis that if you could achieve the speed of light, the period would last forever – time would stop [5], [8].

The author of this paper concludes that light is one of the five events, that disappears and dissolves in space, and only space (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' **does not age,** as it doesn't experience time passing. Time would stop when the Repulsive Force (Revathon) would **merges** with space (Dark Matter/Vethon) and its frequency would become **zero** as shown in Fig. 6a & 6b.

According to the 'Super-Standard Model, 'the birth of the Universe is highly impossible to calculate [Age of the universe is **infinity (∞)**] because during the 3rd stage of the evolution the Repulsive Force (Revathon) would **merge** with space (Dark Matter/Vethon)and becomes space (Dark Matter/Vethon) and the author names the time as **Varthon.** Therefore, the author of this paper refines the Lorentz Time dilation formula $t = t_0/$ "sqrt $(1-v^2/c^2)$" to $t = t_0/$ "sqrt $(1-v^2/w^2)$"and names it as **Varthini-HVC Time dilation**.

The expression γ = "sqrt $(1-v^2/c^2)$,"which is known as the Lorentz factor is refined to (γ) = "sqrt $(1-v^2/w^2)$,"and names the expression as **Kamala-JL factor**.

According to the Super-standard Model, the Length contraction is negligible at velocities we commonly experience and the length becomes zero when the Repulsive Force (Revathon) **merges** with **space** (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force,' and its frequency becomes **zero.** The author also refines the Lorentz contraction formula $L = L_0$"sqrt $(1-v^2/c^2)$" to $L = L_0$"sqrt $(1-v^2/w^2)$"and names this expression as **Pradiksha-JM contraction**.

III. THE STANDARD MODEL OF PARTICLE PHYSICS vs THE SUPER-STANDARD MODEL OF PARTICLE PHYSICS

3.1 The Standard Model of Particle Physics

Around 1900, scientists thought an atom was the fundamental particle. The experiments, which looked into an atom using particle probes, indicated that an atom has a tiny dense, positive nucleus and a bunch of negative electrons (e⁻) which are in constant motion with the nucleus. Then, scientists thought the nucleus was one fundamental particle because it appeared small, solid and dense [7].
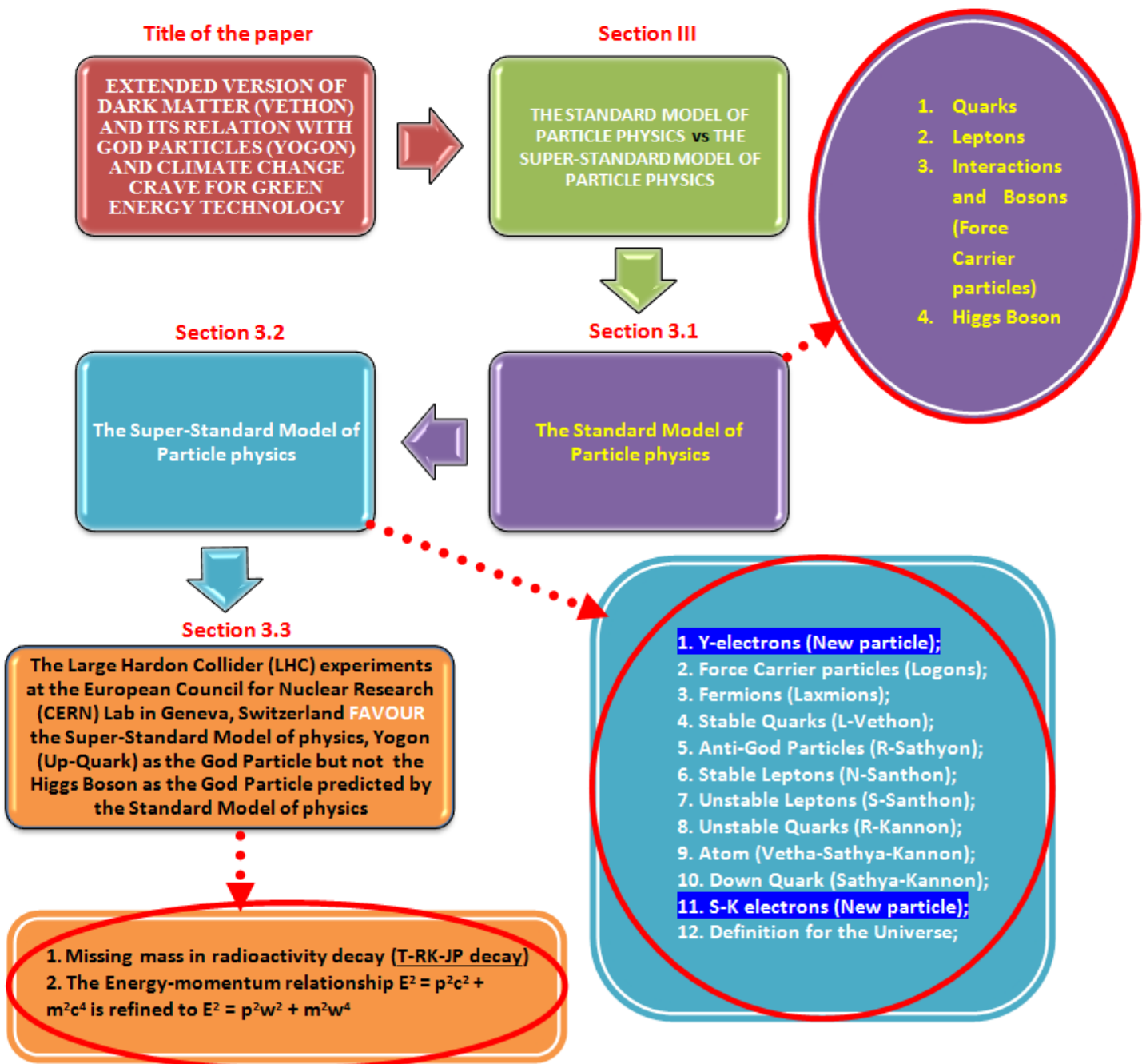
Fig. 8 Outline of Section III – The Standard Model of Particle Physics **vs** The Super-Standard Model of Particle Physics

Later, scientists discovered the nucleus was made up of protons (p^+) positively charged and neutrons (n) which have no charge. Physicists have discovered even smaller particles called Quarks, which jiggle within the protons and neutrons [7].

Currently, we have a theory referred to as the **Standard Model** developed by physicists, which explains the fundamental particles **(Fermions and Bosons)** as shown in Fig. 9. Six Quarks namely (Up/Down, Charm/Strange and Top/Bottom), six Leptons namely electron (e^-), muon (μ), tau (τ) and its three kinds of neutrinos (ν) are Fermions which have odd integer spins (like 1/2, 3/2, and so forth). All the Force Carrier particles are Bosons (gluons, photons, W bosons and Z bosons) which have an integer spin (0, 1, 2...) [7], [11].

3.1.1 Quarks

Quarks are the first type of matter particles. Quarks have the unusual characteristic of having a fractional electric charge (2/3,-1/3) and also carry another type of charge known as '*color charge*.' Quarks only exist in groups, and composite particles made up of Quarks are called Hadrons. Hadrons combine so that they have a net integer electric charge. There are two classes of Hadrons: Baryons and Mesons. Baryons, the first class of hadrons, are made up of three Quarks. Protons (uud) are made up of two Up Quarks and one Down Quark and neutrons (udd) are made up of two Down Quarks and one Up Quark. Mesons, the second class of Hadron is made up of one Quark (q) and an Anti-Quark ($\bar{q}$) and they are very unstable because they consists of a particle and an antiparticle [7], [11].

The author of this paper has predicted and concludes that Baryonic Matter in the Standard Model of Particle Physics is a fraction of Dark Matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force,' which is not understood so far in physics.

3.1.2. Leptons

Leptons are the second type of matter particles. The three Leptons - electron (e^-), muon (μ) and tau (τ) appear to be point-like particles without internal structure, having an electrical charge. The other three Leptons are types of neutrinos (ν), which are very hard to find and have no electrical charge [7], [11].
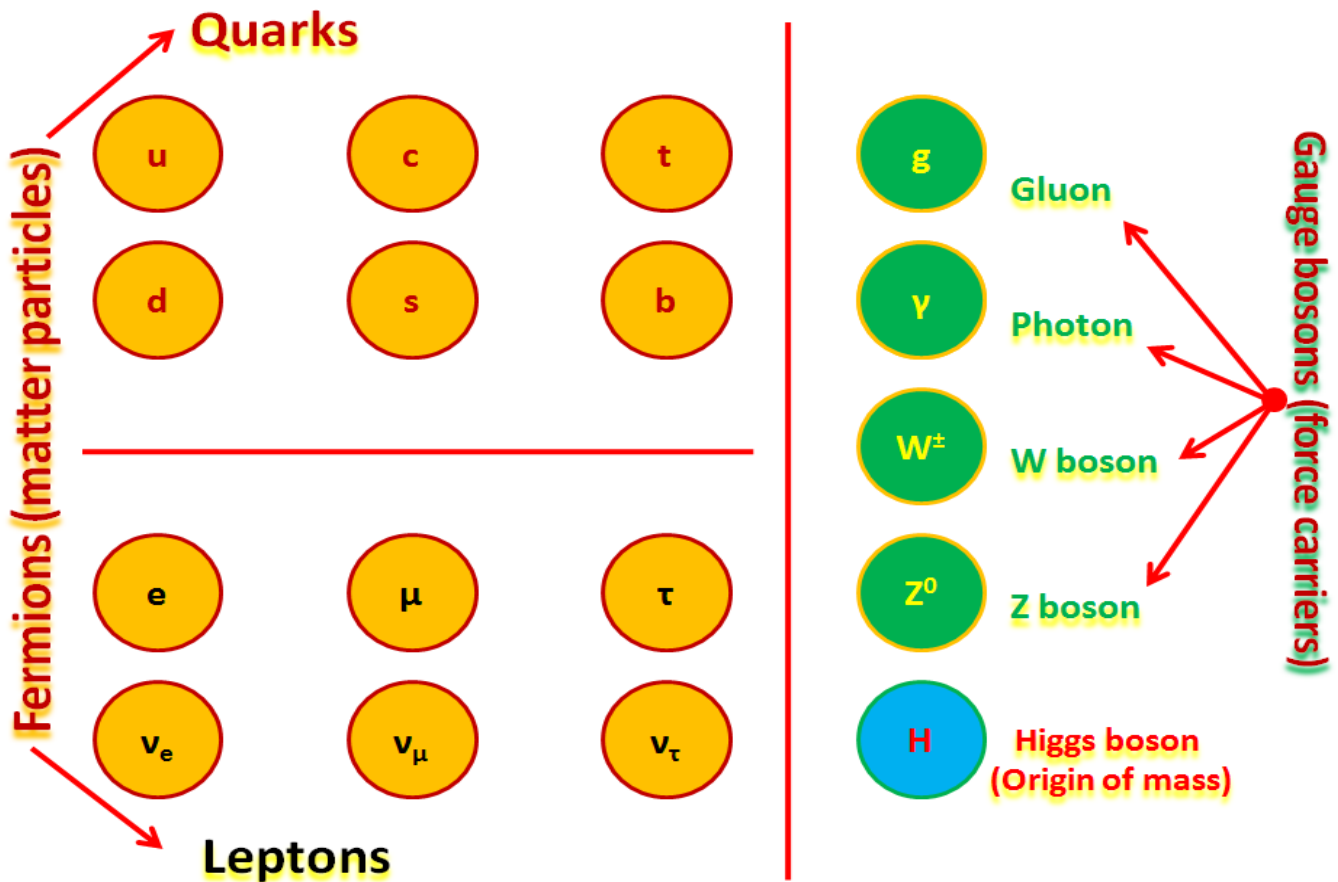

Fig. 9 The Standard Model of Particle Physics

This paper is an extended version of the paper titled, "Unified Force (Vethon) and its Relation with God Particles (Yogon) and Global Warming Crave for Green Energy Technology," published in the International Journal of Emerging Technology in Computer Science & Electronics (IJETCSE), ISSN: 0976-1353 Volume 12 Issue 2 – JANUARY 2015.

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Leptons decay, so there is corresponding antimatter (antilepton) for each Lepton. The three kinds of neutrinos and electrons are commonly seen around us because they are stable, and neutrinos never interact with any other particles [7], [11].

3.1.3 Interactions and Bosons (Force Carrier particles)

The Universe exists because of the fundamental interaction between particles and all forces as per the Standard Model. The four different types of interactions are strong, electromagnetic, weak and gravity and these interactions include attractive and repulsive forces, decays and annihilations [7], [11]. Electromagnetic interactions and the weak interactions have been combined by the Standard Model into one unified Electro weak theory as shown in Fig. 10.

Color charge behaves differently than electromagnetic charge and holds Quarks together to form Hadrons. Quarks and gluons are color charged particles and exchange gluons in strong interaction. Since the Quarks in a given Hadron exchange gluons madly, physicists talk about color-force fields (gluons hold the bunch of Quarks together) [2], [8]. But in the nucleus, the positively-charged protons repel one another and do not blow apart because of the *residual strong interaction* (the strong force between the Quarks in one proton and the Quarks in the other proton is strong enough to overwhelm the *repulsive electromagnetic force*) which glues the nucleus together [7], [11].

The like charged particles repel and opposite particles attract by the electromagnetic force, and the photon is the carrier for the electromagnetic force. Physicists have also discovered that in the Standard Model the charged parts of one atom can interact with the charged parts of another atom (i.e. the electrons in one atom are attracted to the protons in another atom, and vice versa). This allows different atoms to bind together, an effect which is referred to as *residual electromagnetic force* [7], [11].

The two least massive Quarks (Up Quark and Down Quark), the least massive charged Lepton (electron) and the neutrinos are the stable matter of the Universe. The electrical charged particles (W^+ and W^-) and the neutral Z particles are the carrier particles of weak interactions. Weak interactions are responsible for the decay of massive Quarks and Leptons to lighter Quarks and Leptons [7], [11].

Gravity is one of the major unanswered problems in the Standard Model. The Standard Model of Particle Physics cannot satisfactorily explain it because gravitational force is not understood to the root [1], [7].
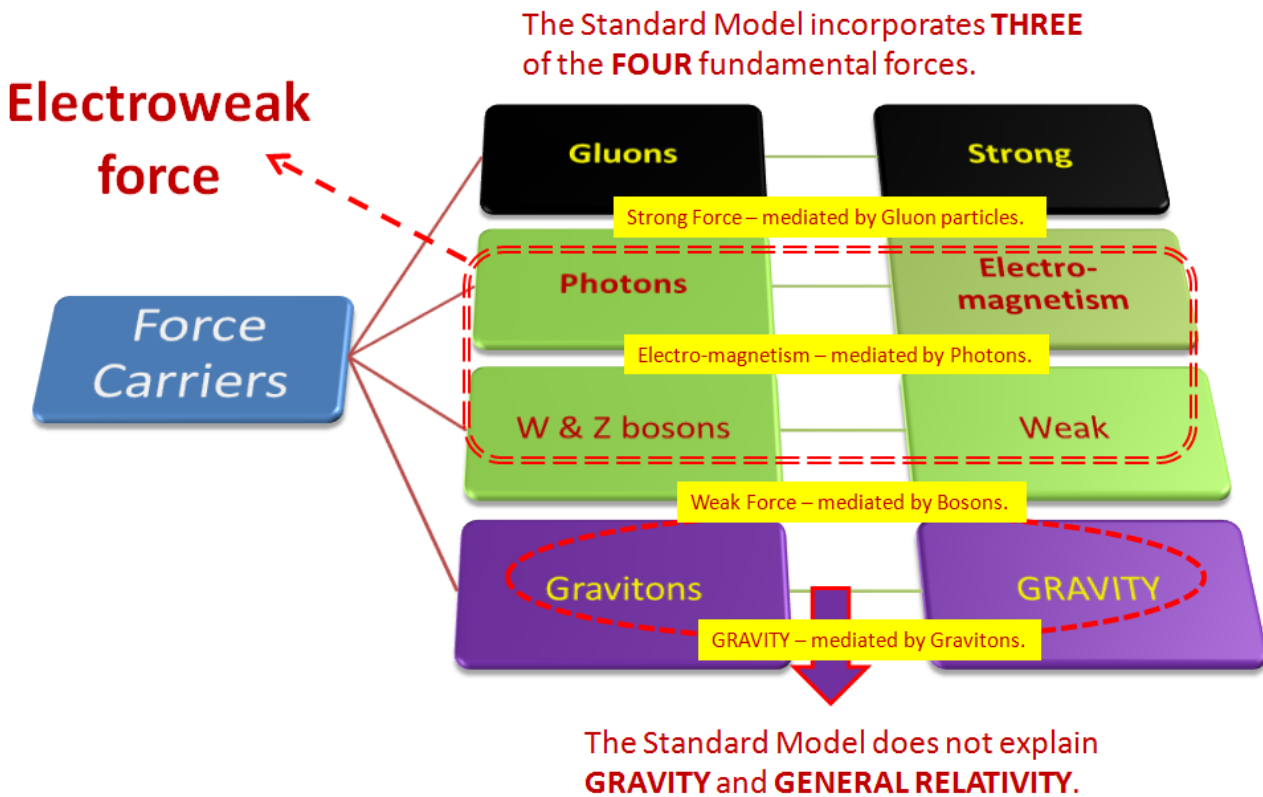

Fig. 10 Interactions and Bosons (Force Carrier particles)

3.1.4 Higgs Boson

In modern physics, there is no such thing called empty space. There are fields spread throughout all of space. In 1964, six theoretical physicists proposed that an energy field permeated the entire Universe. The energy field is now called the Higgs Field. The reason they proposed the Higgs Field was that nobody understood why some sub-atomic particles had a great deal of mass, some particles had little mass and others had no mass at all. The energy field that Higgs proposed would interact with the sub-atomic particles and give them the mass. Massive particles interact a lot with Higgs Field and mass less particles would not interact at all. The Higgs Field which gives the sub-atomic particles mass is made up of countless individual Higgs Bosons just like H_2O made up of countless molecules of H_2O. Quarks, electrons and neutrinos interact with the Higgs Field. Therefore they have mass. Since gluons and photons do not interact with the Higgs Field, they do not have mass [7], [11-12].

The Higgs Boson was the last particle of the Standard Model and its discovery helps to confirm the mechanism by which fundamental particles get mass. In comparison with other quantum fields Peter Higgs realized that there would be particles associated with this new Higgs Field and would have an intrinsic spin of zero. Experiments conducted with accelerators have shown that the mass of the Higgs Boson had to be greater than about 115 Gev/c^2 [7], [11]. The Large Hardon Collider (LHC) experiments searched for evidence in the mass range of about 115-600 GeV/c^2 at the European Council for Nuclear Research (CERN) Lab in Geneva, Switzerland. Both the experiments with A Toroidal LHC Apparatus (ATLAS) and Common Mode Correction (CRC) reported that they had evidence for a 'Higgs like' Boson with a mass between 125 GeV-126 GeV [7], [11-13].

Both the Higgs Boson and the Z Boson decay in a tiny fraction of a second (approximately in about 10^{-22} seconds) into electrons and muons (e^+ e^- μ^+ μ^-) as shown in Fig.11, with a combined mass of about 125 to 126 GeV [7], [14].

The Standard Model does not explain Dark Matter, Dark Energy, Cosmological Movement of the Universe and other phenomena because the Standard Model fails to understand that **space is acting on the mass**.

Therefore, the author concludes that the Super-Standard Model is the only theory that encompasses Quantum Mechanics as well as Relativity. The Super-Standard Model eventually describes all forces and particles – the ultimate goal of physics.
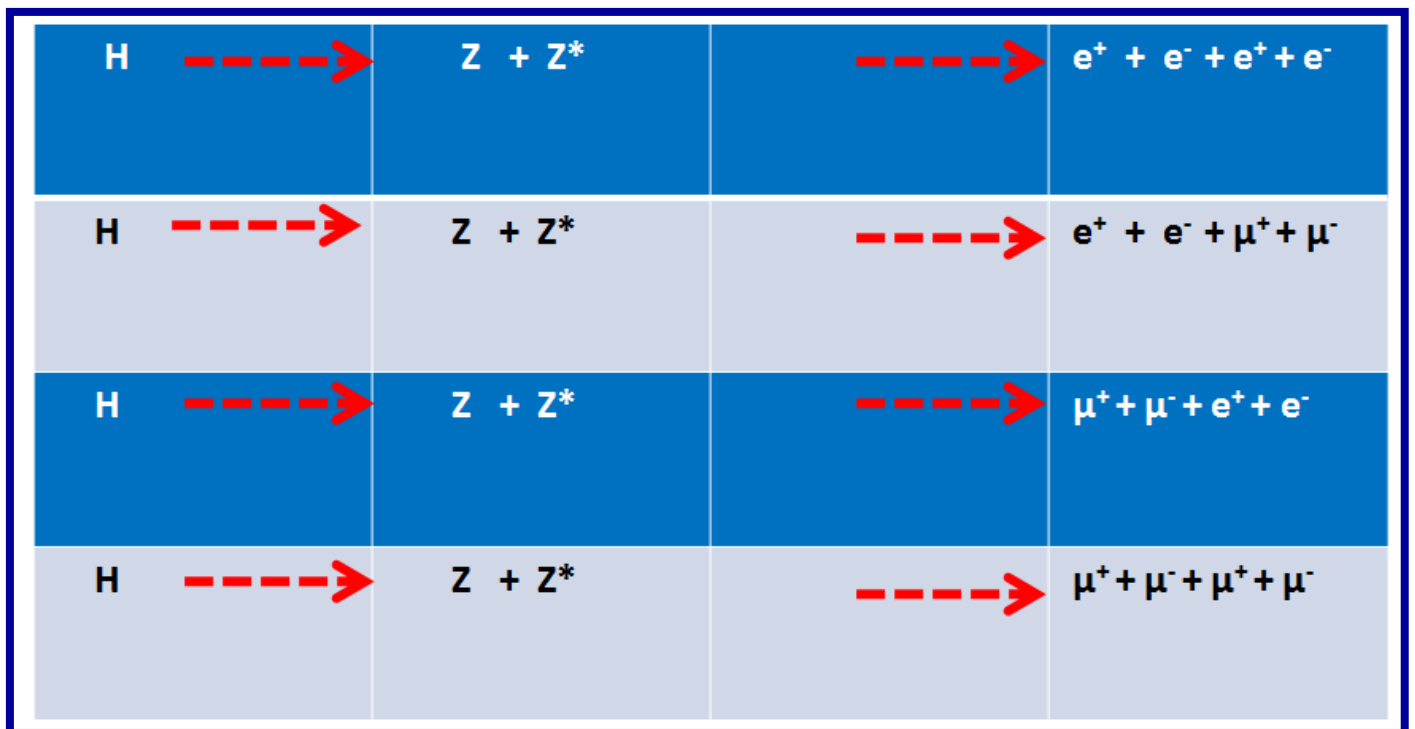
H $\dashrightarrow$	Z + Z*	$\dashrightarrow$	$e^+ + e^- + e^+ + e^-$
H $\dashrightarrow$	Z + Z*	$\dashrightarrow$	$e^+ + e^- + \mu^+ + \mu^-$
H $\dashrightarrow$	Z + Z*	$\dashrightarrow$	$\mu^+ + \mu^- + e^+ + e^-$
H $\dashrightarrow$	Z + Z*	$\dashrightarrow$	$\mu^+ + \mu^- + \mu^+ + \mu^-$

Fig. 11 Both the Higgs Boson and the Z Boson decay in a tiny fraction of a second (approximately 10^{-22} seconds) to electrons and muons (e^+ e^- μ^+ μ^-) with a combined mass of about 125 to 126 GeV [7], [14].

3.2 The Super-Standard Model of Particle Physics

3.2.1 The Super-Standard Model (First four stages of Evolution):

As explained in Section 2.2 the Super-Standard Model (Vethathiri Model of the Universe), explains the first four stages of its evolution.

3.2.1.1 Dark Matter (Vethon) – what is it?

Overlapping (Global/Spherical Form) of **constant** 'Self-Compressive Surrounding Pressure Force' in three-dimensional space is the inherent **quality** of Dark Matter (Vethon) [1].

3.2.1.2 Evolution - Stage 1:

During the first stage of evolution, the God Particles (Yogon) have **expelled** due to the overlapping (Global/Spherical Form) of space by their inherent **quality** of constant 'Self-Compressive Surrounding Pressure Force' [1]. For instance, a drop of water has **expelled** due to overlapping of constant circular waves (two-dimensional) compressing itself toward its centre point as shown in Fig. 12.

The particles, which are **expelled** from the space and <u>have the innate capacity to resist</u> the space (Dark Matter/Vethon), are known as **God Particles (Yogon)** [1]. The particles, which are **expelled** from the space which <u>do not have the innate capacity to resist</u> the space (Dark Matter/Vethon) **merge** back and become space (Dark Matter/Vethon), which are known as **Anti-God Particles.** The author of this paper names the Anti-God Particles as <u>**R-Sathyon.**</u>

3.2.1.3 Evolution - Stage 2:

During the second stage of evolution, due to the **friction** between the God Particles (Yogon) and the space (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force,' innumerable tiny waves are **constantly generated** from space, which is known as Repulsive Force (Revathon) [1]. The same Dark Matter (Vethon) has **transformed** into 'Repulsive Force (Revathon).'

3.2.1.4 Evolution - Stage 3:

During the third stage of the evolution, the Repulsive Force (Revathon) initially becomes **global-shaped particles** because the Repulsive Force (Revathon) **cannot withstand** the 'Self-Compressive Surrounding Pressure Force' for a long time and it folds, curves and twists and **merges back** into the space (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' [1].

3.2.1.5 Evolution - Stage 4:

During the fourth stage of evolution, Dark Matter (Vethon) which is defined as 'Self-Compressive Surrounding Pressure Force' **causes** the formation of mass (Radhigon) which is defined as "Association of God Particles" [1]. For example: Down Quark (Sathya-Kannon), "Association of two Up Quarks and Proton, "Association of two Up Quarks and one Down Quark etc. According to the intensity of the mass (Radhigon), the Repulsive Force (Revathon) forms globally as particles at the beginning but changes into spreading waves as it **transforms** into five different events such as magnetic (pressure), electrical (sound and light) and chemical (smell and taste) waves**.**

3.2.1.6 God Particles (Yogon - Up Quarks) and Y-electrons:

Every God Particle (Yogon – Up Quark) is a wave, **expelled** from a tiny portion of space (Dark Matter/Vethon), which **cannot be further divided.** Every God Particle (Yogon) is in **rotation** due to overlapping (Global/Spherical Form) of space by its inherent **quality** of constant 'Self-Compressive Surrounding Pressure Force' [1]. Repulsive Force (Revathon) forms **globally** as Y electron at the beginning due to the **friction** between the Up Quark (Yogon) and the Dark Matter (Vethon). Y electrons spin around God Particles (Yogon - Up Quarks) in an elliptical order at **infinite speed.**

3.2.1.7 Down Quark (Sathya-Kannon) and S-K-electrons:

Down Quark (Sathya-Kannon) can be defined as "Association of two Up Quarks." Dark Matter (Vethon) which is defined as 'Self-Compressive Surrounding Pressure Force' **causes** the formation of a Down Quark (Sathya-Kannon).Repulsive force (Revathon) forms **globally** as S-K electron at the beginning due to the **friction** between the Down Quark (Sathya-Kannon) and the Dark Matter (Vethon). S-K electrons spin around the Down Quark in an elliptical order at **very near to infinite speed.**

3.2.1.8 Proton:

Proton can be defined as "Association of two Up Quarks and one Down Quark." Dark Matter (Vethon) which is defined as 'Self-Compressive Surrounding Pressure Force' **causes** the formation of a proton. For example, in a Hydrogen atom, Repulsive Force (Revathon) forms **globally** as an electron at the beginning due to the **friction** between the proton and the Dark Matter (Vethon).

3.2.1.9 Neutron:

Neutron can be defined as "Association of one Up Quark and two Down Quarks." Dark Matter (Vethon) which is defined as 'Self-Compressive Surrounding Pressure Force' **causes** the formation of a neutron**.**

3.2.1.10 Atom:

An atom can be defined as **"Repulsive Force and its associated fluctuations."** Dark Matter (Vethon) which is defined as 'Self-Compressive Surrounding Pressure Force' **causes** the formation of an **atom** as shown in Fig. 13. For example, in a Deuterium atom there is one proton (two Up Quarks and one Down Quark) and one neutron (one Up Quark and two Down Quarks). Repulsive Force (Revathon) forms **globally** as an **electron** at the beginning due to the **friction** between the nucleus and the Dark Matter (Vethon).
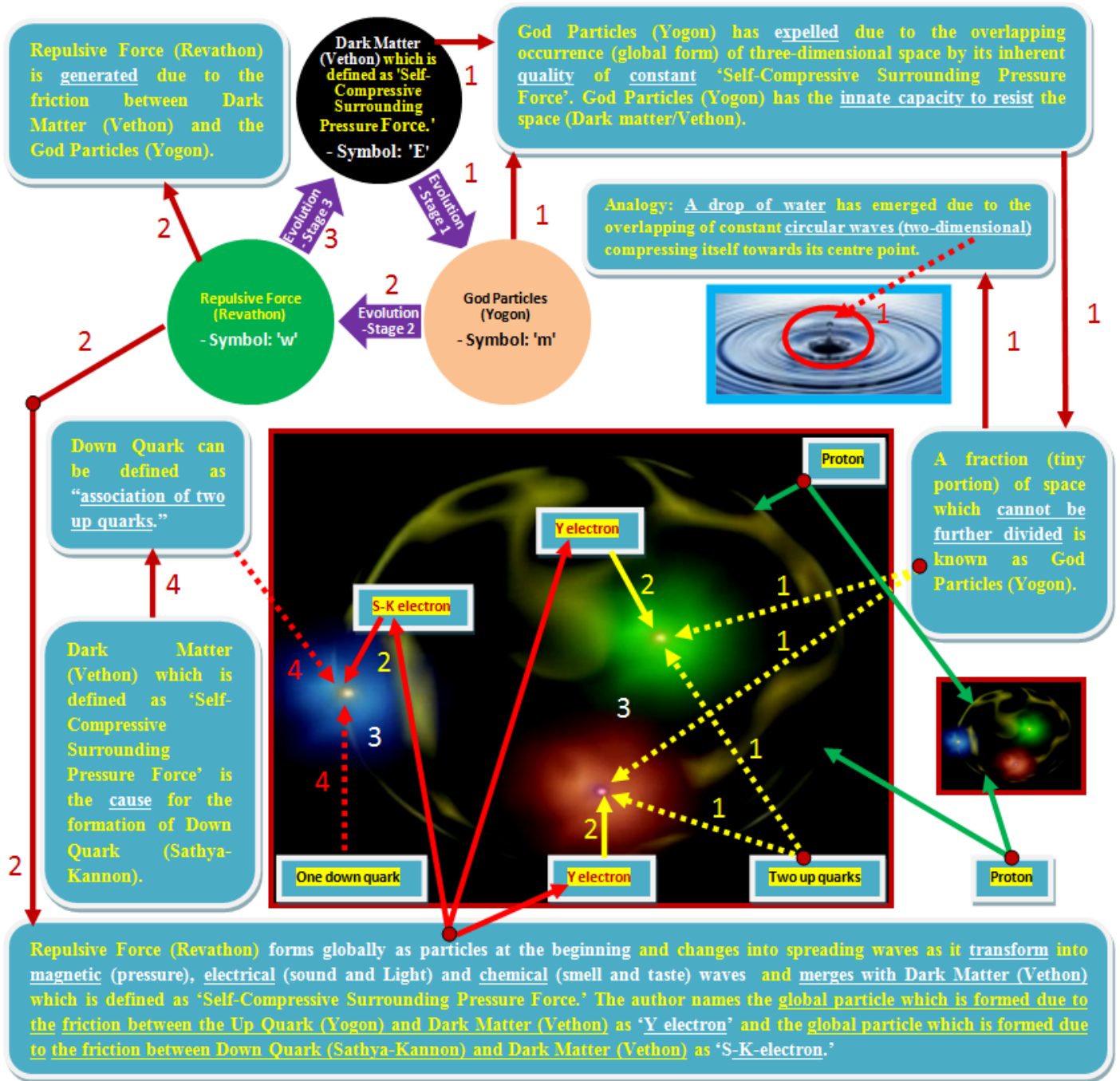
Fig. 12 The Super-Standard Model – First four stages of evolution (stage one to stage four are represented in numbers 1 to 4). New definition: Down Quark, which can be defined as 'Association of two God Particles (two Up Quarks),' and the author, names Down Quark as 'Sathya-Kannon.' Discovery of three electrons in protons (two Y-electrons and one S-K-electron) and three electrons in neutrons (two S-K-electrons and one Y-electron). In protons and neutrons, Y electrons spin around Up Quarks in an elliptical order at infinite speed and S-K-electrons spin around Down Quarks in an elliptical order at very near to infinite speed.
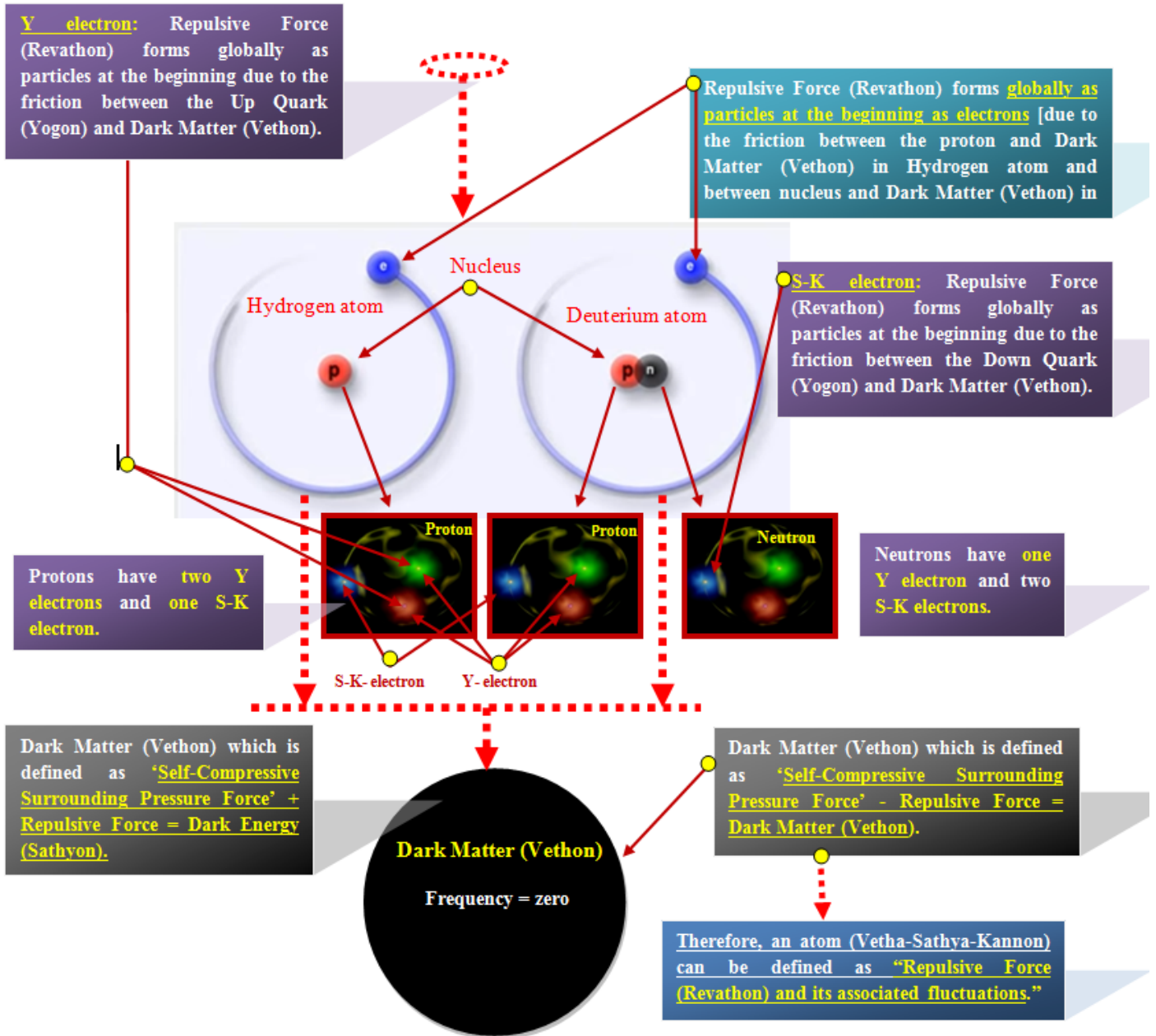
Dark Matter (Vethon) which is defined as 'Self-Compressive Surrounding Pressure Force,' is what **allows** Quarks to bond to form protons and neutrons; protons and neutrons to bond atoms; atoms to bond and form molecules **allowing** the world to stay together and create matter as shown in Table 1. Therefore, both an atom and the Universe can be defined as "Repulsive Force and its associated fluctuations" as shown in Fig. 14.

Fig. 13 The Super-Standard Model – first four stages of evolution (stage one to four are represented in numbers 1 to 4); Evolution of an atom (Vetha-Sathya-Kannon): An atom can be defined as '**Repulsive Force (Revathon) and its associated fluctuations.**' Dark matter (Vethon) which is defined as Self-Compressive Surrounding Pressure Force,' is what **allows** Quarks to bond to form protons and neutrons; protons and neutrons to bond atoms; atoms to bond and form molecules **allowing** the world to stay together and create matter. Y electrons spin around God Particles (Yogon - Up Quarks) in an elliptical order at infinite speed and S-K electron spins around Down Quark in an elliptical order at very near to infinite speed.

Fig. 13 **(continued):** The Super-Standard Model – first four stages of evolution (stage one to four are represented in numbers 1 to 4); Evolution of an atom (Vetha-Sathya-Kannon): An atom can be defined as '**Repulsive Force (Revathon) and its associated fluctuations.**' Dark matter (Vethon) which is defined as 'Self-Compressive Surrounding Pressure Force,' is what allows Quarks to bond to form protons and neutrons; protons and neutrons to bond atoms; atoms to bond and form molecules allowing the world to stay together and create matter. Y-electrons spin around God Particles (Yogon - Up Quarks) in an elliptical order at infinite speed and S-K-electron spins around Down Quark in an elliptical order at very near to infinite speed.

Table 1: Dark Matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force,' is what **allows** Quarks to bond to form protons and neutrons; protons and neutrons to bond atoms; atoms to bond and form molecules **allowing** the Earth to stay together and create matter.

|		
	UP QUARK	
1	Dark Matter (Vethon) - quality - Self-Compressive Surrounding Pressure Force.	Frequency - Zero
2	Up Quark: God Particle (Yogon).	Evolution - Stage 1
3	Repulsive Force (Revathon).	Evolution - Stage 2
4	Y electron.	Evolution - Stage 2
5	Repulsive Force (Revathon) merges with Dark Matter (Vethon).	Evolution - Stage 3
	▪ Y electrons: Repulsive Force (Revathon) forms globally as particles (Y electrons) at the beginning due to the friction between the God Particles (Yogon) i.e. Up Quarks and the Dark Matter (Vethon). ▪ Y electrons spin around God Particles (Yogon - Up Quarks) in an elliptical order at infinite speed.	
	DOWN QUARK	
1	Down Quark: Association of two God Particles (Yogon) – i.e. two Up Quarks – Dark Matter (Vethon) causes the formation of Down Quark.	Evolution - Stage 4
2	S-K electrons.	Evolution - Stage 2
3	Repulsive Force (Revathon) merges with Dark Matter (Vethon).	Evolution - Stage 3
	▪ S-K electrons: Repulsive Force (Revathon) forms globally as particles (S-K electrons) at the beginning due to the friction between the Down Quarks (Sathya-Kannon) and the Dark Matter (Vethon). ▪ S-K electron spins around Down Quarks in an elliptical order at very near to infinite speed.	
	PROTON	
1	Proton: Association of two Up Quarks and one Down Quark – Dark Matter (Vethon) causes the formation of proton.	Evolution - Stage 4
2	Example: An electron in a Hydrogen atom.	Evolution - Stage 2
3	Repulsive Force (Revathon) merges with Dark Matter (Vethon).	Evolution - Stage 3
	▪ An electron in a Hydrogen atom: Repulsive force (Revathon) forms globally as a particle (an electron in a Hydrogen atom) at the beginning due to the friction between the Proton and the Dark Matter (Vethon).	
	NEUTRON	
1	Neutron: Association of One Up Quark and two Down Quarks – Dark Matter (Vethon) causes the formation of neutron.	Evolution - Stage 4
2	Repulsive Force (Revathon) merges with Dark Matter (Vethon).	Evolution - Stage 3
	ATOM	
1	Atom: "Repulsive Force and its associated fluctuations" - Dark Matter (Vethon) causes the formation of an atom.	Evolution - Stage 4
2	Example: An electron in a Hydrogen atom and an electron in a Deuterium atom.	Evolution - Stage 2
3	Repulsive Force (Revathon) merges with Dark Matter (Vethon).	Evolution - Stage 3
	▪ An electron in a Hydrogen atom and an electron in a Deuterium atom: Repulsive Force (Revathon) forms globally as a particle (an electron in a Hydrogen atom) at the beginning due to the friction between the proton and Dark Matter (Vethon) in a Hydrogen atom and as a particle (an electron in a Deuterium atom) due to the friction between the nucleus and the Dark Matter (Vethon) in a Deuterium atom.	
	▪ Dark Matter (Vethon) which is defined as 'Self-Compressive Surrounding Pressure Force,' is what allows Quarks to bond to form protons and neutrons; protons and neutrons to bond atoms; atoms to bond and form molecules allowing the Earth to stay together and create the matter. Therefore, both an atom and the Universe can be defined as "Repulsive Force and its associated fluctuations."	
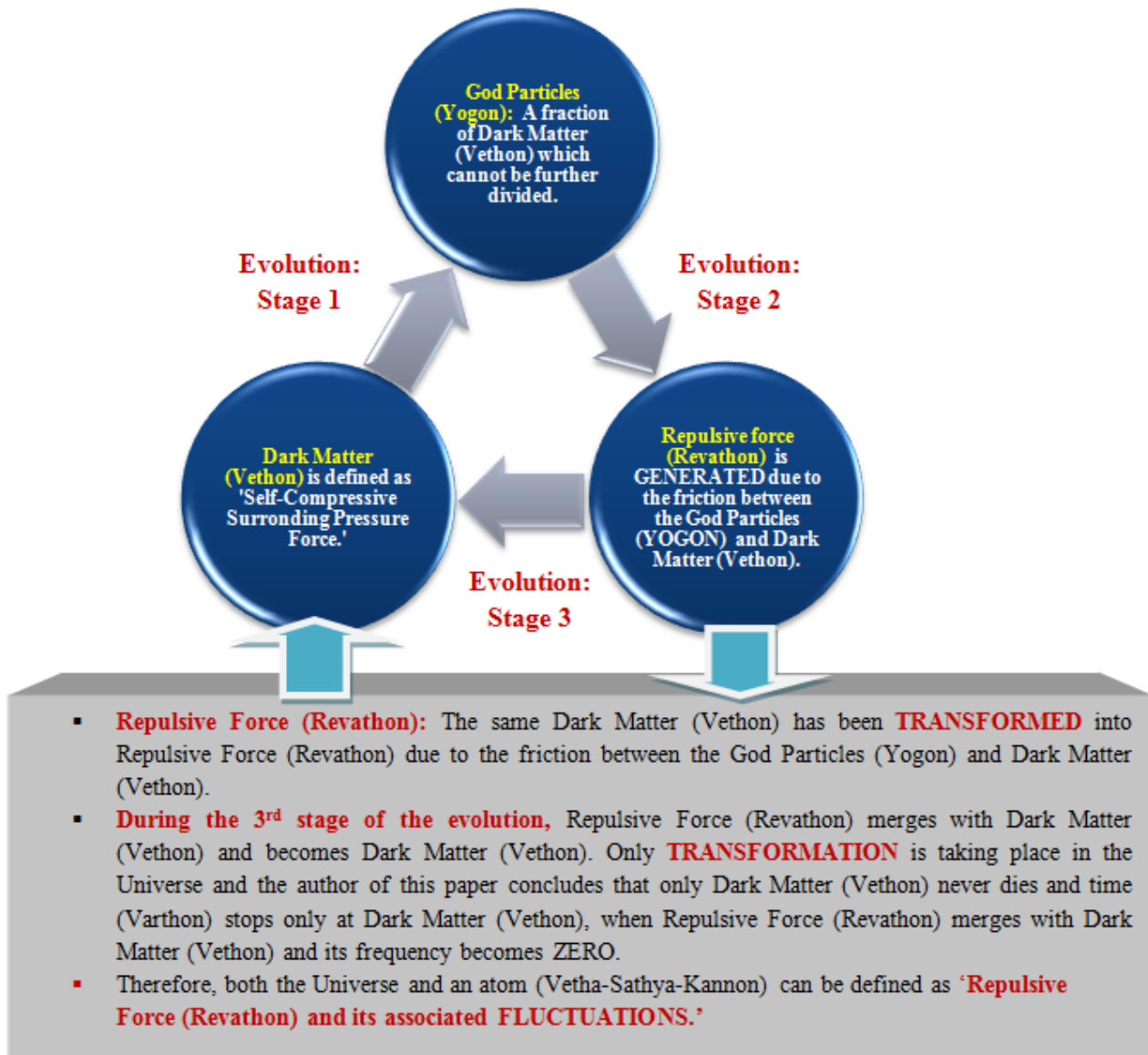
Fig. 14 Both the Universe and an atom (Vetha-Sathya-Kannon) can be defined as **"Repulsive Force (Revathon) and its associated fluctuations."** The author of this paper concludes that only Dark Matter (Vethon) never dies and time (Varthon) stops only at Dark Matter (Vethon), when Repulsive Force (Revathon) merges with Dark Matter (Vethon) and its frequency becomes **zero.**

3.2.2 The Super-Standard Model - Fundamental Particles (Logons and Laxmions):

3.2.2.1 Logons:

The new model of physics, the Super-Standard Model developed by the author of this paper explains the fundamental Force Carrier particles as **Logons** [1. Dark Matter (Vethon) which is defined as 'Self-Compressive Surrounding Pressure Force' and 2. Repulsive Force (Revathon) - photons, W bosons and Z bosons which have an integer spin (0, 1, 2...)] as shown in Fig. 15a. The Universe exists because of the fundamental interaction between the particles and the **Logons** (1. 'Self-Compressive Surrounding Pressure Force,' i.e. 'Attractive Force' and 2. Repulsive Force) as per the Super-Standard Model.

The three different types of interactions are strong (Self-Compressive Surrounding Pressure Force), electromagnetic (Repulsive Force) and weak (Repulsive Force) and these interactions include decays and annihilations. **Gravity is eliminated in the Super-Standard Model since there is no gravity. Gravity is still not understood to the root in physics.**

3.2.2.2 Laxmions:

Six Quarks namely (Up/Down, Charm/Strange and Top/Bottom), ten Leptons namely Y electron (e^{y-}), S-K electron (e^{sk-}), electron (e^-), muon (μ), tau (τ) and its five kinds of neutrinos (v) are **Laxmions** as shown in Fig. 15b which have odd integer spins (like 1/2, 3/2, and so forth).

This paper is an extended version of the paper titled, "Unified Force (Vethon) and its Relation with God Particles (Yogon) and Global Warming Crave for Green Energy Technology," published in the International Journal of Emerging Technology in Computer Science & Electronics (IJETCSE), ISSN: 0976-1353 Volume 12 Issue 2 – JANUARY 2015.   Page 20

3.2.2.3 Quarks:

Quarks are the first type of matter particles. God Particles (Yogon-Up Quarks) are **expelled** from a tiny portion of space (Dark Matter/Vethon), which is defined as Self-Compressive Surrounding Pressure Force [1]**.** Quarks only exist in groups, and composite particles made up of Quarks are called **Stable Quarks.** The two least massive Quarks (Up Quark and Down Quark) are the stable matter of the Universe and the other four Quarks (Charm/Strange and Top/Bottom) are the unstable matter of the Universe because the four massive Quarks **decay** into lighter Quarks. The author of this paper names the Stable Quarks as **L-Vethon** and the Unstable Quarks as **R-Kannon.** The stable quarks (L-Vethon) are made up of three Quarks. Protons (uud) made up of two Up Quarks and one Down Quark and neutrons (udd) made up of two Down Quarks and one Up Quark. Even though the Quarks decay, in the Super-Standard Model, there is corresponding **antimatter for only the God Particles (Yogon i.e. Up Quark)** and there is no corresponding antimatter for the remaining five Quarks.

3.2.2.4 Leptons:

Leptons are the second type of matter particles. The Repulsive Force (Revathon) initially becomes **global-shaped particles** called **Leptons** because the Repulsive Force (Revathon) **cannot withstand** the 'Self-Compressive Surrounding Pressure Force' for a long time and it folds, curves and twists and **merges** back into space (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' [1]. The least massive charged Leptons (Y electron, S-K electron and electron) and the neutrinos are the stable matter of the Universe. The other two Leptons [muon (μ) and tau (τ)] are the unstable matter of the Universe because the two massive Leptons decay into lighter Leptons. The author of this paper names the Stable Leptons as **N-Santhon** and the Unstable Leptons as **S-Santhon.**

The five Leptons: Y electron (e^{y-}), S-K electron (e^{sk-}), electron (e^-), muon (μ), tau (τ) appear to be point-like particles without internal structure, having an electrical charge. The other five Leptons are types of neutrinos (ν), which are very hard to find and have no electrical charge. Even though Leptons decay in the Super-Standard Model, there is **no corresponding antimatter for each Lepton**. The five kinds of neutrinos, Y electrons, S-K electrons and electrons are commonly seen around us because they are stable, and neutrinos never interact with any other particles.
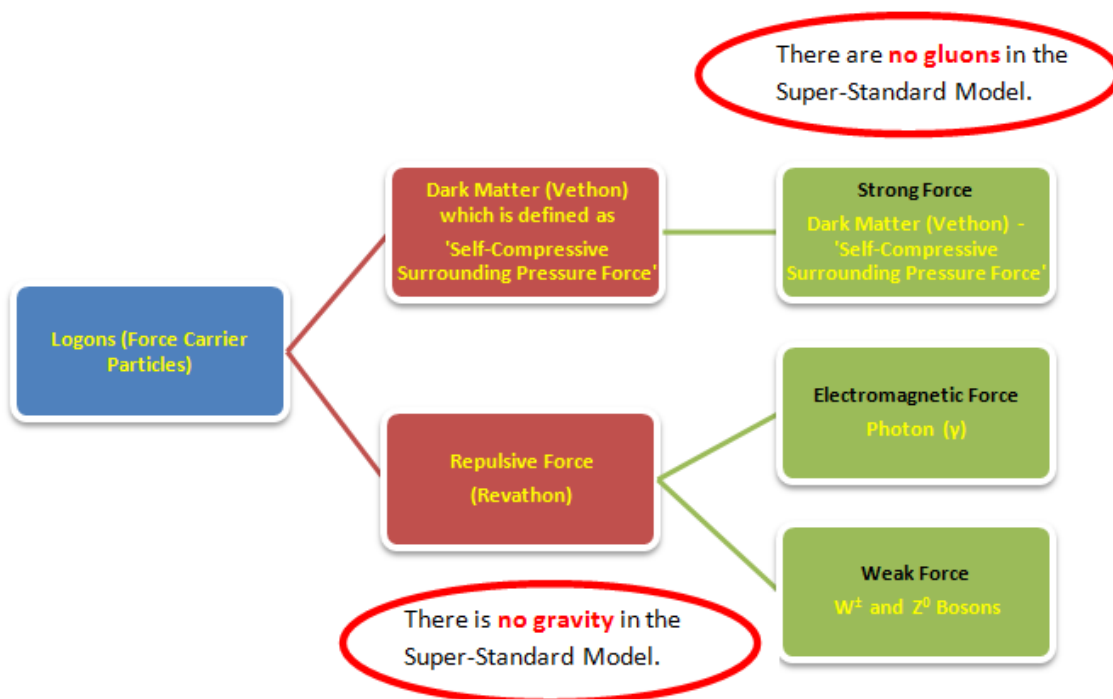

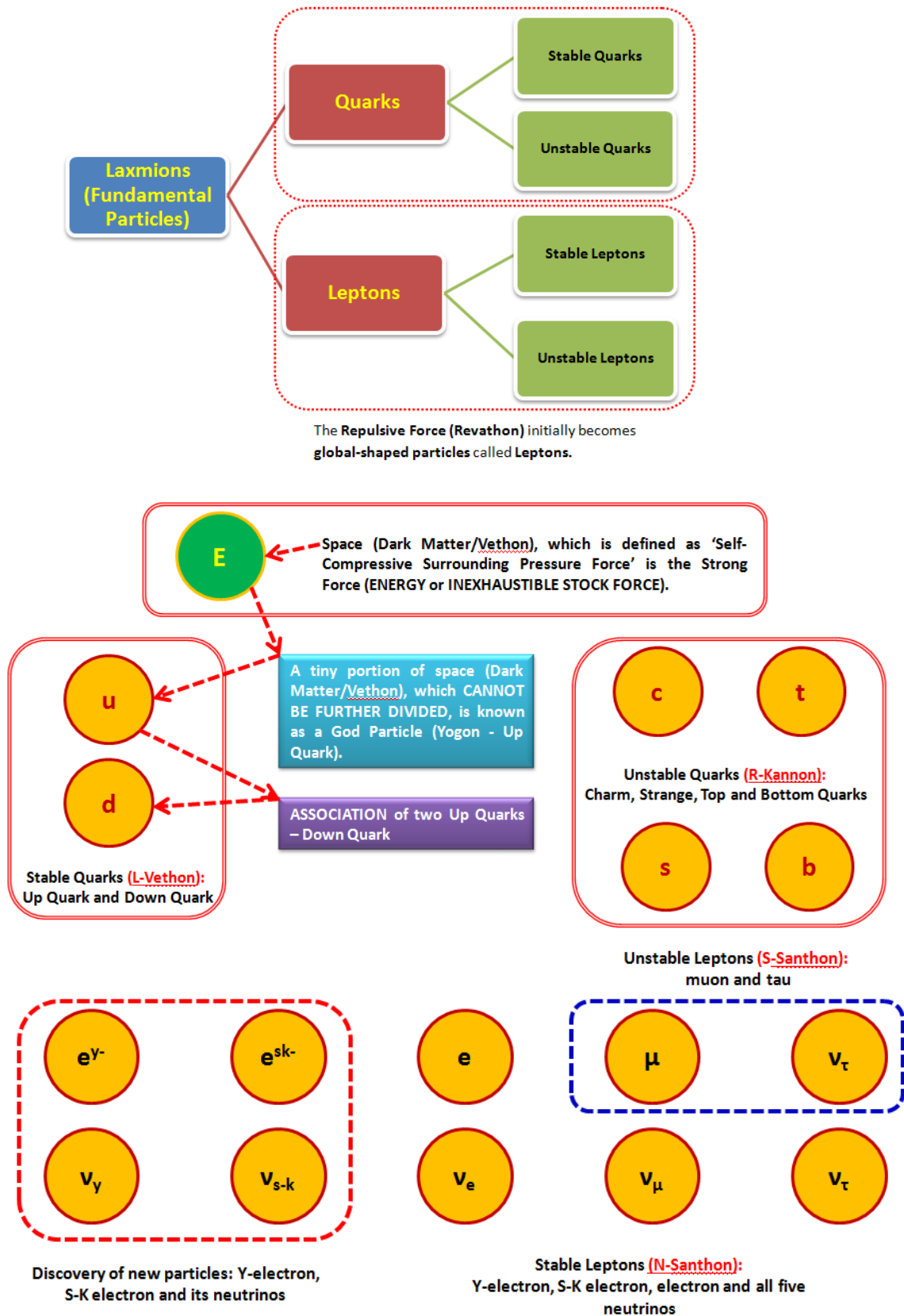Fig.15a The Super-Standard Model: Force Carrier particles (**Logons).**

Fig.15b The Super-Standard Model: Fundamental Particles (**Laxmions**).

This paper is an extended version of the paper titled, "Unified Force (Vethon) and its Relation with God Particles (Yogon) and Global Warming Crave for Green Energy Technology," published in the International Journal of Emerging Technology in Computer Science & Electronics (IJETCSE), ISSN: 0976-1353 Volume 12 Issue 2 – JANUARY 2015.

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3.2.3 The Super-Standard Model (God Particles – Up Quark) vs The Standard Model (God Particles - Higgs Boson)

	The Super-Standard Model (God Particles - Up Quark)	The Standard Model (God Particles - Higgs Boson)
1.	The Super-Standard Model begins with space Dark Matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' [1].	The Standard Model begins with a proton and electron base [1].
2.	In the Super-Standard Model of physics, there is **no void** in space. Dark Matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' permeates through all of space [1].	In the Standard Model of physics, there is no such thing called empty space but there is an energy field spread through all of space. This energy field is now called the Higgs Field [12].
3.	The Super-Standard Model states that the God Particles (Yogon – Up Quarks) are an excitation of space due to the overlapping occurrence (Global/Spherical Form) of space by its inherent **quality** of **constant** 'Self-Compressive Surrounding Pressure Force.' God Particles (Yogon i.e. Up Quarks) are a tiny fraction of space (Dark Matter/Vethon), **which cannot be further, divided [1].**	In the Standard Model of physics, both the Higgs Boson and the Z Bosons **decay in a tiny fraction of a second** (approximately 10^{-22} seconds) into electrons and muons (e^+ e^- μ^+ μ^-) [7], [14].
4.	Dark Matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' **causes** the formation of **mass** [1] from the smallest particle e.g. Down Quark (Sathya-Kannon) to the biggest objects such as stars. Mass (Radhigon) can be defined as "**Association of God Particles (Yogon).**" Dark Matter (Vethon), is what **allows** Quarks to bond to form protons and neutrons; protons and neutrons to bond to form atoms; atoms to bond and form molecules allowing the Earth to stay together and create matter.	The energy field (Higgs Field) that Higgs proposed would interact with the sub-atomic particles and give them mass [7], [11-12]. Massive particles interact a lot with the Higgs Field but mass less particles would not interact at all. E.g. Quarks, electrons and neutrinos interact with the Higgs Field. Therefore they have mass. Gluons and photons do not interact with the Higgs Field, they do not have mass [7], [11-12].
5.	The Super-Standard Model of physics explains Dark Matter, Dark Energy, Cosmological Movement of the Universe and other phenomena.	The Standard Model of physics and the Higgs Field proposed by six theoretical physicists in 1964 do not explain Dark Matter, Dark Energy, Cosmological Movement of the Universe and other phenomena because both the Standard Model and the Higgs mechanism fail to understand that **space is acting on the mass**.
6.	The '**Up Quark**' should be the **God Particle** (Yogon) as per the Super-Standard Model and not Higgs Boson.	Today as per the Standard Model, Higgs Boson is referred to as the God Particle.

3.3 The Large Hardon Collider (LHC) experiments at the European Council for Nuclear Research (CERN) Lab in Geneva, Switzerland <u>FAVOUR</u> the Super-Standard Model of Particle Physics, Up-Quark (Yogon) as the God Particle but not the Higgs Boson as the God Particle predicted by the Standard Model of Particle Physics

The Large Hardon Collider (LHC) experiments searched for evidence in the mass range of about 115-600 GeV/c^2 at the European Council for Nuclear Research (CERN) Lab in Geneva, Switzerland in 2012. Both the experiments with A Toroidal LHC Apparatus (ATLAS) and Common Mode Correction (CRC) reported that the Higgs Boson and the Z Bosons decay in a tiny fraction of a second (**approximately 10^{-22} seconds**) into electrons and muons (e^+ e^- μ^+ μ^-) with a combined mass of about 125 to 126 GeV. Presently as per the Standard Model, Higgs Boson (125-126Gev) is the God Particle by which the particles obtain mass [7], [13-14].

The principle behind LHC is pretty simple but the equipment to achieve the goal is more complex. By smashing protons together hard and fast enough, firing two beams of particles (2,808 bunches per beam – with 600 million collisions per second), one beam going clockwise and the other going counter clockwise, the LHC causes protons to break apart into smaller atomic particles [13]. In this event, a Higgs Boson may have been produced almost instantly into two Z bosons, which also decayed instantly to four muons, or, four electrons, or, two muons and two electrons. The mass of the Higgs Boson is much greater than the masses of its final decay products and the remaining energy goes into kinetic energy of the decayed products as per the Standard Model. To calculate the 'invariant mass' of the set of particles from the decay, the Energy-momentum equation $E^2 = p^2c^2 + m^2c^4$ is used which gives the mass of the 'parent,' the Higgs Boson [7], [13-14]. **The author of this paper concludes that the remaining energy of the decayed products merges with space and becomes space (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' and the Energy-momentum equation to calculate the 'invariant mass' should be <u>$E^2 = p^2w^2 + m^2w^4$</u> not $E^2 = p^2c^2 + m^2c^4$ [not light (c) but Repulsive Force (w)].**

For example, Uranium-238 has a mass of 238.0508 atomic mass units (u) and it decays into thorium (234.0436u) and an alpha particle (4.0026u). But about 0.0046u of mass appears to have been lost. Einstein says that when Uranium-238 undergoes radioactivity decay some of its mass is converted into kinetic energy. This conversion of energy is observed as a loss of mass of about 0.0046u in Uranium-238 decay [7]. Einstein was wrong in his prediction because he failed to understand that **space is acting on the mass.** The author of this paper has predicted that the **missing mass** of about 0.0046u in Uranium-238 decay **merges** with space (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' and names the **missing mass** in a radioactivity decay as <u>**T-RK-JP decay**</u>.

As per the Standard Model, protons and neutrons are made up of three Quarks adding up to about 10MeV, roughly one percent (1%) of the mass of the proton and neutron. Among the six flavours of Quarks the first generation Quarks (Up/Down) of Standard Model are the lightest quarks. The first generation of Leptons are electrons and neutrinos, which as per the Standard Model neutrinos pass right through the earth without interacting with a single atom and electrons revolve around the orbit [7], [13-14]. Even though as per the Standard Model, Quarks have strong interactions and cannot live freely**, <u>there are small discrepancies that indicate there is some new physics</u>.**

In the Super-Standard Model, a particle **which cannot be further divided** is known as the God Particle. Any particle, which **decays** in a tiny fraction of a second into lighter Quarks and Leptons, cannot be a God Particle [1]. <u>**One example is**</u>: One person is standing and there are three people standing around him to make the first circle and then around that is another circle of five to seven people, and around this circle is another group of nine to eleven people and so on up to forty or fifty circles. Each person is being **forced equally** by the people surrounding them in the circles. If one in the middle is squeezed by the force of all the people surrounding him in **all directions** then he will try to find a gap to move to be able to breathe. After a short span of time, the person in the middle will be **expelled** from his position due to the force of all the people surrounding him in **all directions**. Therefore, he is **not moving** but he is **forced to move** in a path that is **elliptical** because he is squeezed in **all directions equally**. This is the **quality** of Dark Matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force.' Therefore, the author of this paper concludes that every God Particle (Yogon – Up Quark) is a wave, which is **expelled** from a tiny portion of space (Dark Matter/Vethon), and which **cannot be further divided.** Every God Particle (Yogon) is in **rotation** due to the overlapping (Global/Spherical Form) of space by its inherent **quality** of constant 'Self-Compressive Surrounding Pressure Force.'

In the Super-Standard Model, the Repulsive Force (Revathon) initially takes the form of **global-shaped particles** called Leptons because the Repulsive Force (Revathon) **cannot withstand** the 'Self-Compressive Surrounding Pressure Force' for a long time as it folds, curves and twists and **merges** back into space (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' [1].

Repulsive Force (Revathon) forms globally as a **Y electron** at the beginning due to the **friction** between the Up Quark (Yogon) and the Dark Matter (Vethon) and as an **S-K electron** at the beginning due to the **friction** between the Down Quark (Sathya-Kannon) and the Dark Matter (Vethon). **Y electrons** spin around God Particles (Yogon - Up Quarks) in an elliptical order at **infinite speed. S-K electrons** spin around Down Quarks in an elliptical order at **very near to infinite speed.** Dark Matter (Vethon) which is

defined as 'Self-Compressive Surrounding Pressure Force' is the **cause** for the formation of a Down Quark (Sathya-Kannon - Association of two Up Quarks).

By smashing protons together hard and fast enough, firing two beams of particles, one beam going clockwise and the other going counter clockwise, the LHC causes protons to break apart into smaller atomic particles into electrons and muons (e^+ e^- μ^+ μ^-) with a combined mass of about 125 to 126 GeV**,** which are **Leptons** as shown in Fig. 17 [13], [14].

The author of this paper has **discovered** that there are **three electrons** (two Y electrons and one S-K electron) in **protons,** which are **Leptons.** The author concludes that the final signature patterns obtained by smashing protons together from the LHC experiments at the European Council for Nuclear Research (CERN) Lab in Geneva, Switzerland are **Leptons** [**electrons (e^+ e^-) and muons (μ^+ μ^-)].** Therefore, the experimental results **FAVOUR the Super-Standard Model** and **not the Higgs Boson** as predicted by the Standard Model of Particle Physics.

For example, in neutron beta decay, a neutron (udd) decays to a proton (uud), an electron and an antineutrino as shown in Fig. 16 as per the Standard Model of physics. One of the Down Quarks in a neutron is transformed into an Up Quark. The neutron has now become a proton. Down Quarks can be further divided into two Up Quarks but Up Quarks cannot be further divided. Therefore, the author concludes that the Up Quark should be the God Particle as per the Super-Standard Model **which cannot be further divided**. The mass of the Up Quark is about 2.01+/-0.14 MeV/c^2 and the Down Quark is about 4.79+/-0.16 MeV/c^2 [1]. Therefore, the author concludes that the Large Hardon Collider (LHC) experiments at the European Council for Nuclear Research (CERN) Lab in Geneva, Switzerland **FAVOUR** the Super-Standard Model of Particle Physics, **Up Quark (Yogon)** as the God Particle but **not the Higgs Boson** as the God Particle predicted by the Standard Model of Particle Physics. This shows that there is an **exciting new physics** to study in this 21st Century as shown in Fig. 18.
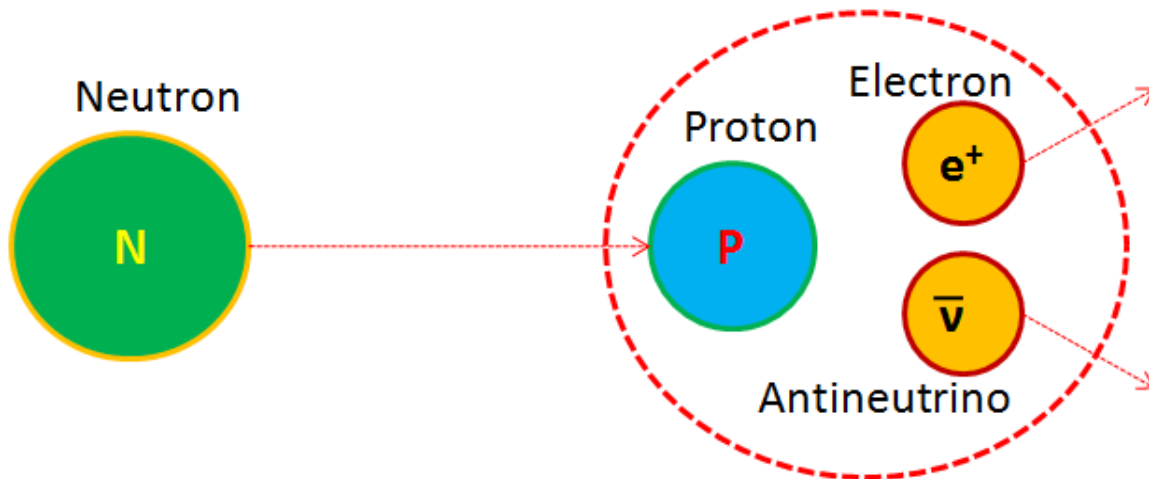

Fig. 16 Neutron Beta Decay - One of the Down Quarks in a neutron is transformed into an Up Quark. The neutron has now become a proton. Down Quarks can be further divided into two Up Quarks but Up Quarks **cannot be further divided**. Therefore, the author concludes that the Up Quark is the God Particle as per the Super-Standard Model which **cannot be further divided**.
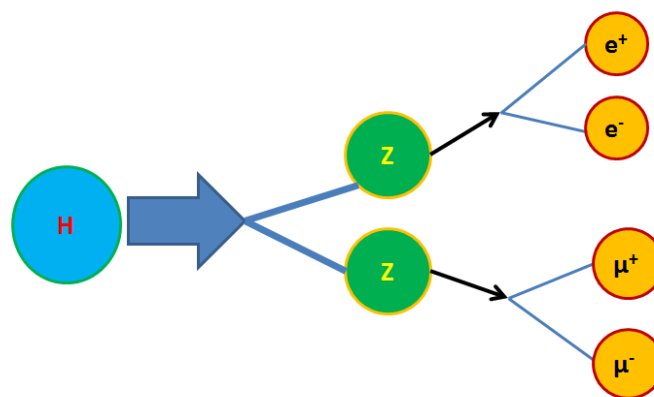

Fig. 17 The Higgs Boson and the Z Bosons decay in a tiny fraction of a second (approximately 10^{-22} seconds) into electrons and muons (e^+ e^- μ^+ μ^-) with a combined mass of about 125 to 126 GeV.
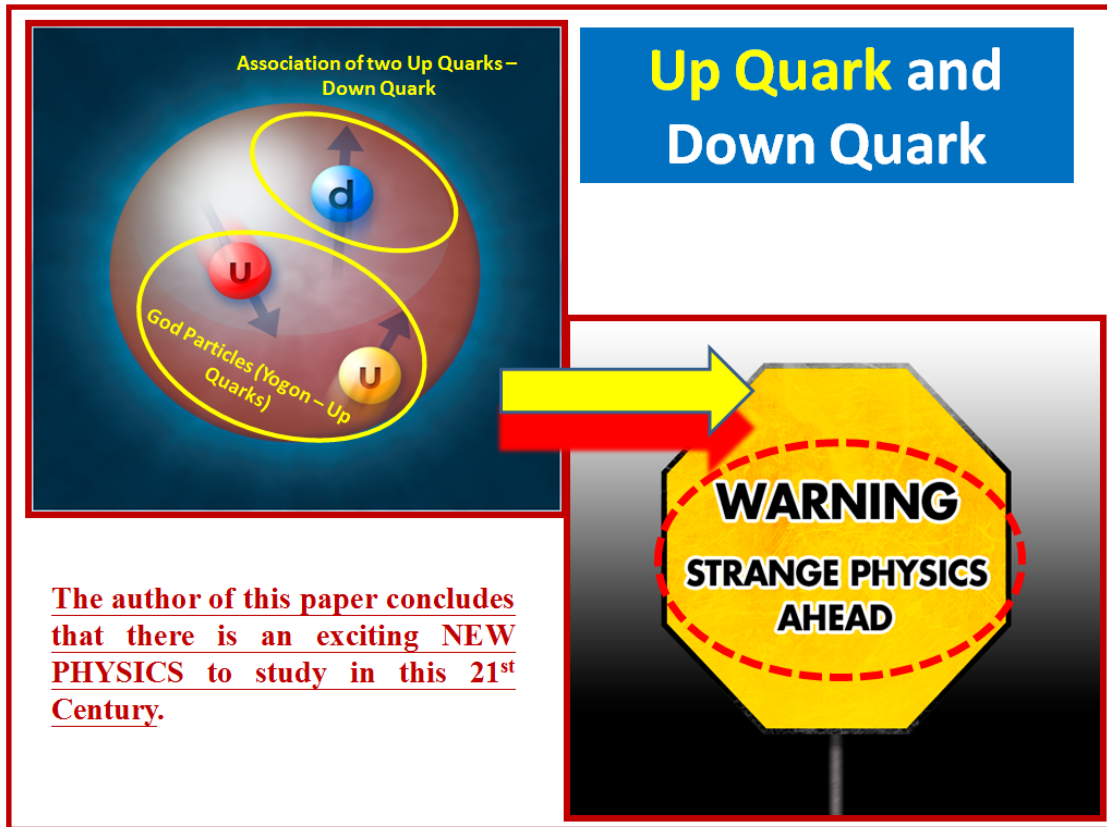
Fig. 18 The author of this paper has discovered that there are **three electrons (two Y electrons and one S-K electron) in protons**, which are **Leptons**. The author concludes that the final signature patterns obtained by smashing protons together from the Large Hardon Collider (LHC) experiments at the European Council for Nuclear Research (CERN) Lab in Geneva, Switzerland are **Leptons [electrons and muons (e⁺ e⁻ μ⁺ μ⁻)].** Therefore, the experimental results **FAVOUR** the Super-Standard Model of Particle Physics, Up-Quark (Yogon) as the God Particle but **not the Higgs Boson** as the God Particle predicted by the Standard Model of Particle Physics. **This shows that there is an exciting new physics to study in this 21ˢᵗ Century.**

IV. DARK MATTER (VETHON) AND ITS RELATION WITH 'CLIMATE CHANGE' CRAVE FOR GREEN ENERGY TECHNOLOGY
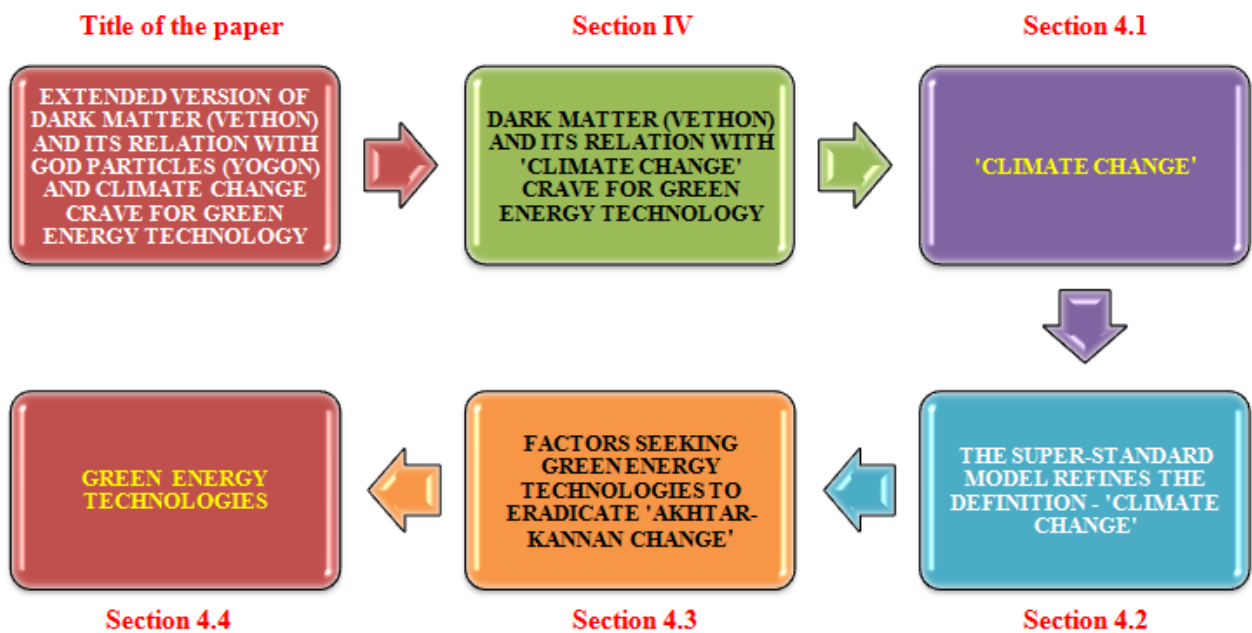
Fig. 19 Outline of Section IV – Dark Matter (Vethon) and its relation with 'Climate Change' crave for Green Energy Technology.

4.1 Climate Change

Large quantities of greenhouse gases are emitted from different sources like road transport, fossil fuel based power plants, cement production, deforestation, iron and steel manufacture, oil and gas production, garbage, livestock, fertilizers and aviation into the atmosphere via both natural and human activities. When sunlight enters the Earth's atmosphere approximately half of the solar radiation is absorbed by the Earth's surface (land and water) and warms the Earth. Some solar radiation is sent back into the atmosphere in the form of infra-red rays. The emission of man-made greenhouse gases into the atmosphere from burning of fossil fuels from different sources trap most of the infra-red rays and raise the temperature of the Earth. As a result the H_2O level in the sea increases, which is known as 'Climate Change' [1], [15-17].

4.2 The Super-Standard Model refines the definition - 'Climate Change'

In the Universe, millions and millions of planets with incalculable tons of weight exists, moving in a rhythmic and precise manner and floating in space. The mass of the planet Earth is approximately equal to (6E+24) kilograms and about seventy one percent (71%) of the Earth's surface is covered with oceans and the remaining consists of continents and islands [15], [16].

As explained in Section 2.2, scientists have experimentally proved that the time Earth travels around the Sun once is 365.25 days, and the Earth also spins as it orbits the Sun, and is constantly in motion. Some kind of **Energy (E)** or **inexhaustible stock force** is required to keep the Earth constantly in motion. The author of this paper concludes that the Dark Matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' the source of all forces which is acting in **all directions** and in **all degrees (360^0 degrees)** is the **Energy (E)** or **inexhaustible stock force,** which keeps the Earth orbiting and spinning without changing its polarity (direction of motion). The constant motion of the Earth is the **experimental evidence** for 'Climate Change' as it proves that the **quality** of Dark Matter (Vethon) is 'Self-Compressive Surrounding Pressure Force,' the source of all forces which is acting in **all directions** and in **all degrees (360^0 degrees)** and keeps the Earth orbiting and spinning without changing its polarity (direction of motion) [1] as shown in Fig. 20.

Therefore, Vethathiri's discovery [1] that not only mass is acting on space but also <u>space is acting on mass</u> forecasts that the Dark Matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force,' <u>PUSHES</u> the increased H_2O level as shown in Fig. 21 towards the islands and continents, due to the warming of the Earth resulting in floods, storms, ocean currents, Tsunamis etc. initiating 'Climate Change' [1]. The author of this paper names 'Climate Change' as '<u>Akhtar-Kannan Change</u>.'
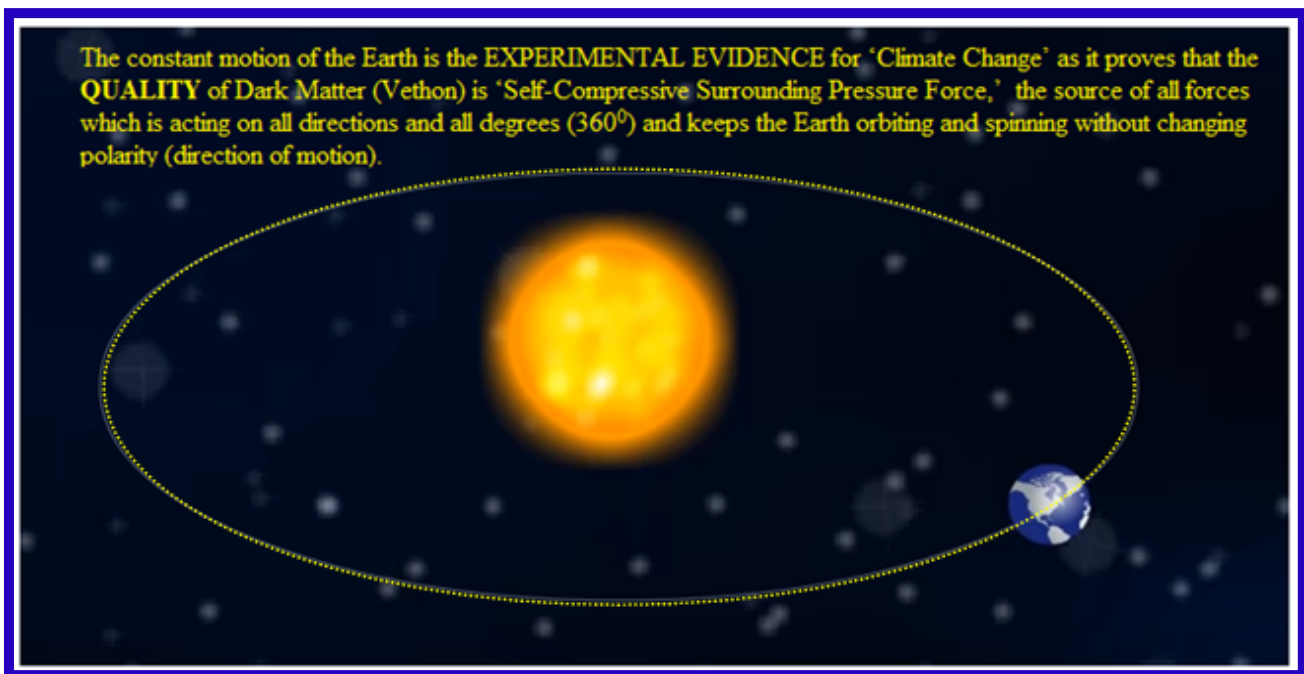

Fig. 20 The constant motion of the Earth is the <u>**experimental evidence**</u> for 'Climate Change' as it proves that the <u>**quality**</u> of Dark Matter (Vethon) is 'Self-Compressive Surrounding Pressure Force,' the source of all forces which is acting in **all directions** and **all degrees (360^0)** and keeps the Earth orbiting and spinning without changing polarity (direction of motion).

4.3 Factors seeking Green Energy Technologies to eradicate 'Akhtar-Kannan Change'

There will be an increase in demand of oil, coal and gas towards 2020 and 2030 as industrialization has progressed and population has increased worldwide. The amount of energy required will be directly proportional to the growth of the Earth's population. Lawrence Berkeley National Laboratory (LBNS) conducted a study for the U.S. Department of Energy's (DOE) office of Electric Transmission and Distribution and estimated that electric power outages and blackouts cost the U.S. of about $79 billion annually [9].

The Dark Matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' is directly proportional to the rise of H_2O level due to warming of the Earth (if the H_2O level due to warming of the Earth is high, Climate Change will **increase** and if the H_2O level due to warming of the Earth is low, Climate Change will **decrease**) as shown in Fig. 22. These are some of the factors needing green energy technologies to eradicate 'Climate Change' referred to as 'Akhtar-Kannan Change.'

4.4 Green Energy Technologies

The primary types of green energy technologies like hydrogen (H_2), solar power, wind power, hydro electric power, geothermal power and the zero emission technology (fuel cell technology) promise to eliminate problems created by fossil fuels and their primary goal is pollution reduction. Their primordial aim is to solve the international problems like global warming and oil dependency. The zero emission technology (fuel cell technology) converts chemical energy into electrical energy and the by-product is only heat and water, which mean elimination of greenhouse gases and pollution. H_2 can be produced throughout the Earth from multi production methods which mean elimination of oil dependence and distributed production. Experiments were conducted by using T-1000 1.2kW Proton Exchange Membrane Fuel Cell (PEMFC) under laboratory conditions at Power Systems Research Laboratory, Victoria University, Melbourne. Based on the experiment, it confirms that a solution for production losses due to power outages and environmental disasters can be T-1000 [19-21]. The experimental data and computational data derived during the experiment denote, that T-1000 is valid and operable [9].
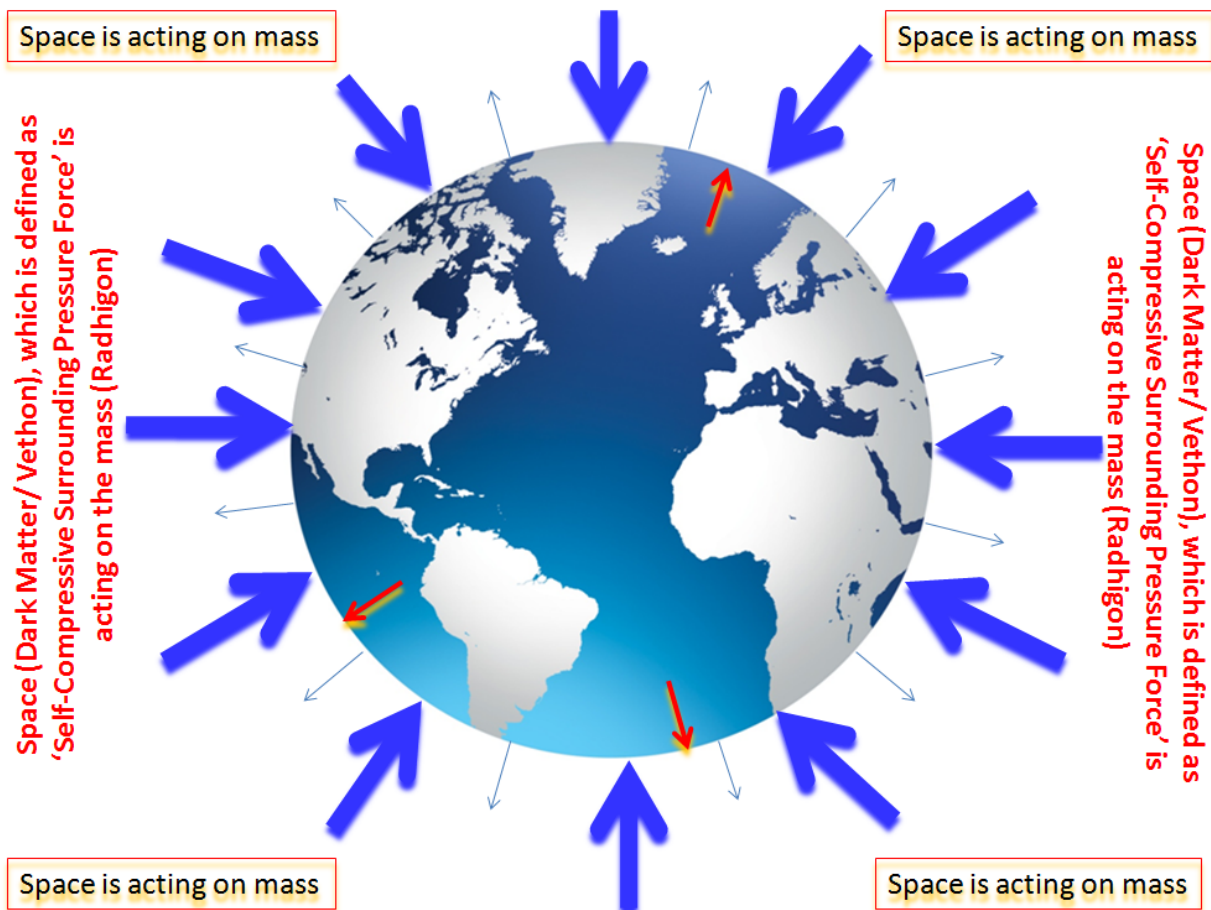

Fig. 21 Vethathiri's discovery that not only mass is acting on space but also **space is acting on mass** forecasts that the Dark Matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force,' **PUSHES** the increased H_2O level towards the islands and continents, due to the warming of the Earth resulting in floods, storms, ocean currents, Tsunamis etc. initiating 'Climate Change.' Therefore, the author of this paper concludes that 'Self-Compressive Surrounding Pressure Force' is directly proportional to the increased H_2O level due to warming of the Earth, which now leads to a discovery of a **new definition** for 'Climate Change' and names 'Climate Change' as '**Akhtar-Kannan Change**.'
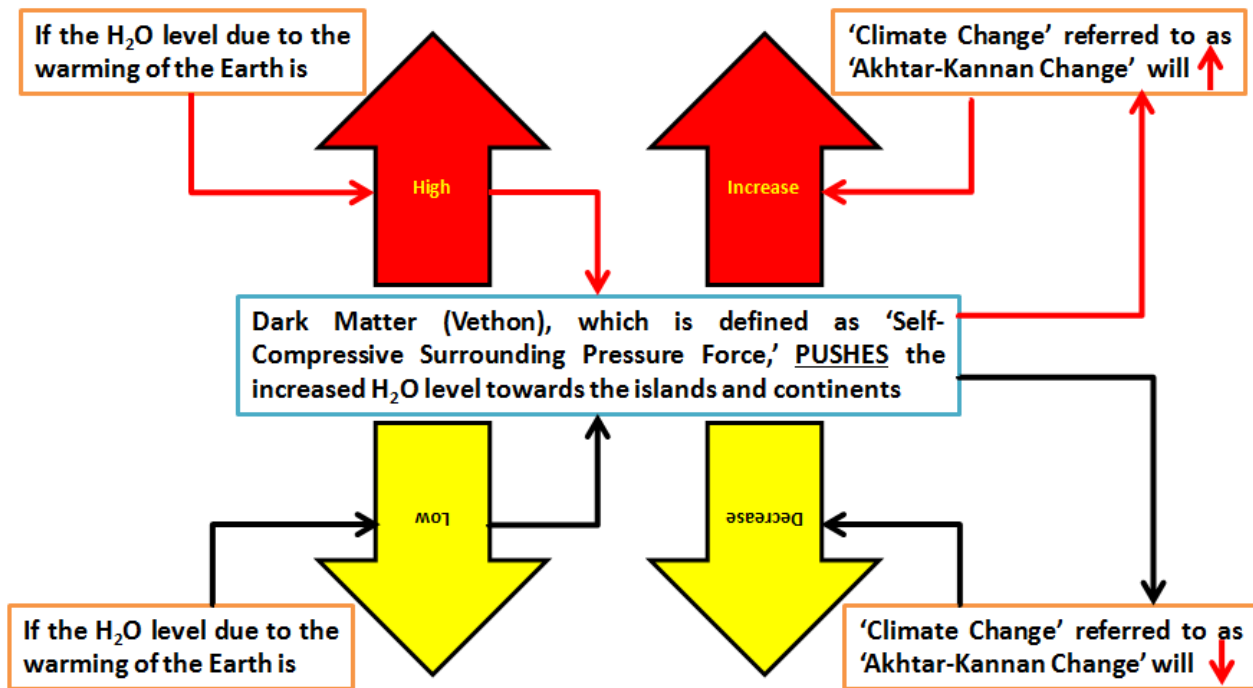
Fig. 22 Dark Matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' is **directly proportional** to the increased H_2O level due to warming of the Earth (if the H_2O level due to warming of the Earth is high, 'Climate Change' referred to as 'Akhtar-Kannan Change' will **increase**, and if the H_2O level due to warming of the Earth is low, 'Climate Change' referred to as 'Akhtar-Kannan Change' will **decrease**).

V. CONCLUSION

The Super-Standard Model is the only theory that encompasses Quantum Mechanics as well as Relativity and describes all forces and particles – **the ultimate goal of physics**.

5.1 Section II

The Super-Standard Model (Vethathiri Model of the Universe), explains the first four stages of its evolution in Section II. Dark Matter (Vethon) and Dark Energy (Sathyon), two of the most famous, and most embarrassing, problems in physics so far have been defined and explained in Section II. Newton and Einstein's concepts of Gravity have been refined in Section II. The author **does not agree** with Einstein's second postulate of the Theory of Special Relativity and added the second requirement - Repulsive Force (Revathon) is **not constant.**

Mass (Radhigon) is defined and the Cosmological Movement of the Universe (V-S-K Movement of the Universe), which is not understood so far in physics is described in this Section. The author of this paper concludes that the **constant motion** of the Earth, the Sun and the Galaxy is the **experimental evidence** for Dark Matter (Vethon) as it proves that the **quality** of Dark Matter (Vethon) is 'Self-Compressive Surrounding Pressure Force.' The author also concludes that the Universe is **not expanding** at an accelerating rate, only **Dark Energy**

(Sathyon) is **expanding,** which is explained in Section II. The author of this paper has predicted that if you give equal force in **all directions** it will move in an elliptical path and the theory may successfully put to the test which is also highlighted in Section II (**Equal pressure in all directions = Elliptical path).**

The following equations are refined by the author in this Section:
1. Einstein's Energy-mass equation $E = mc^2$ to $E = mw^2$;
2. Lorentz factor, $\gamma =$ "sqrt $(1-v^2/c^2)$," to Kamala-JL factor, $(\gamma) =$ "sqrt $(1-v^2/w^2)$."
3. Lorentz Time dilation formula, $t = t_0/$ "sqrt $(1-v^2/c^2)$" to Varthini-HVC Time dilation formula, $t = t_0/$ "sqrt $(1-v^2/w^2)$";
4. Lorentz contraction formula, $L = L_0$ "sqrt $(1-v^2/c^2)$" to Pradiksha-JM contraction formula, $L = L_0$ "sqrt $(1-v^2/w^2)$."

5.2 Section III

The newly discovered particles by the author of this paper, **Y electrons** and **S-K electrons** in protons and neutrons are described in Section III. Down Quark (Sathya-Kannon), an atom (Vethya-Sathya-Kannon) and Universe is also defined in this Section. The author of this paper concludes that only Dark Matter (Vethon) **never dies** and time stops only at Dark Matter (Vethon), when Repulsive Force (Revathon) merges with Dark Matter

(Vethon) and its frequency becomes **zero** and names time as **'Varthon.'** The Super-Standard Model - Fundamental Particles (Logons and Laxmions) are also described in Section III. The Energy-momentum equation to calculate the 'invariant mass,' $E^2 = p^2c^2 + m^2c^4$ is refined to $\underline{E^2 = p^2w^2 + m^2w^4}$ [not light (c) but Repulsive Force (w)] in Section III. The Large Hardon Collider (LHC) experiments at the European Council for Nuclear Research (CERN) Lab in Geneva, Switzerland **FAVOUR** the Super-Standard Model of physics, Yogon (Up Quark) as the God Particle but not the Higgs Boson as the God Particle predicted by the Standard Model of Physics is highlighted in Section III.

5.3 Section IV

The constant motion of the Earth is the **experimental evidence** for 'Climate Change (Akhtar-Kannan Change)' as it proves that the **quality** of Dark Matter (Vethon) is 'Self-Compressive Surrounding Pressure Force,' the source of all forces which is acting on **all directions** and **all degrees** (360^0) and keeps the Earth orbiting and spinning without changing polarity (direction of motion) is explained in Section IV.

5.4 Future Work

The Super-Standard Model (Vethathiri Model of the Universe), will be explained further in detail in the forthcoming projects namely, "The Super-Standard Model (Vethathiri Model of the Universe) Unites Quantum Mechanics and Relativity into One Grand Theory – The Theory of Everything (Origin)," and "The Origin of the Universe - Kannan Jegathala Krishnan" which incorporates White Holes (Kamalon), Wormholes (Krishnon), Black Holes (Kannon), Magnetisn (Meylon), Electricity (NAP-Akhton), Doppler Effect (JK-JP Effect), Blue Shift (P-JAY-Murthon), Red Shift (H-VAS-Chandron) and other phenomena. The author of this paper concludes that the Super-Standard Model will be the backbone for the change of modern physics (Quantum Mechanics and Relativity) in this 21st Century.

VI. ACKNOWLEDGEMENT

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VIII.   THE SUPER-STANDARD MODEL (VETHATHIRI MODEL OF THE UNIVERSE) BY DR. KANNAN JEGATHALA KRISHNAN UNDER THE GUIDANCE OF SENIOR PROFESSOR YOGIN SATHYAMURTHY MAHALINGIAH

SENIOR PROFESSOR YOGIN SATHYAMURTHY MAHALINGIAH, 'THE WORLD COMMUNITY SERVICE CENTRE', ALIYAR, POLLACHI, INDIA

The new model of Physics which is named as the **Super-Standard Model (Vethathiri Model of the Universe)** by myself under the supervision of Senior Professor Yogin Sathyamurthy Mahalingiah from the World Community Service Centre,' Aliyar, Pollachi, India answers the **Unified Theory - "The Theory of Everything (Origin)."** The Super-Standard Model (Vethathiri Model of the Universe) is the only model in Physics that Unites Quantum Mechanics and Relativity into One Grand Theory – "The Theory of Everything (Origin)."

▪ I have concluded that Unified Force, which is defined as 'Self-Compressive Surrounding Pressure Force' is the Dark Matter (Vethon). So far in physics, nobody has been able to explain what **'Dark Matter' and 'Dark Energy'** is. I have defined and explained 'Dark Matter (Vethon)' and 'Dark Energy (Sathyon),' one of the most famous, and most embarrassing, problems in physics so far. I have refined Newton's Theory of Gravity, Einstein's Theory of Special Relativity **($E=mc^2$ to $E=mw^2$)** and also Higgs Boson, which was declared as a 'God Particle,' by the Standard Model of Physics. I have concluded that '**Up Quark'** should be the God Particle as per the Super-Standard Model of Particle Physics and not Higgs Boson as predicted by the Standard Model of Particle Physics.

▪ I have defined mass (Association of God Particles), an atom (Repulsive Force and its associated fluctuations) and the Down Quark (Association of two God Particles - Up Quarks). I have named mass as 'Radhigon,' an atom as 'Vetha-Sathya-Kannon,' and the Down Quark as 'Sathya-Kannon.' I have discovered that there are three electrons in protons and three electrons in neutrons. I have explained the Cosmological Movement of the Universe which is not understood so far in physics. I have concluded that the Universe is **not expanding** at an accelerating rate, only Dark Energy (Sathyon) is **expanding** and named the **expansion** of Dark Energy as 'Vetha-Sathyon' and the Cosmological Movement of the Universe as 'V-S-K Movement of the Universe.'

▪ I have pointed out that Dark Matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force,' **PUSHES** the increased H_2O level, due to the warming of the Earth, towards the continents and islands initiating 'Climate Change,' which now leads to the discovery of a new definition and named 'Climate Change' as 'Akhtar-Kannan Change.'

I have sent emails and letters regarding my recent research discoveries to the **Presidents** and **Prime Ministers** in about 40 countries and to the **Chancellors** and **Vice-Chancellors** at about 250 leading Universities in the world (copy to - Physicists and Electrical Engineers), which include MIT University (US), University of Cambridge (UK), Swiss Federal Institute of Technology (Switzerland), University of Tokyo (Japan), LMU Munich (Germany), Australian National University (Australia), IIT Bombay (India), National University of Singapore (NUS), University of Toronto (Canada), Lomonosov Moscow University (Russia) etc.

I have delivered my first keynote lecture in the International Conference on Power Generation Systems and Renewable Energy Technologies organized by International Islamic University, Islamabad, Pakistan. I was provided with **VVIP Protocol** throughout the Conference during the year 2010. I have published about 30 publications in peer reviewed journals; conferences and delivered Chief Guest, Guest of Honour, Inaugural, Special, Valedictory and Keynote addresses during International Conferences and Guest Lectures for about 55 institutions in Australia and abroad.

- ABOUT THE AUTHOR DR. KANNAN JEGATHALA KRISHNAN:

Education:

I received my Doctor of Philosophy (PhD) specializing in Renewable Energy Systems from the Department of Electrical Engineering, College of Engineering and Science, Victoria University, Melbourne, Australia during the year 2014. I received my Master of Technology (MTech) from Department of Mechanical Engineering, Faculty of Science, Engineering and Technology, Swinburne University of Technology, Melbourne, Australia and Masters of Business and Administration (MBA) from Victoria University, Melbourne, Australia during the year 2010 and 2009.

I received my Graduate Diploma of Information Systems Management (GradDipISM) from Central Queensland University, Melbourne, Australia and Bachelor of Engineering (BE) in Mechanical Engineering from Bharathiar University, Coimbatore, India during the year 2003 and 1999. I completed my Master Course of Simplified Kundalini Yoga (SKY), form the World Community Service Centre, Aliyar, Pollachi, India during the year 1995.

Academic appointments:

Currently, I am appointed as a 'Research Scientist & Coordinator - University Education', The World Community Service Centre (WCSC), Aliyar, Pollachi, South India for geographical locations (South Eastern Countries) for coordinating with Universities in South Eastern Countries for implementing Educational Programmes since June, 2014; 'University Co-ordinator' for Kalasalingam University to promote its academic programmes in South Eastern Countries and Kalasalingam University in India since January, 2015; 'Authorised Representative' for Bharath University to promote its academic programmes with Australian Universities and Bharath University in India since November, 2014; I am appointed as a Sessional Lecturer at Faculty of Science, Engineering and Technology, Swinburne University of Technology, Melbourne, Australia since July, 2016.

I was also appointed as a Sessional Lecturer (July, 2016 – December, 2016) at College of Engineering and Science, Victoria University, Melbourne, Australia; Sessional Lecturer/Tutor/Teaching Assistant (January, 2011 – December, 2014) at College of Engineering and Science, Victoria University, Melbourne, Australia; Lecturer (February, 2001 – December, 2001) at Govt. Polytechnique, Ooty, The Nilgiris, India; and Workshop Superintendent (September, 1999 – January, 2001) at CSI College of Engineering and Technology, Ketti, The Nilgiris, India.

IX. THE SUPER-STANDARD MODEL - KEY WORDS AND THEIR DEFINITIONS

1.	Dark Matter (Vethon)	Dark Matter (Vethon) can be defined as 'Self-Compressive Surrounding Pressure Force' and is denoted by a letter 'E.'
2.	God Particles (Yogon –Up Quark)	God Particles (Yogon) are a fraction of space (Dark Matter/Vethon) which **cannot be further divided**. God Particles (Yogon), which are excited from the space (Dark Matter /Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force,' have the innate capacity to **resist** the space (Dark Matter/Vethon).
3.	Force Carrier Particles (Logons)	The fundamental Force Carrier particles are known as Logons [1. Dark matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' and 2. Repulsive Force (Revathon) - photons, W bosons and Z bosons which have an integer spin (0, 1, 2...)].
4.	Fundamental Particles (Laxmions)	Six quarks namely (Up/Down, Charm/Strange and Top/Bottom) and ten Leptons namely Y-electron (e^{y-}), S-K electron (e^{sk-}), electron (e^-), muon (μ), tau (τ) and its five kinds of neutrinos (ν) are known as Laxmions.
5.	Stable Quarks (L-Vethon)	The two least massive Quarks (Up Quark and Down Quark) are the Stable Quarks (L-Vethon).

6.	Dark Energy (Sathyon)	The volume occupied in three-dimensional space by both 'Self-Compressive Surrounding Pressure Force' and Repulsive Force is known as 'Dark Energy.' It is denoted by a letter 'S,' and S = (E + w).
7.	Repulsive Force (Revathon)	Due to the friction between the God Particles (Yogon) and the space (Dark Matter/Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force,' innumerable tiny waves are **constantly generated** from space, which is known as Repulsive Force (Revathon). It is denoted by a letter 'w.'
8.	Anti-God Particles (R-Sathyon)	The particles, which are excited from the space (Dark Matter /Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force' and **do not** have the innate capacity to **resist** the space (Dark Matter/Vethon) merge back and become space (Dark Matter/Vethon), which are known as Anti-God Particles (R-Sathyon).
9.	Stable Leptons (N-Santhon)	The least massive charged Leptons (Y-electron, S-K electron and electron) and the neutrinos are the stable matter of the Universe, which are known as Stable Leptons (N-Santhon).
10.	Unstable Quarks (S-Santhon)	The two Leptons [muon (μ) and tau (τ)] are known as Unstable Leptons (S-Santhon) because the two massive Leptons decay into lighter Leptons.
11.	Down Quark (Sathya-Kannon)	Down Quark (Sathya-Kannon) can be defined as "**Association of two Up Quarks**".
12.	Climate Change (Akhtar-Kannan Change)	Vethathiri's discovery that not only mass is acting on space but also space is acting on mass forecasts that the Dark Matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force,' **PUSHES** the increased H_2O level towards the islands and continents, due to the warming of the Earth resulting in floods, storms, ocean currents, Tsunamis etc. initiating 'Climate Change (Akhtar-Kannan Change).'
13.	Magnetism (Meylon)	Whenever the Repulsive Force (the compressed, intensified force) extends itself, then it is regarded as 'Magnetism (Meylon).'
14.	Mass (Radhigon)	Mass (Radhigon) can be defined as "Association of God Particles".
15.	Unstable Quarks (R-Kannon)	The four Quarks (Charm/Strange and Top/Bottom) are known as Unstable Quarks (R-Kannon) because the four massive Quarks decay into lighter Quarks.
16.	Time (Varthon)	According to the 'Super-Standard Model,' the birth of the Universe is highly impossible to calculate [Age of the Universe is **infinity** (∞)] because during the 3rd stage of the evolution the Repulsive Force (Revathon) would merge with space (Dark Matter/Vethon) and becomes space (Dark Matter/Vethon) and the author names the time as Varthon.
17.	Vetha-Sathyon	The Universe is not expanding at an accelerating rate, only Dark Energy (Sathyon) is expanding.
18.	Y-electrons – Newly discovered Particles	Repulsive Force (Revathon) forms globally as Y-electron at the beginning due to the friction between the Up Quark (Yogon) and the Dark Matter (Vethon). Y-electrons spin around God Particles (Yogon - Up Quarks) in an elliptical order at infinite speed.
19.	S-K electrons – Newly discovered Particles	Repulsive force (Revathon) forms globally as S-K electron at the beginning due to the friction between the Down Quark (Sathya-Kannon) and the Dark Matter (Vethon).S-K electrons spin around the Down Quark in an elliptical order at very near to infinite speed.
20.	Atom(Vetha-Sathya-Kannon)	An atom can be defined as "**Repulsive Force and its associated fluctuations.**"
21.	Universe	The Universe can be defined as "**Repulsive Force and its associated fluctuations**."
22.	Cosmological Movement of the Universe (V-S-K Movement of the Universe)	The Earth, the Sun and the Galaxy are not moving on their own. They are forced to move by Dark Matter (Vethon), which is defined as 'Self-Compressive Surrounding Pressure Force'. This can be called the Cosmological Movement of the Universe (V-S-K Movement of the Universe). **Equal pressure in all directions = Elliptical Path**.