# **Unified Understanding of Cosmological Energy Fields: Exploring Gravitation, Repulsion, and More**

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Approach

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#### **ABSTRACT**

First, we develop a unitary process that can explain all four physical activations: electromagnetic wave, electromagnetic force, repulsion, and attraction. Second, it is clarified that cosmological and physical entities relate to different levels of existence in the universe and, hence, cannot be considered under the same paradigm. We know that biological entities use physical substances as executants; analogously, physical entities use cosmological substances as executants. Therefore, we have introduced new terms for the cosmological substances used as executants in physical activities. Third, this study introduces the primary elements of the cosmological world, such as visibility, forcibility, fullness, and hollowness, and defines them according to their attributes. This study explains how different combinations and placements of primary elements create different cosmological fields. These fields are used in all physical activations. Finally, we explain the entity model and how all physical activations occur. This study concludes that all physical activations use primary elements and follow the same universal law. Therefore, this study addresses the untouched subject of the creation of repulsion and attraction (gravitation). Furthermore, it addresses several cosmic mysteries that are yet to be resolved.

#### 1. INTRODUCTION

# 1.1. History of Quantum Machines and Particle Physics

All physical activations are explained by quantum machines. We found the traces of the use of quantum machines date back to 1801 when Thomas Young discovered the wave formation in a double-slit experiment. In 1859, Gustav Kirchhoff proposed a theorem about blackbody radiation. To Boltzmann, the mysterious concept of entropy was first introduced in the work of the German Rudolph Clausius (1822-1888) [1]. During the 19th century, several philosophers and scientists made important contribu-

tions to the field of space science. The modern concept of quantum physics came into existence when Max Plank introduced of quantization of energy in 1900 to explain blackbody radiation, while Einstein applied this idea to explain the photoelectric effect in 1905. In 1924, Louis de Broglie hypothesized that all matter is wave-like [2]. In 1925-1927, Werner Heisenberg introduced the uncertainty principle and the concept of wave-particle duality. Regarding particle physics, several atomic and subatomic particles were discovered up until the 20th century. Subsequently, scientists attempted to further break the particle to find the elementary physical particle (EPP); however, whatever they found could not be claimed as elementary because the possibilities of further breaking were not ruled out.

# 1.2. Addition to Prevailing Knowledge

- a) We argue that considering the cosmological and physical worlds under the same paradigm is the root problem of modern physics. These are two different levels similar to the physical and biological world.
  - b) We provide here a brief terminology of cosmological terms.
- c) We explain how four basic cosmological substances create different cosmological fields by their ingredients (cosmological substances) and placements.
  - d) We explain a model of EPP, which can receive, hold, and provide different fields.
- e) This model will explain the receiving cosmological fields, converting them into physical fields, providing a physical image, and reconverting them into cosmological fields.
- f) We explain here how the model represents all types of activation (such as electromagnetic waves, electromagnetic fields, attraction, and repulsion) by obeying the unitary process.
- g) We address several unanswered questions, such as cosmological constant, dark matter, dark energy based on the proposed theory.
- h) We explain the cause behind all activations, including gravitation and repulsion caused by mass and heat, respectively [3].

## 1.3. Limitations of the Proposed Theory

The proposed theory is based on cosmology and cannot be tested with available technology. Thus, we rely on inferences drawn from experiments conducted within the cosmological realm. To this end, we attempted to introduce novel terminology, but some words may confuse us with physical words due to preconceptions. In this study, we have demonstrated several hypotheses that may seem incorrect. However, all are connected by one thread, and we cannot leave any of them out when we consolidate them because it would cause a lack of clarity.

# 1.4. Terminology of Cosmological Words

- a) Cosmological substances appear in the form of their attributes: visibility, forcibility, fullness, and hollowness.
- b) Sense is the correlation between visibility and forcibility. Quantum is the correlation between fullness and hollowness.
- c) Space fabric, known as physical emptiness or aether, is the medium of all physical activities, including electromagnetic waves and gravitation [4].
- d) For all practical purposes, we have used the word "space fabric" instead of the prevailing word "space."
  - e) "Exertion" refers to the impulse offered by a physical object involved in attraction and repulsion.
  - f) "Sensorial" refers to the impulse accepted by a physical object involved in attraction and repulsion.
  - g) "Sensorial exertive pull" denotes attraction, and "sensorial exertive push" denotes repulsion.

## 1.5. Methodology

The universal entropy [5] progresses through countless levels of existence and is never satisfied with

the progress. There are known levels that are cosmological, physical, biological, psychological, and intellectual. Each level is distinct in its way, albeit governed by the same universal laws [6]. Interestingly, the relationship between two successive levels is analogous owing to the applicability of the same universal law. We do not have complete knowledge of any level, but we do have some knowledge of each level. Therefore, it is possible to learn many things by substituting the known knowledge of one level with the unknown of another level using parallel laws and the guess proof [7]. For instance, humans absorb psychological symbols [8], animals absorb biological food, and plants absorb physical matter. Hence, it can be inferred that matter absorbs cosmological energies. However, it is important to note that an incorrect substitution may lead to improper inference. Therefore, this philosophical methodology can be applied only after careful application of unitary logic and checking the results, which must follow practically proven facts. It has been stated, "If E is evidence for some hypothesis H, then E makes it more likely that H is true: in such circumstances, E confirms H" [9]. This analogy can apply to issues where experimentation is impossible [10].

While structuring the model of an entity, we employ the concept of a "universal law" as a fundamental logic for incorporating the available knowledge of physics, biology, and psychology. We cross check the information from all directions to ensure accuracy. As Ayer once stated, "A rational man is one who makes a proper use of reason: and this implies, among other things, that he correctly estimates the strength of evidence" [11]. We have a number of well-known experiments discussed in the paper. The author does not have any contradictions with the observations made therein; instead, he differs with the inferences drawn from the observations. Therefore, no additional experiments are required.

#### 2. DIFFERENCE BETWEEN PHYSICAL AND COSMOLOGICAL WORLD

We know that physical entities follow the fundamentals of biological entities, but do not follow biological science. Similarly, cosmological entities are the fundamentals of physical entities but do not follow physical science [12]. Some of the important differences are presented here:

- a) A living physical particle "feeds on" (receives and absorbs) a cosmological substance being pure energy (thermal and electric energy) [13, 14]. In contrast, cosmological substances cannot "feed on" physical particles.
- b) Energy (unlike a physical substance) is shapeless [15] and has no physical parameters comparable to a physical body [16].
- c) An "inertial frame of reference" can be defined only for a physical entity, whereas a photon can simultaneously occupy different places [17].
- d) No matter how small the physical particle is, it will be a physical particle only. A boson [18], which is the smallest available physical particle, can receive/store/emit heat and can be cooled down to  $-273.15^{\circ}$ C, as it is a physical particle.
- e) Flip Tanedo stated, "It's sufficient for a particle to have the energy to have a meaningful sense of existence" [13]; the opposite is not true.
- f) Electromagnetic waves and gravitational pulls are both executed by physical entities, using cosmological entities (energy fields) as their executants. It is just like biological entities execute physical substances, psychological entities execute bio-chemicals, and intellectual entities execute psychological emotional symbols.
- g) A plant has biological life, whereas molecules do not; instead, they have physical life. In the same way, physical matter has physical life, whereas cosmological energies do not; instead, they have cosmological life.
- h) We can photograph physical particles, but not cosmological particles such as light, thrust, and gravity. A photon (light particle) performs a photographic act itself.
- i) A physical mass can increase by acquiring energy, as described by the mass-energy conversion equation [19]. However, a photon cannot gain mass by acquiring another photon.
- j) Cain says, "But for the photon, there's zero time elapsed between when it's emitted and when it's absorbed again. It doesn't experience distance either" [17, 20]. In other words, cosmological substances do

not experience physical parameters like distance and time. This phenomenon is also observed in quantum entanglement [21].

The above views are provided by different philosophers based on different experiments, indicating the difference between the cosmological and physical levels of the universe. "Our knowledge of cosmology is very limited" [22], because we are taking physical and cosmological worlds within the same paradigm.

# 3. STRUCTURE OF FIELDS

# 3.1. Evolution of Primary and Secondary Fields

To understand the cosmological world, we must first introduce its basic elements. We have four imaginable cosmological substances named according to their attributes: visibility, forcibility, fullness, and hollowness. These cosmological substances are physically imperceptible and responsible for the creation of energy fields as well as the space fabric. First of all, we will discuss the energy fields; thereafter, we will discuss the space fabric and the structure of a physical entity, referring to Figure 1.

Cosmological substances have no direct relationship with the physical world, they create cosmological fields, which can be used as executants of physical entities. All cosmological fields are created with different combinations and placements of cosmological substances. The four cosmological fields are listed as follows:

- a) Visibility field: made of quantum (fullness-hollowness) and visible sensing (positive visibility-negative visibility), acts as the executant for the electromagnetic wave.
- b) Forcibility field: made of a quantum of (fullness-hollowness) and forcible sensing (positive forcibility-negative forcibility), acts as the executant for the electromagnetic force.
- c) Fullness field: made of sensing (visibility-forcibility) and fullness quantum (positive fullness-negative fullness), acts as the executant for the sensorial exertive push (repulsion).
- d) Hollowness field: made of sensing (visibility-forcibility) and hollowness quantum (positive hollowness-negative hollowness), acts as the executant for sensorial exertive pull (attraction).

### 3.2. Additional Note

- a) For all practical purposes, visibility (heat) represents diversity, while forcibility represents intensity, which is opposite attributes but complements each other, creating "sense." Keeping "sense" constant and increasing diversity will reduce the intensity. In 2017, the HSI Sensing Team stated: "A magnet subjected to heat experiences a reduction in its magnetic field; when the same magnet is exposed to low temperatures, its magnetic property is enhanced, and the strength increases" [23].
- b) For all practical purposes, fullness and hollowness are opposite attributes, but complement each other, creating "quantum." The double-slit experiment demonstrates their opposition. It is stated: "We first note the pattern of light on the screen with just one slit open, then we open the second slit, admitting more light through the slits; however, some places on the screen, where there was visible light, go dark" [24]. Herein, the authors argue that the light of the second slit has a component of "hollowness," which cancels the fullness of the first slit. This proves that "hollowness" has an attribute that is opposite to "fullness." After introducing the "negative fullness" wave, no difference remains between the water and electromagnetic waves (Figure 2).
- c) The positivity and negativity in attributes are derived from the space fabric, where each attribute has an average space density.

# 3.3. Interchange between Emitting Field and Receiving Field

Figure 3 and Figure 4 show the four activations: the electromagnetic wave and force, and the sensorial exertive push and pull. Each activation has two ends: one at the emitter and the other at the receiver. In the case of electromagnetic waves, the receiving entity receives the magnetic field from the emitter, converts it to the electric field, propagates it, and absorbs it [25]. To well stated that "electricity and

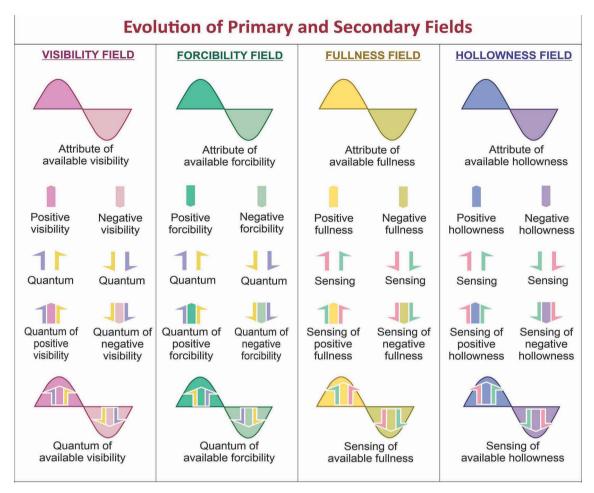


Figure 1. We have two kinds of senses: visibility and forcibility, and two kinds of quantum: fullness and hollowness. All fields are created using a combination of sense and quantum. The figure shows the different types of fields available. We have used the words "negative" and "positive." These words pertain to the average density of space in relation to specific attributes.

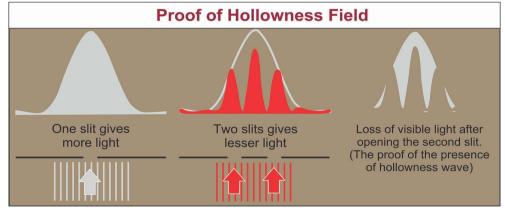


Figure 2. When only one slit is open, there is lighter than when two slits are open. This phenomenon provides evidence of the existence of a hollowness field as the second part of the electromagnetic wave.

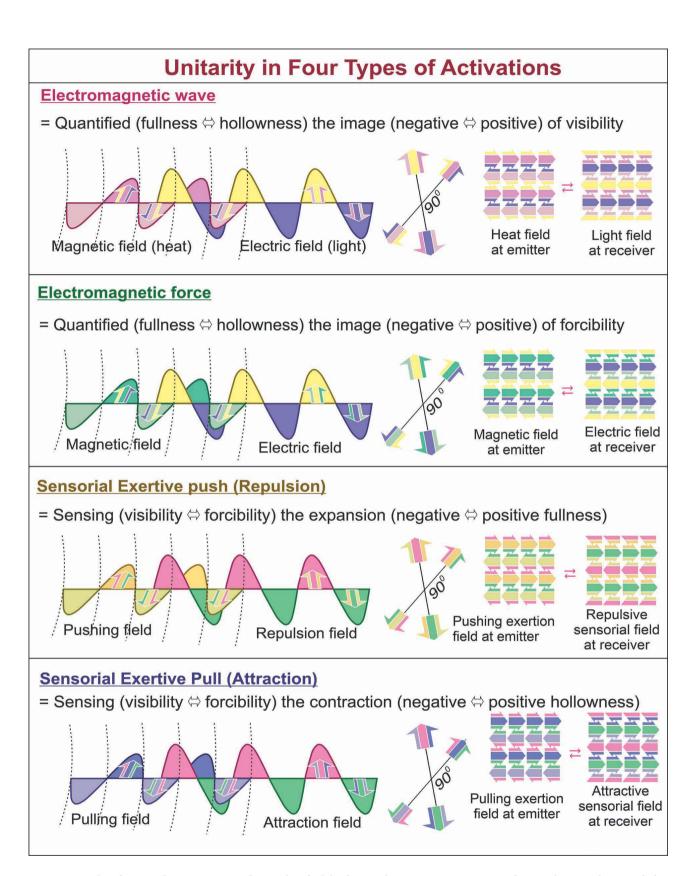


Figure 3. The figure demonstrates how the fields from the emitter are transformed into those of the receiver without altering the components.

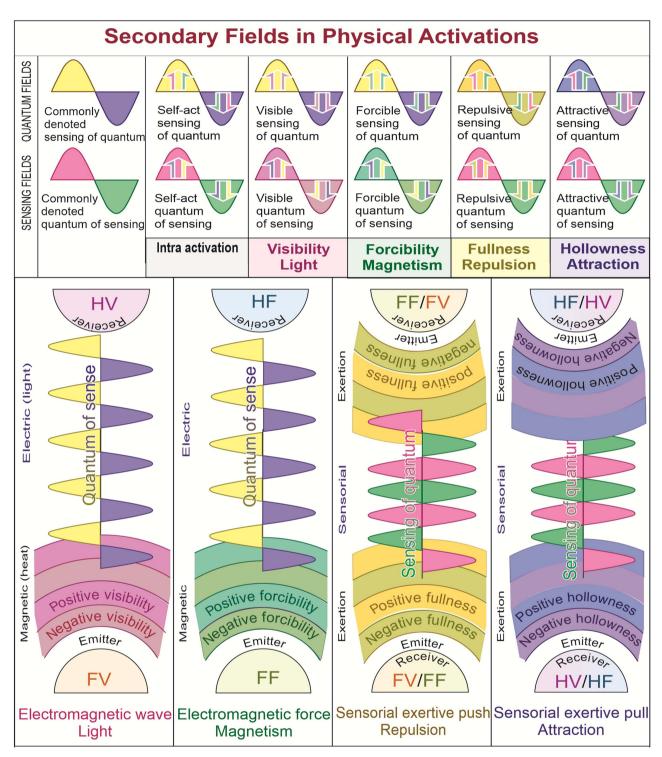


Figure 4. To activate, two fields are involved: the emitter releases a dipolar field that expands spherically and the receiver picks up a monopolar field that expands linearly. When repulsion and attraction waves occur, both objects function as emitters and receivers, thereby producing stationary waves.

magnetism are two sides of the same phenomenon" [26]. NASA specified that "a changing magnetic field will induce a changing electric field and vice-versa—the two are linked" [27]. Both fields have the same

constituents. When the constituents of the magnetic field are displaced at the right angle, the field converts into an electric field. The same phenomenon applies to other activations, too.

The details of the four activations are as follows:

- a) Electromagnetic wave: It has a magnetic (heat) field at the emitter, described as the "quantum of available visibility," and an electric (light) field at the receiver, described as the "available visibility of quantum."
- b) Electromagnetic force: It has a magnetic field at the emitter, described as "quantum of available forcibility," and an electric field at the receiver, described as "available forcibility of quantum."
- c) Sensorial exertive push: It has an exertive (thrust) field at the emitter, described as "sensing of available fullness," and a sensorial push field at the receiver, described as "available fullness of sensing."
- d) Sensorial exertive pull: It has an exertive (drawing thrust) field at the emitter, described as "sensing of available hollowness," and a sensorial push field at the receiver, described as "available hollowness of sensing."

# 3.4. Activation of Fields in Space Fabric

All emitting fields are dipolar and, hence, cannot move in a linear direction. They expand spherically in all directions with a waveform. The wave has a crest and trough of positive and negative density of the concerned attribute, respectively. The receiver receives them in the form of electric and sensorial fields. These fields are monopolar and can propagate linearly in space, without influence of the distance. In the case of repulsion and attraction, only the sense is flowing (no quantum is flowing); hence, they are called stationary waves. In the case of electromagnetic waves and forces, the quantum is flowing; hence, they are referred to as moving waves. Figure 3 and Figure 4 show that all activations play the same role.

# 4. STRUCTURE OF SPACE FABRIC

Sbitnev stated: "We assume that dark energy and dark matter filling up the whole cosmic space behave as a special superfluid, here named superfluid quantum space" [28]. Agreeing with Sbitnev, we propound that the aether or space fabric itself is made of cosmological substances, which carry the additional dark matter and dark energy as a superfluid within it. According to the theory (Figure 5), the space fabric is composed of four cosmological substances: visibility, forcibility, fullness, and hollowness, arranged symmetrically in a way such that all attributes balance each other [4]. The theory suggests that the standard space fabric is emptiness with a positive nonzero space density in cosmological terms [29]. Furthermore, the theory proposes that each substance has an average space density above zero, allowing for positive and negative characteristics. The fluctuation capability of the space fabric enables quantum transportation through electromagnetic waves and electromagnetic force as well as sense transportation through repulsion and attraction (gravitation).

## 5. MODEL OF THE ELEMENTARY PHYSICAL PARTICLE

# 5.1. Life of Elementary Physical Particle

Life is comprised of three essential elements: space, time, and consciousness. These three components work in unison to define the existence of a living entity (**Figure 6**). 1) The capability of space is dictated by coded information stored in the four chests of EPP, which also determines the characteristics of the entity. 2) Time is divided into three parts. The future is indicated by data flowing into the interaction chamber. The past is represented by data flowing out of the interaction chamber. The physical image of the entity represents the present. 3) Consciousness triggers the EPP to oscillate and activate all field areas, one by one, 90 degrees apart from each other along the wavelength. This composition of space, time, and consciousness resides in a square-shaped structure. We call it the living entity of the elementary physical particle [30]. And life goes through the future to the present and to the past [31].

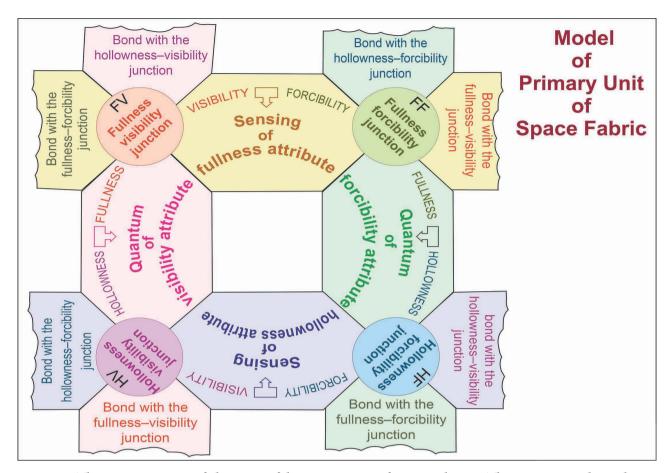


Figure 5. The primary unit of the space fabric comprises four attributes. The two vertical attributes balance each other out. The other two horizontal attributes balance each other out. The vertical and horizontal balance each other. Therefore, the result reaches zero. All attributes play a role in cosmological activation.

# 5.2. Justification of Square-Shaped Structure

We opted for a square-shaped structure based on strong logical foundations. This structure serves as a prototype for space fabric, which is likewise square-shaped [32]. We have four chests parallel to the four bases of biological DNA. We also have four types of activation: electromagnetic wave, electromagnetic force, attraction, and repulsion. All of these activations have four fields: visibility, forcibility, fullness, and hollowness. We believe that nature is unitary and that everything starts with one, which converts into two opposite attributes. When these two multiply by two, we get four, and all four are opposites. An entity has two parts: quantum and sense. Quantum creates fullness and hollowness, while sense creates visibility and forcibility, and we arrive at four. Depending on entropy, this pattern continues with 1, 2, 4, 8, 16, etc. Therefore, it is logical to assume a four-dimensional model of EPP.

# 5.3. Four Chests

The chests provide physical codes to cosmological fields to convert them into physically perceptible fields. After the interaction, the chests withdraw the codes, reconverting to cosmological fields (Figure 6).

- a) The chest of fullness-visibility dyes (FV) imparts/acquires the physical codes to/from the data related to fullness and visibility.
- b) The chest of hollowness-visibility dyes (HV) imparts/acquires the physical codes to/from the data related to hollowness and visibility.

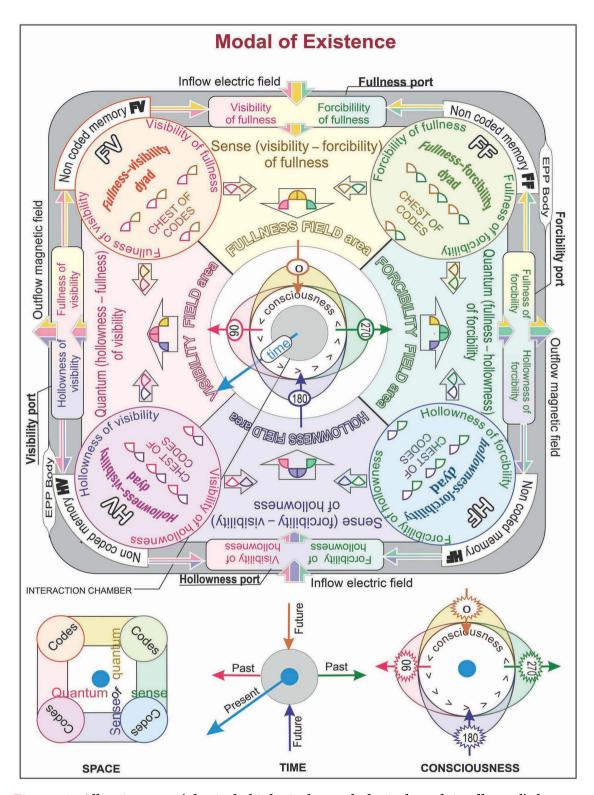


Figure 6. All existences (physical, biological, psychological, and intellectual) have a standard model. This model has four ports, four memory chambers, four code chests, and one interaction chamber. The model's outer denotes the lower level of existence, and the inner denotes the higher level. This self-operative model uses space (capableness), time, and consciousness, which are the integral parts of existence.

- c) The chest of fullness-forcibility dyes (FF) imparts/acquires the physical codes to/from the data related to fullness and forcibility.
- d) The chest of hollowness-forcibility dyes (HF) imparts/acquires the physical codes to/from the data related to hollowness and forcibility.

#### 5.4. Four Field Areas

The four field areas are four junctions that receive different cosmological fields from the outside, from the memory chamber, obtain physical codes from chests, and deliver the coded data to the interaction chamber. Data are also received from the interaction chamber, yielding the physical codes, and sending the cosmological fields to memory chambers and the outside for emission. These field areas are 1) the visibility field area, 2) the forcibility field area, 3) the fullness field area, and 4) the hollowness field area.

#### 5.5. Interaction Chamber

The interaction chamber is where the physically perceptible fields arrive from two different field areas, interact, and conduct an analysis for appropriate pairing. After pairing, an image is created, which remains alive for a minimum possible time (called the present). Subsequently, the image disintegrates, and the disintegrated perceptible fields move to the corresponding field areas. With regards to time, data moving inside is referred to as the future, data moving outside is the past, and the smallest available time when the image is created in between the future and the past is called the present.

# 5.6. Memory Chambers

We have physical images to memorize, but they are in cosmological format. These are disintegrated into four parts, each residing in its assigned memory chamber. As one image resides in four parts, it remains dormant. The "memory chamber" is the place where all the images are received, stored, and delivered to field areas. Whatever we receive from the outside is mixed with the data coming from the memory chambers. Hence, the resultant image is not pure, but highly deflected toward the data of memory chambers. Which image data will be delivered depends on the incoming fields and the entity's desire. Hence, David and Emily stated that wishful seeing affects visual perception [33]. Marianna stated that "perception is often biased, selective, and malleable" [34]. Aristotle argued, "...how perception leads to desire..." [35]. The above examples are related to the intellectual entity. In the case of the physical world, we obtain a modulated (with information) magnetized electric field from the outside. After the interaction, the entity stores the information as magnetic imprints on the magnetic tape.

# 6. CREATION OF ACTIVATING WAVES

We have four cosmological substances; we call them primary fields or cosmological attributes. These attributes create different energy fields through different combinations and placements. The fields are responsible for four types of activations in the form of waves. Among these waves, two are moving waves, namely electromagnetic waves and the electromagnetic force carrying light and magnetic flux. The other two are stationary waves, such as sensorial exertive push and pull, creating repulsion and attraction, respectively. First, we discuss the creation of electromagnetic waves. Notably, the terms "positive" and "negative" are concerning the average space density of the space fabric.

# 6.1. Creation of Electromagnetic Wave

Figure 7 shows that when an observer activates the hollowness, fullness, and visibility fields but does not activate the forcibility field, an electromagnetic wave is generated [36]. If the forcibility field is absent, the empty forcibility field area is filled with a form of visibility that is opposite in aptitude and lower in space density. This is known as "negative visibility." The "positive visibility" and "negative visibility"

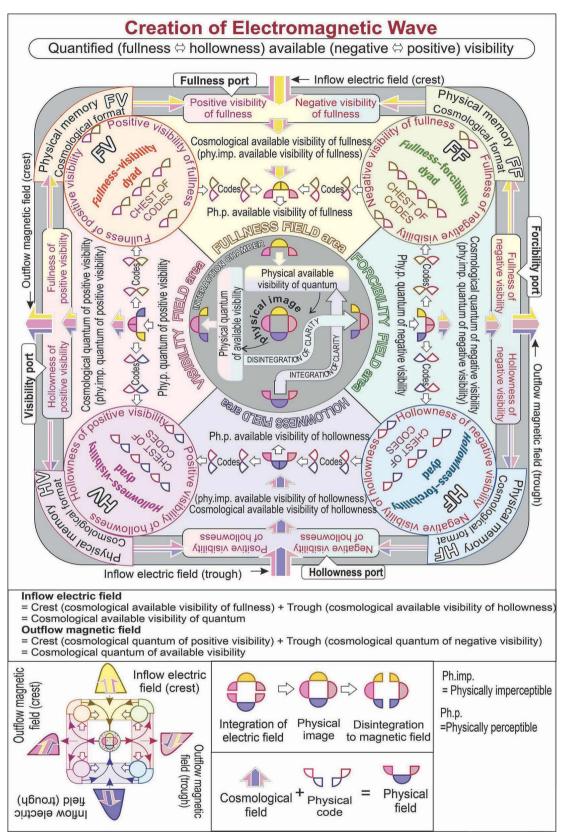


Figure 7. The theory uses a unitary model of existence and explains the entity inflow (receiving), self-flow, and outflow (emission) of electromagnetic waves.

create "available visibility." Similarly, "hollowness" and "fullness" create "quantum." In the case of electromagnetic waves, the magnetic field is called the heat field or thermal radiation [37].

The wave is created under the following conditions:

- a) The fullness field area receives data from two sources: 1) the crest of the electric field from the outside and 2) preoccupied memories from FV and FF. The composition is called "cosmological available visibility of fullness." After obtaining codes from the chests FV and FF, the data is converted into "Physically perceptible available visibility of fullness" and sent to the interaction chamber.
- b) Analogously, the hollowness field area receives data from two sources: 1) trough of the electric field from the outside and 2) preoccupied memories from HV and HF. The composition is referred to as "cosmological available visibility of hollowness." After obtaining codes from the chests HV and HF, the data is converted into "physically perceptible available visibility of hollowness," which is sent to the interaction chamber.
- c) The interaction chamber considers a logical pairing of "fullness" and "hollowness" and creates the future of the image called "physically available visibility of quantum (fullness-hollowness)."
  - d) The future converts into the past, creating a "Physical quantum of available visibility" (Figure 4).
  - e) A physical image is created between the future and the past, which lies in the present.
- f) The "Physical quantum of available visibility" disintegrates and is converted into the "physically perceptible quantum of positive visibility" and "physically perceptible quantum of negative visibility." Here, the "available visibility" disintegrates into "positive visibility" and "negative visibility."
- g) The "physically perceptible quantum of positive visibility" goes to the visibility field area, where it surrenders its physical codes to the chests HV and FV, leaving with the "cosmological quantum of positive visibility." The area sends these cosmological data to the memory chambers HV and FV, and a copy of these data is offered outside of the activating entity for emission as the crest of the magnetic field.
- h) Similarly, the "physically perceptible quantum of negative visibility" moves to the forcibility field area, where it surrenders its physical codes to the chests FF and HF, leaving with the "cosmological quantum of negative visibility." The area sends these cosmological data to the memory chambers FF and HF, and a copy is offered outside of the entity for emission as the trough of the magnetic field.
  - i) The emitted crest and trough create the magnetic field, offering an image to another observer.

# 6.2. Creation of Electromagnetic Force

**Figure 8** shows that when an observer activates the hollowness, fullness, and forcibility fields but does not activate the visibility field, an electromagnetic force is generated. If the visibility field is absent, the empty visibility field area is filled with a form of forcibility that is opposite in aptitude and lower in space density. We refer to it as "negative forcibility." The "positive forcibility" and "negative forcibility" create "available forcibility." Similarly, "hollowness" and "fullness" create "quantum." Considering the creation of electromagnetic force, according to the unitary logic, the process is parallel to the process of electromagnetic waves, where the words "visibility" and "forcibility" are inter-replaced.

# 6.3. Creation of Sensorial Exertive Push (Repulsion)

We have two stationary sense waves, known as the sensorial exertive push (repulsion) and sensorial exertive pull (attraction).

**Figure 9** shows that when an observer activates its own fullness, forcibility, and visibility fields, but does not activate the hollowness field, a "sensorial exertive push" or repulsion wave is generated. Without the hollowness field, the empty hollowness field area is filled with a form of fullness that is opposite in aptitude and less dense in space. We refer to it as "negative fullness." The "positive fullness" and "negative fullness" create "available fullness." In the same way, "visibility" and "forcibility" create "sensing." The entity plays the game of repulsion is described under:

a) The visibility field area receives data from two sources: 1) the crest of the sensorial field from outside and 2) preoccupied memories from HV and FV. The composition is referred to as "cosmological

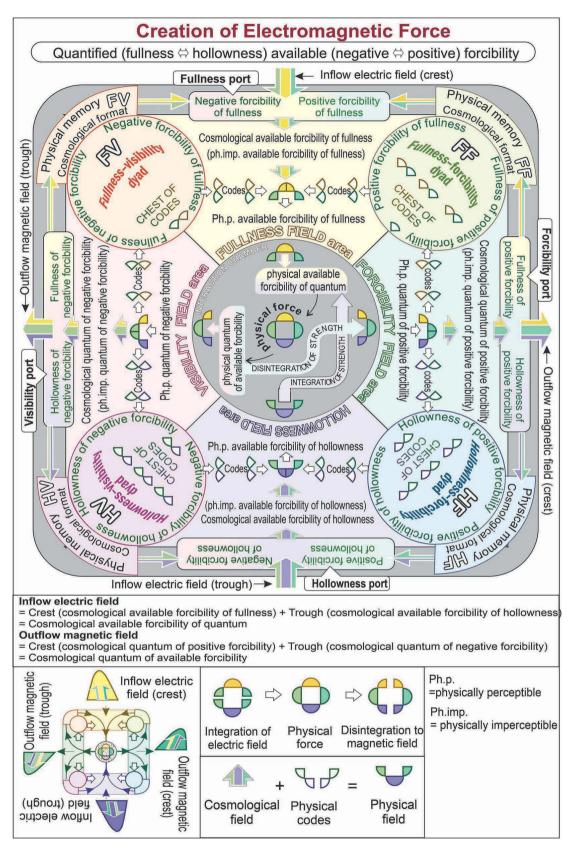


Figure 8. The theory uses a unitary model of existence and explains the entity inflow (receiving), self-flow, and outflow (emission) of electromagnetic force.

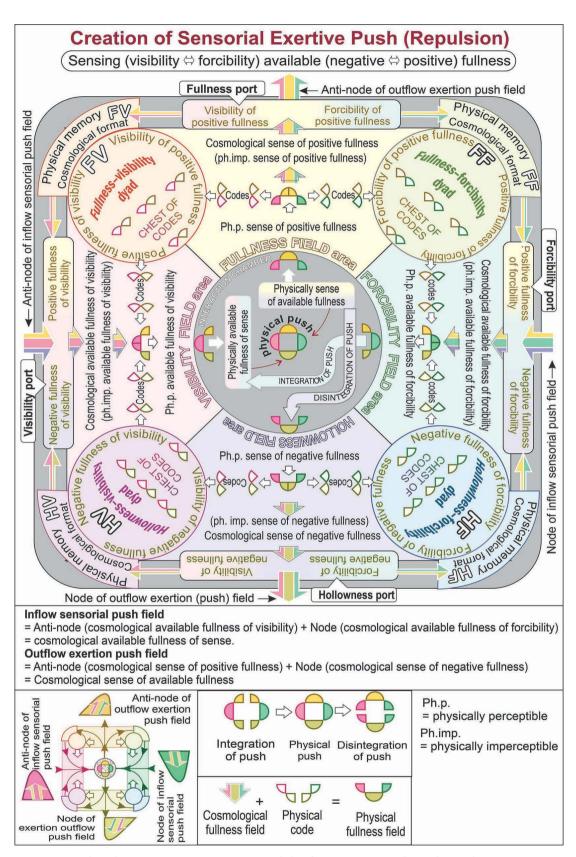


Figure 9. The theory uses a unitary model of existence and explains how an entity receives a repulsion push.

available fullness of visibility." After obtaining codes from the chests HV and FV, the data converts into "physically perceptible available fullness of visibility," which is sent to the interaction chamber.

- b) Analogously, the forcibility field area receives data from two sources: 1) the trough of the sensorial field outside, and 2) preconceived memories from HF and FF. The composition is called "cosmological fullness quantum of forcibility." After obtaining codes from the chests HF and FF, the data converts into "physical fullness quantum of forcibility," which is sent to the interaction chamber.
- c) The interaction chamber considers a logical pairing of "visibility" and "forcibility" and creates the future of the thrust, namely the "physically available fullness of sense."
  - d) The future converts into the past, creating a "physical sense of available fullness" (Figure 4).
- e) A physical thrust is created between the future and the past, which lies in the present. This thrust is called REPULSION.
- f) The "physical sense of available fullness" disintegrates and converts into a "physically perceptible sense of positive fullness" and a "physically perceptible sense of negative fullness." Here, the "available fullness" disintegrates into "positive fullness" and "negative fullness."
- g) The "physical sense of positive fullness" moves to the fullness field area, where it surrenders its physical codes to the chests FV and FF, leaving with a "cosmological sense of positive fullness." The area sends these cosmological data to the memory chambers FV and FF, and a copy is offered for emission as the crest of the exertion field.
- h) Analogously, the "physically perceptible sense of negative fullness" goes to the hollowness field area, where it surrenders its physical codes to the chests HV and HF, leaving with a "cosmological sense of negative fullness." The area sends these cosmological data to the memory chambers HV and HF and is offered for emission as the trough of the exertion field.
  - i) The crest and the trough of the emission create an exertion field available outside to another entity.

# 6.4. Creation of Sensorial Exertive Pull (Attraction)

Figure 10 shows that when an observer activates its hollowness, forcibility, and visibility fields, but does not activate the fullness field, a "sensorial exertive pull (attraction)" is generated. If the fullness field is absent, the empty fullness field area is filled with a form of hollowness that is opposite in aptitude and lower in space density. We will refer to it as "negative hollowness." The "positive hollowness" and "negative hollowness" create "available hollowness." Meanwhile, "visibility" and "forcibility" create "sensing." Concerning the creation of sensorial exertive pull (attraction), according to the unitary logic, the process is parallel to that of sensorial exertive push (repulsion), where the words "fullness" and "hollowness" are inter-replaced.

# 7. ADDITIONAL ACHIEVEMENTS

#### 7.1. Unification of All Activations

Nature keeps things in balance, creating two types of activations: the flowing and the stationary wave. Flowing waves are electromagnetic waves and electromagnetic force, transporting quantum of light, and magnetic flux; both are opposite in aptitude. Stationary waves are sensorial exertive push and sensorial exertive pull, transferring a sense of repulsion and attraction; both are opposite in aptitude. Even though all activations are opposite to one another, they follow the same rules while evolving, as previously explained. The "fullness" is quantum with no desire, whereas "hollowness" is desire with no quantum. "Visibility" provides diversity with no intensity, whereas "forcibility" provides intensity with no diversity. All compensate each other, and we obtain a unit at last. All create an intensified diversity of the desired quantum; creating a unit image.

# 7.2. Simultaneous Existence of Electric and Magnetitic Field

Figure 4 indicates that all waves have two ends: emission and reception. Emission is made of magnetic

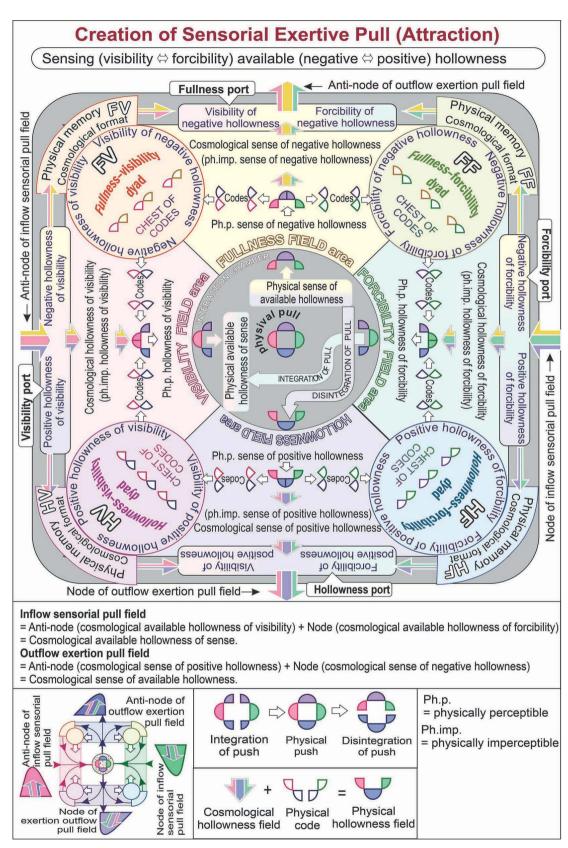


Figure 10. The theory uses a unitary model of existence and explains how an entity receives an attraction pull.

and exertion fields, which may be referred to as "outgoing fields," dipolar and spherically expanding fields. Meanwhile, the reception is made of electric and sensorial fields, which may be called "incoming fields," monopolar and linear expanding fields. These facts propound that 1) the spherical and the linear field cannot run simultaneously and 2) the receiver collects the liner field from emitter who is offering spherical field. Therefore, both the electric field and magnetic field cannot run simultaneously. A physical object receives the magnetic fields by converting them to an electric field, absorbing them, and re-emitting them in the form of magnetic field fields. The same rule applies to stationary waves (repulsion and attraction). Dr. Baird stated: "Every time you change a magnetic field, you create an electric field. This is called Faraday's Law of Induction" [38]. Maxwell stated: "Electric and magnetic fields are two manifestations of the same phenomenon" [39]. Hence, this proves that both phenomena cannot exist simultaneously.

# 7.3. Cosmic Microwave Background, Hidden Magnetic Field, Dark Energy, And Dark Matter

The theory propounds that it is the receiver who creates all activations alone. If no emitter exists, only the required field is available on the space fabric, and activation will occur [16]. The space fabric can have extra substances of visibility, forcibility, fullness, and hollowness, which can cause the activation of electromagnetic waves, electromagnetic force, repulsion, and attraction. During these activations, the entity perceives CMB [40, 41], hidden magnetic field [42], dark energy [42, 43], and dark matter [44], respectively.

## 7.4. Formulation of Repulsion Push

The theory further states that 1) Electromagnetic waves transport visibility (light) from more heated to less heated objects. 2) The electromagnetic force transports forcibility (charge field) from more charged to less charged objects. 3) Sensorial exertive push (repulsion) is created in between charged and heated objects. 4) Sensorial exertive pull (attraction) is created between charge-less and heat-less objects. We predict that there is no place or object possible in a world with zero possible heat or charge. Flip Tanedo stated: "It's sufficient for a particle to have the energy to have a meaningful sense of existence" [13]. Therefore, the presence of a minimum energy is a requisite in all cases. Heat and charge represent diversity and intensity, respectively; hence, they must be multiplied while quantifying, and both must have positive values. Thus, the value of repulsion largely depends on charge and temperature. Crookes back in 1874 stated, "Temperature is a primary cause of repulsion" [45] and Gamini Piyadasa stated, "This repulsion force is proportional to the temperature, which is a parameter of the thermal energy of the particle" [3]. Therefore, the repulsion can be quantified as follows:

Repulsion = 
$$K \times (a_1b_2 + a_2b_1) \times M_1M_2/R^3$$
 (Equation 1)

where K is a constant;  $M_1$  and  $M_2$  are the masses of objects 1 and 2, respectively;  $a_1$  and  $a_2$  are the FV (emitability of diversity; heat) of objects 1 and 2, respectively;  $b_1$  and  $b_2$  are the respective FF (emitability of intensity; charge) of objects 1 and 2, and R is the distance between two objects. This is a proposed formula, which has never been proven experimentally. Regarding  $1/R^3$ , we consider two objects placed at opposite sides of the diameter of a closed sphere and apply Boyle's gas law, which states that pressure is inversely proportional to the volume of a closed system (volume is proportional to the  $R^3$ ).

Instead of  $R^2$ , as in attraction, we have  $R^3$  while quantifying repulsion. Thus, repulsion is more effective for micro distances, and gravitation is more effective for macro distances.

There are several examples:

- 1) The theory propounds that heat (FV) and charge (FF) repeals each other, therefore, the tails of comets where the ionized gas tail points away from the heated sun but not the non-ionized molecules [46]. Please refer to **Figure 6**.
- 2) Plasma can be ejected in the form of an arc from the sun's surface, despite its strong gravitational force [47]. The arc of ejectment follows the magnetic wind [48], possibly due to the repulsion between the

ionized gas and the heat of the sun's surface.

- 3) While rotating, the planets around the sun can achieve a stable equilibrium between centrifugal force, gravitation pull, and repulsion. The repulsion is attributed to the heat and charge of the sun. Whenever a planet attempts to fall toward the sun, repulsion increases rapidly compared to attraction, prohibiting the planet from going nearer to the sun.
- 4) Schewe states that gravity at small scale remains a mystery [49]. The nuclear force is strongly attractive between nucleons at distances of approximately 0.8 femtometers (fm, or  $0.8 \times 10^{-15}$  meters), but it diminishes rapidly to insignificance at distances beyond about 2.5 fm. At distances less than 0.7 fm, the nuclear force becomes repulsive. As the repulsion is more significant at lower distances, it does not allow nucleons to be closer after a certain distance, and therefore, it determines the size of nuclei. It shows that the repulsion is more significant at lower distances.
- 5) Given "vacuum energy," which is the energy density of the space fabric, Baez asked, "Does this energy really exist? And if so, how much of it is there?" [50]. When this space fabric is calculated based on the theory of countless virtual particles, it comes out to be 120 orders of magnitude larger than what we find calculating the expansion of the universe due to dark energy [51]. This is referred to as the mystery of the "cosmological constant," which is still not resolved [32]. The present theory suggests that the expansion is based on the effective heat and charge within dark energy only; however, our space fabric is made of a massive amount of dark energy and dark matter balancing each other. This amount is not considered while calculating the vacuum energy.

#### 8. CONCLUSION

The entire universe is evolved, structured, and operated based on a unitary law, which we call the universal theory of existence. The same unitary law applies to all the universe levels, namely the cosmological, physical, biological, psychological, and intellectual worlds. All entities of all levels are structured on a parallel model, explained in this paper. This model is capable of explaining all activations, such as electromagnetic waves (light), electromagnetic force (magnetic flux), sensorial exertive push (repulsion), and sensorial exertive pull (attraction) in a unitary process. The physical objects create the stationary waves, repulsion, and attraction, which are nothing but the crowdedness and emptiness of the space fabric. It is explained that the physical and cosmological worlds are different; hence, a new terminology must be used. We provide some basic terminology according to the attributes of these cosmological substances. This is the first study to disclose the cause and process of gravitation (attraction) and repulsion and resolve several unresolved mysteries of the cosmological world.

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# **CONFLICTS OF INTEREST**

The author declares no conflicts of interest regarding the publication of this paper.

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