



How the Universe is Renewed

A Study in the Dynamics of Normal and Reverse Spacetime, Wormholes, and Countermeasures

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Abstract

This research presents a new vision and new ideas to explain the regeneration of the universe, depending on the dynamic relationship between the two opposite space-time fabrics: the normal space-time fabric that moves from anthrop to regularity or from the future to the past and the reverse space-time fabric that moves from the past to the future. Or from the system to the entropy. The idea stems from the fact that the beginning of the universe was not just an explosion of energy; it occurred as a result of a severe crowding of wormholes at a critical point because the difference between the two spacecraft is very large and very enormous, which led to the formation of wormholes to bring the difference closer, which led to its intense crowding and explosion at a very small point, which led to the formation of the remnants of wormholes, which are photons. The inverse was larger and more spacious before the explosion, as this led to the superiority of the ordinary material after the explosion because the reverse spacetime tissue is decomposed by the antimatter faster than the regular material, unlike the normal spacetime tissue in which the decomposition occurs. The regular substance is faster than the decomposition of the antibody after this explosion. Some wormhole holes started to form again, but at a very lower percentage than those before the explosion. This part evolved to form black holes, as the antimatter is retained as a result of the presence of the normal space-time tissue inside due to the wormhole, while these holes continue to pull the normal space-time fabric, and the blocks begin to form through the movement of the normal space-time tissue. The universe continues to regenerate through these processes, and it also studies how every time the universe is renewed, it is faster than the time before, which leads to a point in the end. Ordinary to maintain space-time expansion. The research also presents a model of a cosmic law taken from my previous research, the first research, the theory of everything, and the law of the universe. The second research modification of relativity and the third research how the universe speaks through consciousness. It links the two tissues with the expansion mechanisms of matter and antimatter, as well as the suggestion of an engine that relies on the dynamic difference between the two spacecraft to produce energy, through which we work to reach a very, very high speed, and this is an equation to achieve this: $E \square = M \times (\Delta x)^2/t^2$.

1. Introduction

From the moment humanity began to question the origin of this universe and other universes, theories have revolved around explaining the Big Bang as an absolute starting point. However, this explanation remains incomplete as long as it fails to clarify how and why that moment came about in the first place, and as long as it doesn't explain the continuous renewal that the universe undergoes in fractions of a second.

This question—how does the universe renew itself?—led me to believe that the universe renews itself in a way that is not exactly like a cell, because there are many differences between a cell and the universe. By reconsidering the nature of spacetime itself, the relationship between normal and inverted fabrics, and the hidden role played by wormholes as points of connection that bridge the gap between normal and inverted spacetime fabrics due to the enormous difference between them in the universe, I realized that the universe is not based solely on matter, nor solely on energy, nor solely on normal matter and antimatter, but rather on a continuous interaction between two opposing temporal states:

The inverted spacetime fabric, which moves from the past to the future, or from a state of order to a state of entropy, and which I call the chaotic fabric, works to decompose antimatter faster than normal matter and to create normal matter faster than antimatter; and the normal spacetime fabric, which moves from the future to the past. Or from a state of entropy to a state of order, which I call a regular fabric that breaks down ordinary matter faster than antimatter and creates antimatter faster than ordinary matter.

This difference between the two spacetime fabrics is what determines the shape of our current universe.

There is still something that has not been discussed in depth in scientific research: that wormholes are not merely channels for time or spacetime transmission but are—in essence—"ways to unify and approximate the fabrics of spacetime." They are points of convergence between opposites, between opposing temporal directions, and therefore any disturbance in their density or distribution leads to a radical change in the behavior of the universe itself. Due to a change in the fabric of normal and inverted spacetime, the structure of the universe itself changes. This leads to the fundamental idea of this research:

The Big Bang was not the beginning of the universe, but rather a direct result of the convergence of an enormous number of wormholes. These wormholes worked to bridge the gap between the two spacetime fabrics, which was enormous. The inverted spacetime fabric was larger than the normal spacetime fabric, resulting in the formation of a vast number of wormholes. When this connection between the wormholes was severed at a certain point due to the intense convergence there, the universe was subject to a vast number of possibilities until the Big Bang occurred, at which point it began to take on the fewest possible possibilities.

Furthermore, the renewal of the universe today depends on the continuous struggle between the two fabrics. This struggle is constant, as evidenced by the fact that the universe is now accelerating to minimize the difference between the two fabrics, after which its cycle of renewal begins anew. There are two types of renewal: self-renewal, where the universe renews itself internally, attempting to compensate for the deficiencies in its normal fabric as it expands. The difference is that regions arise where energy tends to rebalance itself through the formation of black holes. There is a complete renewal process that occurs when the difference between the two spacetime fabrics becomes extremely large, at which point the universe begins to renew

itself entirely. These black holes are not inert regions, as some might think. Rather, they are factories for generating antimatter. Normal spacetime fabric exists in large quantities within them, but it does not outweigh the inverted spacetime fabric. We find, through the equation $E_{\square} = m \times (\Delta x)^2 / t^2$. Note: This law was formulated in my other theory, The Theory of Everything and the Law of the Universe, stating that the presence of extremely large mass reduces the square of the difference between the two spacetime fabrics, regardless of the energy and time squared. From this, we can conclude that most black holes are the result of extremely strong interactions between normal matter and antimatter. These interactions produce virtual objects in enormous quantities.

This introduction is not merely a presentation of ideas, but an invitation to rebuild a new understanding of the universe:

The universe is not simply something that expands but rather breathes between two fabrics, renewing itself entirely or spontaneously through the difference between them.

2. Theoretical Framework: The Structure of Double Spacetime and the Nature of Cosmic Renewal

Spacetime has never been merely a stage or a fabric upon which matter and antimatter move, as many people imagine today through the lens of general relativity. Rather, it is a living entity, as I explained in my third research paper, "How the Universe Speaks Through Consciousness." Spacetime, as a fabric, possesses two layers that are opposite in direction and function. Understanding these two layers—the regular spacetime fabric and the inverted spacetime fabric—represents the first step in understanding how the universe renews itself and how it transitions from one phase to another. In its simplest form:

1. The Regular Spacetime Fabric

This is the spacetime fabric in which:

Time moves from the future to the past.

It moves from entropy (randomness) to order. Or from numerous possibilities to very, very few possibilities, which represents the force of gravity.

It creates and forms antimatter faster than ordinary matter, supports the stability of antimatter more strongly than ordinary matter, and decays ordinary matter faster than antimatter.

It is always pulled towards large masses, which causes gravity, as large masses pull it towards them. When it is pulled and moves towards large masses, it increases gravity, since its mass increases according to the law $E_{\square} = m \times (\Delta x)^2 / t^2$, where (Δx) is the difference between the two spacetime fabrics: the inverted fabric minus the normal one. When the normal spacetime fabric moves, its mass increases, and this is what scientists today explain as dark matter.

2. Inverse Spacetime Fabric

This is the spacetime fabric that moves from the past to the future.

Time moves within it from order to entropy. Or from the least probable to the most probable, it represents other forces such as electromagnetism, the strong nuclear force, the weak nuclear force, and the time force. This force will be explained in the following sections of the research.

It accelerates the formation of ordinary matter more than the formation of antimatter. It increases the stability of the formation of ordinary matter. It accelerates the decay of antimatter compared to ordinary matter.

It repels masses made of ordinary matter due to the arrow of time that matches it. This is part of the time force and works to greatly and extensively reduce gravity, which scientists today explain as dark energy.

These two fabrics are the "incomplete visible picture" of the spacetime fabric of the universe for many people.

3. The Violent Interaction Between the Two Fabrics

The violent interaction between the two fabrics is the key to total or self-generating cosmic renewal, i.e., internal renewal.

The universe in its current form is not based on one without the other; rather, it is based on the difference between them. Every difference between them, however very, very, very small, works to change the shape of the universe and causes ripples throughout the universe called time-energy waves. According to the equation $E = m \times (\Delta x)^2 / t^2$, these waves are distributed throughout the universe and work to maintain its internal balance. Since the universe is constantly changing—that is, constantly expanding—the difference between the two spacetime fabrics is also constantly changing. Therefore, these waves change and affect every region of the universe, influencing its nature, shape, and future. This is because the vast majority of time in the universe flows from the past to the future. This is due to the fact that the inverted spacetime fabric is larger than the normal spacetime fabric, resulting in the difference between the two fabrics that we see in the equation $E = m \times (\Delta x)^2 / t^2$. This difference attempts to maintain the universe's internal balance through the changes it induces, controlled by the difference between the normal and inverted spacetime fabrics.

When this difference increases to a critical point, immense spacetime tension is generated, similar to the rupture of a cosmic spring.

This tension opens enormous wormholes—which attempt to restore balance by bringing the two fabrics closer together.

Each wormhole is the universe's attempt to say the following: "The balance is broken; I will rebuild it." The universe is engaged in rebuilding itself, either internally or entirely. A force called the time force influences this renewal process. The principle of this force is that the closer the arrow of time is, the greater the repulsion. This means that the inverted spacetime fabric transitions from order to entropy. Similarly, the atom, or ordinary matter, transitions from order to entropy, causing the external inverted spacetime fabric to repel the atom. Here, we are talking about an atom, not a mass of atoms, as the situation is different. Thus, one atom of ordinary matter and another atom of another ordinary matter do not attract each other; rather, they repel each other. This is the basis of chemical bonds between atoms. A bond is a tool for bringing two atoms of ordinary matter closer together. For example, the Big Bang: a wormhole ruptured at the highest level of tension between the two fabrics.

According to this model, we will now move on to the complete renewal of the universe: The universe began from an astonishing crowding of wormholes that were trying to unify the two fabrics. But as the spacetime difference increased to an unbearable degree, these tunnels could no

longer withstand the tension, and they tore apart. This was especially true at the singularity, the point where the difference between the two spacetime fabrics was extremely high, resulting in a very, very large density of wormholes. This indicates that the difference between the two spacetime fabrics was enormous at that point.

At the tearing:

The universe is filled with photons, the remnants of those wormholes.

Ordinary matter became more stable than antimatter. This was due to the presence of an inverted spacetime fabric in a much larger quantity than ordinary spacetime fabric, and we find that the mass of the singularity was very, very small.

After the explosion of enormous energy from the wormholes, which transformed into wormhole remnants representing vibrations and energy quanta in the form of photons.

In this sense, the Big Bang is not a "birth," but rather a structural rearrangement of spacetime.

3. The Law of Universal Regeneration and an Analysis of its Basic Concepts and Derivatives

The law of universal renewal and an analysis of its fundamental concepts and derivatives. The foundation of this research rests on this law, which describes how temporal energy is generated, how the two fabrics of spacetime (normal and inverted) interact within the universe, and how time plays a role in this universe. It's worth noting that I mentioned this law, its definition, and its derivatives in my first research paper, "The Theory of Everything and the Law of the Universe." This law is formulated as follows:

$$\text{The Law of Time-Energy: } E\Box = m \times (\Delta x)^2 / t^2$$

$$\text{Time-energy } (E\Box) = \text{mass } (m) \times (\text{difference between inverted and normal spacetime})^2 \div \text{time}^2$$

This law doesn't merely describe a mathematical relationship; rather, it expresses a complete cosmic cycle that repeats with each renewal of the universe. Each renewal is faster than the previous one until we reach a certain point without an explosion, forming a triangle. At its base, the slowest renewal begins, then it gradually progresses to faster renewal, then faster, then faster, until we reach a point of no renewal. This is because with each renewal of the universe, the normal fabric of spacetime, responsible for gravity, decreases. The reversed spacetime fabric increases. Now we will begin to explain this law. This law describes our current universe and the matter within it.

Derivative 1: The Meaning of "Mass" in This Law

Mass is measured in kilograms. Here, mass is the center of gravity for the normal spacetime fabric. Every mass—large or small—attracts the lines of the normal spacetime fabric. If the mass is made of ordinary matter, it repels the reversed spacetime fabric according to the force-time principle I mentioned earlier. The greater the mass, the greater the pull of the normal spacetime fabric, and the approximate difference between the normal and reversed spacetime fabrics increases according to the law $E\Box = m \times (\Delta x)^2 / t^2$. Therefore, mass has become the general link between gravity and the time-time directions of the two fabrics. Here, mass is a "cosmic control center" that the universe uses to hold its fabric and reshape it.

Derivative 2: The Meaning of "Ordinary Spacetime Fabric"

It is a fabric that moves from entropy to order, or from the future to the past, or from numerous possibilities to very, very few possibilities, as mentioned previously, and stabilizes antimatter more than ordinary matter. It also dominates the gravitational field. The force of gravity is represented, and therefore we observe that the inverted spacetime fabric is always larger than the normal spacetime fabric in our current universe.

The Meaning of "Inverted Spacetime Fabric"

It is the fabric that moves from order to entropy, or from the past to the future, and acts to stabilize ordinary matter more than antimatter. It represents the other forces: the strong nuclear force, the electromagnetic force, and the weak nuclear force. Both spacetime fabrics are hypothetical entities, as I mentioned in my research, "The Theory of Everything and the Law of the Universe." The force of time, however, does not represent either of the two spacetime fabrics; it regulates the difference between them and is a central control center for the renewal of the universe, either internally or entirely.

The Meaning of "Difference Between the Two Fabrics" (Δx)²

This is the most important element in the entire law. The difference between the two fabrics means the following: the extent of spacetime tension. The inverted spacetime fabric is larger than the normal spacetime fabric, and this is what creates the difference between the two fabrics. This difference tells us what stage the universe is in and what time the universe is in at this moment and within this difference.

It also tells us what the universe is like at this moment. We find that the difference between the two fabrics is a slightly variable difference, increasing and decreasing, but it generally tends towards increasing and towards cosmic expansion. This change, increasing and decreasing, is necessary because this slight change is what creates the variables present in the universe, such as the destruction of existing masses and the creation of new masses and the temporal energy waves that spread throughout the universe. The overall change towards increase is also necessary because it creates the universe's trajectory towards entropy and towards the future. The greater the difference, the greater the temporal energy, and the more wormholes work to unify the two fabrics of spacetime, and the process of renewal begins.

Derivative 3: The Meaning of "Time" (t^2)

Time here is not just a duration but a "direction." It represents the duration of the interaction between the two spacetime fabrics, or in other words, the time of transition from the normal fabric (which transitions from entropy to order) to the reversed spacetime fabric (which transitions from order to entropy).

We find that the time that existed at the beginning of the universe is extremely difficult to replicate because the universe at that time had the largest possible difference between the two spacetime fabrics at a specific point called the singularity. We must remember that this is the square of time, and with the completion of the law, $E = m \times (\Delta x)^2 / t^2$, the law becomes sensitive to any change in the transition speed between order and entropy.

Understanding this law allows us to see how the difference between the two fabrics can be exploited artificially. If we could create a large artificial difference—even on a very small scale—then we could produce high temporal energy and generate a large number of wormholes,

the rupture of which at a certain point would release a huge amount of photons. And generate spacetime vibrations and quanta in enormous quantities, just as happened at the beginning of the universe. This is the scientific basis of the spacetime engine, which we will explain in the following section.

4. The Spacetime Engine: The First Engineering Application of the Law of Cosmic Regeneration

$$E\Box = m \times (\Delta x)^2 / t^2$$

This law of time-energy not only describes the universe but can also be used to create a new kind of engineering: engineering based on controlling the two fabrics of spacetime and exploiting the difference between them to produce energy higher than anything humans have ever known. This is the foundation upon which the Spacetime Engine is built—the first physical engine to use the "difference between order and entropy" directly.

4.1 The Core Idea

Creating an extremely large artificial difference between the two fabrics to obtain extremely high time-energy in an extremely small space, just like what happened in the Big Bang, but on a smaller scale. The Spacetime Engine requires a highly excited atom and a highly low-energy atom inside a single chamber, in a very, very small space and under high energy, generating the greatest possible value of the "fabric difference," which is the inversion of the law $E\Box = m \times (\Delta x)^2 / t^2$.

4.2 How the Engine Works

(a) The inner chamber – the heart of the engine: This chamber contains two sections. First section: Cooling certain atoms to temperatures approaching absolute zero (Bose-Einstein condensate). Second section: Exciting other atoms to the highest known energy. When the two sections meet, the following occurs: this extreme contrast between the first and second sections creates a refraction in the local spacetime fabric, increasing the fabric difference in a way that nature itself can only achieve in stars. From this, wormholes are created in large numbers. If they are located at a small point, these wormholes will begin to crowd together at that point, and the "normal fabric" will begin to recede towards the "inverted" spacetime within the chamber. Then it explodes and tears apart into the remnants of those wormholes, which are photons in enormous quantities. The wormhole can be kept open by creating a difference between the two spacetime fabrics and allowing the regular, ordinary fabric to enter the wormhole. This is the fundamental spark.

(b) The point at which the greatest difference between the two spacetime fabrics is created, or the point at which the highest time-time energy is produced. When the difference between the two fabrics reaches a certain, controllable value, the engine begins to create miniature wormholes and quantum wormholes. The crowding and tearing of these wormholes at a specific point is what transforms the interaction of the two fabrics into a "drift force." A nuclear-powered cryo-cooled atomic freezing chamber (to reduce normal spacetime to its lowest state). As the base size increases, the engine's ability to create a greater difference between the two spacetimes increases... thus increasing speeds to levels that are difficult to describe.

4.3 Why Is This Engine Possible Today?

Because all its components exist separately: cooling chambers to absolute zero; accelerators capable of exciting atoms; magnetic field containment technology, making it either uniform or variable as needed; and quantum atomic sizing technology, which focuses excited and cooled atoms at a specific point where the difference between the two spacetimes is greatest. What we lack is the design that integrates these elements into a single arrangement, and this design comes directly from the law of time-energy.

4.4 The Spacetime Engine Is Not Science Fiction... But the Beginning of a New Era

When this engine operates, something unprecedented for humanity will occur. We will be able to control the difference between the two spacetimes instead of controlling the temperature or fuel. This is a revolutionary point that allows us to explore space at much faster speeds. This means speeds exceeding current speeds; the possibility of traveling between two points via a wormhole, achieved by making the difference between the two spacetime fabrics equal at two different locations so that the wormhole opening will then be equal for both ends, enabling instantaneous teleportation; the possibility of creating antimatter within isolated chambers, achieved by creating a Bose-Einstein condensate chamber with dynamic isolation, allowing for the generation of antimatter; and the possibility of generating enormous time-energy within spacetime itself. It is not just an engine... but the first human-made device to interact with the very foundation of existence.

5. The Most Striking Analogy: How the Universe Renews Itself as an Electron Jumps Between Energy Levels

The renewal of the universe is not a random event nor an explosion without a precursor. Rather, it is a controlled physical behavior that clearly resembles what happens to an electron during its ascent when it absorbs energy and jumps to a higher energy level. The process is different during the return phase; the electron releases energy to return to its lower energy level. However, the universe does not return; instead, it renews itself and is reborn.

First: The Electron as a Microcosm of the Universe

The electron only jumps to a higher energy level when the difference between the inverted spacetime fabric and the normal spacetime fabric around it increases due to an incoming photon. As previously explained, the photon is a remnant of wormholes. A speed photon equals the speed of a given set of wormholes. As the speed and number of wormholes (quantum wormholes) vary, so do the wavelength, frequency, and speed of light. Wormholes present the remnant of quantum wormholes. These wormholes increase the electron's energy by increasing the difference between the two spacetime fabrics. This increase raises the number of quantum wormholes within the electron, allowing it to transition from a lower energy level to a higher one. As the electron moves toward a higher orbit, it releases virtual objects due to its repulsion from the inverted spacetime fabric. These virtual objects create quantum wormholes that attempt to bring the two spacetime fabrics closer together at the electron's original location and the two fabrics at its destination. This creates an attractive force that pulls the electron toward the rupture point. When the electron reaches the rupture point of the wormhole, the emitted photon begins to form. The number of wormholes that rupture is determined by the energy and frequency of the photon that excited the electron. As the electron returns to its orbit, it releases the remnants of those wormholes from top to bottom; these remnants are the emitted photons. Since the electron is quantized and has a finite number of stable quantum wormholes, this is analogous to the universe

itself: the universe does not transition to a higher energy level and does not explode unless the difference between the two spacetime fabrics increases to a critical degree, causing the wormholes to rupture.

Second: The Universe's Analogy to the Electron in the Going Phase

The universe is currently in an expansion phase, meaning an increase in the number of wormholes, which precedes the next explosion. When the cosmic wormholes reach their limiting rupture, the universe explodes and renews itself, giving birth to a new universe. Each renewal of the universe is stronger and faster than the one before it, until the universe reaches a stage where it no longer renews itself. This process can be represented by a pyramid or a triangle, where each layer of renewal is larger than the one before it.

In the going phase, the electron and the universe are similar. Both undergo a process of wormhole rupture. However, in the return phase, they differ: the electron returns to its orbit, while the universe explodes and is reborn. This is not a metaphor... it is based on the law: $E = m \times (\Delta x)^2 / t^2$. This law describes time-energy as a fundamental law governing everything mentioned above.

Third: The Universe Acquires Its Energy Like the Electron, but on a Cosmic Scale

The question here is: Where does the universe get its energy from, just as the electron gets its energy from a photon? The answer: The universe captures its energy from the universe that preceded it, specifically from the inverted fabric of spacetime. Each renewal is faster than the previous one because the regular fabric of spacetime is being pulled towards the inverted fabric of spacetime.

As the universe acquires time-energy from the previous universe, the difference between the two fabrics of spacetime increases, cosmic tension increases, wormholes reach the point of rupture, and energy is released. Ordinary matter overcomes antimatter because the inverted spacetime fabric is larger than the normal spacetime fabric. The universe begins to form new ordinary matter due to the larger size of the inverted spacetime fabric compared to the normal one, the universe begins to expand at an accelerated rate, and over time, the tension reaches a critical value, preparing for the next Big Bang.

Fourth: The Relationship Between the Number of Wormholes and the Difference Between the Two Tissues

The greater the difference between the normal and inverted spacetime fabric, the number of wormholes in the universe is increasing, and the number of quantum wormholes inside the electron increases. All of them work to try to bring the two tissues closer together to achieve balance.

Fifth: What Happens Immediately After the Big Bang?

Following the moment of cosmic renewal, the following events occur precisely: the energy of the universe suddenly decreases due to the release of energy, and the normal spacetime fabric begins to increase; the difference between the two spacetime textures decreases; the universe is trying to regain its energy at an incredible speed due to the massive spread of the inverted spacetime fabric, which increases the difference between the two fabrics; the universe is working to form black holes that pull on the normal fabric of spacetime, increasing the difference even more, and the more black holes are formed, the more the expansion increases beyond normal.

6. The Universe Returns to Time Zero

In each cosmic cycle, the universe expands, and this expansion accelerates as if the electron itself were jumping between ever higher energy levels. But behind this expansion lies a single law that governs the entire scene: $E = m \times (\Delta x)^2 / t^2$. Time does not flow steadily but accelerates with each cosmic birth until it breaches the boundary of existence and the boundary of the inverted spacetime fabric.

So, when the universe is born, it emerges from a slow expansion, similar to an electron at a low energy level. With each transition to a new cycle, it becomes more energetically charged due to the significant difference between the two spacetime fabrics. This is because a large portion of the normal spacetime fabric is pulled towards the inverted spacetime fabric, thus increasing its size. Time itself becomes faster, and the density of events is higher.

This is not merely an analogy... it is a recurring structure that may exist on all levels: The electron jumps at specific levels, and perhaps the universe does the same on a larger cosmic scale. With each cycle, the rate of expansion increases, the rate of time change increases, and the interval between the beginning of one cycle and the next decreases. Until we reach the moment when the universe becomes so fast that the next cycle doesn't have enough time to form. At that point, the universe comes to a standstill. This is point zero. This is the point at which the accelerating cycles might reach their end. That is the moment when everything stops. Not because energy runs out, but because time itself reaches a limit beyond which existence can no longer function. There is a limit to existence.

7. Spacetime Structure, Wormholes, and the Instability of the Speed of Light

In this section of the research, we do not treat light as an entity moving within a static vacuum but rather as a medium representing virtual objects—this being one of the mediums of light. Nor do we treat the speed of light as an absolute constant independent of the structure of the universe. Instead, we reconsider the very path a photon takes within the fabric of spacetime. The fundamental idea here is quite simple, yet it represents a significant shift in our understanding.

The actual length traveled by a photon is not measured by the apparent distance but by the number of wormholes it traverses multiplied by the length of each wormhole. Therefore, the actual length of the path can be written as follows:

$$L(\text{actual}) = N \times d$$

Where (N) is the number of unstable wormholes the photon traverses. Wormholes in the universe are unstable due to the instability of the universe itself, which is accelerating and expanding. Consequently, their number varies. (d) is the actual internal length of each wormhole.

The total time of motion is the sum of the times of passage through these wormholes: $\Delta t = N \times \tau$. The speed is then: $V = L(\text{actual}) \div \Delta t = (N \times d) \div (N \times \tau) = d \div \tau$.

Herein lies the crucial point: the time of passage through a wormhole is indeed very, very small because the speed is extremely high. This speed does not depend on the number of wormholes, but rather on the properties of the wormhole itself. However, these properties are not constant in the universe, because, as we mentioned earlier, the universe is not static; it is constantly changing and accelerating. The speed of a photon also varies depending on the position of the wormhole within the spacetime structure. Because the wormhole approximates the difference between the

two spacetimes, and through the equation $C^2 = (\Delta x)^2 / t^2$ and the equation $v = d \div t$, and since the speed of the photon is equal to the speed of the wormhole, we deduce that (d) is the length traveled by the normal spacetime to reach the reversed spacetime. (t) can also be expressed as the time it takes the normal spacetime to transform into the reversed spacetime. It is not necessary for the speed of light to be an absolute constant, as I explained in my second research paper, "A Modification of Einstein's Relativity."

Based on the above, the speed of light is not necessarily a constant value, and I believe it is indeed not. Many experiments in the early universe support this, and even at the edges of the universe and at black holes, it is also supported. The speed of light is a value resulting from the length of the wormhole divided by the time it takes to traverse that region. And since the length of the wormhole changes with its position in spacetime, time also changes. Sometimes the speed of light remains constant, and other times it changes depending on the variation in length and time. Near black holes, where the regular fabric of spacetime is at its most uniform, the difference between the two fabrics decreases, and consequently, the length of the wormhole shortens, thus decreasing the speed of light.

However, in regions where the difference between the random, inverted fabric of spacetime and the regular, uniform fabric increases—such as in regions where the universe is expanding at tremendous speeds, like the edges of the universe—the length of the wormhole increases, and the resulting speed increases.

Wormholes as a Source of Energy: In principle, it is conceivable to extract energy from the regular and inverted fabrics of spacetime by destroying these wormholes. This would be achieved by maintaining their stability through a mechanism involving altering the difference between the two fabrics of spacetime to counteract the cosmic expansion. Once the wormholes are stable, we can destroy them and release their remnants, which will be in the form of photons. There is a cosmic laboratory that performs this function, operating within supermassive black holes that release enormous energy, much like quasars.

In this sense, light is not merely a carrier of energy within a vessel that allows it to do so. This vessel is the fabric of spacetime, where its speed results from the universe's own reorganization and self-renewal. The universe possesses a consciousness that organizes itself by choosing the shortest path, which is represented by wormholes. Thus, the wormhole becomes a dynamic, not a static, element, directly linked to the expansion of the universe, its internal organization, and the deep structure of spacetime. This perspective does not present the speed of light as a phenomenon independent of the universe, but rather as a direct consequence of the structure of spacetime and its internal interactions. It opens the door to a new understanding of speed, energy, and time as different manifestations of a single, profound process occurring within the fabric of the universe. The universe knows what it is doing.

8. Choosing the Shortest Quantum Path: From the Chloroplast to the Renewal of the Universe

Since the universe chooses the shortest path for its total renewal through its accelerating expansion, not its contraction, contraction would lead to eternity and indefiniteness, as it would repeat itself endlessly. However, the universe's accelerated expansion means that each time a cosmic renewal occurs, the universe chooses annihilation over permanence, with the vast

majority of matter being consumed, until it eventually reaches a triangular shape, as previously mentioned.

In this research, I would like to clarify that the selection of the shortest quantum path for light upon entering the chloroplast is not a strange process, but rather one governed by the laws of spacetime. This is the same principle the universe applies when choosing the shortest quantum path for energy, as energy is efficiently transferred within galaxies and throughout the universe.

When a photon enters the chloroplast, it has a high spacetime difference between the two fabrics, while proteins, which are large and complex, have a relatively small spacetime difference relative to light, according to the law. This leads to an increase in the overall difference between the light-dependent and protein-dependent pathways and, consequently, an increase in the number of quantum wormholes between them. The number of quantum wormholes increases to approximate the difference between the two spacetime variabilities. In other words, the pathway with the fewest quantum wormholes within the protein—that is, those connecting the protein's components—results in the formation of the greatest number of quantum wormholes between the protein and the light outside it. This large quantity of quantum wormholes causes light to be attracted to the protein. When light is attracted, the remnants of the quantum wormholes that connected them are also converted into photons, thus increasing the efficiency of the chloroplast.

The photon is attracted to proteins with higher mass, but this is not the decisive factor; other crucial factors include time-energy and time. The shorter the time it takes for normal tissue to transition to the protein's inverted spacetime, the smaller the difference between the two spacetimes of the protein, and the larger the overall difference between the protein and light. This leads to an increased number of quantum wormholes attempting to attract light without affecting its speed, thus allowing for highly efficient light transmission. This interaction directly reflects how energy in the universe chooses the most efficient paths by utilizing the shortest quantum route and quantum wormholes.

From this, we can conclude that what enables the chloroplast to do this is its living nature. The presence of a significant proportion of normal spacetime within it makes it alive, which reduces the difference between the two spacetimes within the chloroplast. This, in turn, increases the number of quantum wormholes, resulting in more efficient light attraction. As a highly organized and living system, this model resembles the living model of the universe: energy always chooses the path with the greatest difference between the two spacetimes, or the path with the smallest difference between them. This leads to the selection of the optimal quantum path, whether within the chloroplast or on a cosmic scale, and depends on the overall spacetime difference. This underscores that choosing the shortest quantum path for energy is a general rule governing the system at all levels, from the cell to the entire universe.

One final point for further understanding: migratory birds possess a substance that must be present in their beaks or eyes—that is, on their extremities. This substance functions at low temperatures, and its activity increases in cold air. It acts as a quantum system at low temperatures because increasing the normal spacetime fabric reduces the difference between the two spacetime fabrics, thus decreasing the time it takes for the normal spacetime fabric to transition to the reversed spacetime fabric and consequently increasing the duration of quantum entanglement. This substance is fundamental to avian migration, and this protein could be used or removed and a similar compound synthesized in the laboratory to usher in a new era of quantum mechanics operating within ordinary room conditions. It is likely that this protein,

present in the eye, serves to control migration; it is the language the bird uses to communicate with other birds during migration.

9. Conclusion: The Universe's Renewal from the Atom, Especially the Electron, to the Whole

In this research, we explored the universe's journey from the smallest energy levels in atoms to its greatest cosmic expansions and how the universe constantly renews itself.

We discovered that cosmic renewal is not merely a random explosion but a precise process dependent on the interaction between two spacetime fabrics: normal and inverted.

The difference between them generates wormholes and the temporal energy that drives the universe, just as it moves the electron between its energy levels.

We also witnessed numerous innovations through the law of the universe, $E = m \times (\Delta x)^2 / t^2$. We saw how this process resembles what happens in cells, especially in chloroplasts, where light takes the shortest quantum path, and quantum wormholes are generated, increasing energy efficiency, just as the universe does on a cosmic scale.

It became clear that life, whether inside the cell or within the universe, depends on the difference between these two fabrics for energy redistribution and organization. Entirely or internally.

As we have seen, wormholes play a crucial role in controlling energy flow, and the emergence of photons and the antimatter-making mechanism are natural consequences of the interaction between the two fabrics. We have also explored how this understanding can lead to the design of new spacetime engines or energy systems.

Ultimately, it becomes clear that the universe always chooses the most efficient path between the two fabrics at the galactic level, just as light always chooses the most efficient path between the two spacetime fabrics at the chloroplast level, for example. This law, $E = m \times (\Delta x)^2 / t^2$, governs the renewal of the universe, maintaining its triangular cycle until it reaches a point where the universe ceases to expand. The framework predicts that variations in the microstructure of spacetime near extreme gravitational environments may lead to measurable deviations in photon propagation and energy redistribution, providing a potential observational signature for the proposed model.

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Author Contributions

Mohamed Ibrahim El-Saeed Issa conceived the theoretical framework, developed the mathematical and physical model, performed the analysis, and wrote the manuscript.

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