The "Dead Universe" Theory: Natural Separation of Galaxies Driven by the Remnants of a Supermassive Dead Universe

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ABSTRACT

This article explores the "dead universe" theory as a novel interpretation for the origin and evolution of the universe, suggesting that our cosmos may have originated from the remnants of a preceding universe. This perspective challenges the conventional Big Bang theory, particularly concerning dark matter, the expansion of the universe, and the interpretation of phenomena such as gravitational waves.

1. INTRODUCTION

The Big Bang theory is brilliant and convinces us that the universe emerged from an extremely hot and dense initial state, not from a "primordial atom explosion" as is commonly misinterpreted. However, even with its wide acceptance by the scientific community, this acceptance does not guarantee that it holds the definitive truth about the remote origins of the cosmos. For over a century, this theory has been considered a valid model by science. Yet, several historical gaps have not been overcome, and new doubts arise as the theory is disseminated in academic and educational environments around the world. The fact that it is widely accepted does not imply that it is unquestionably true, nor that the universe originated exactly as proposed by it.

Furthermore, a scientific theory should be supported by the empirical evidences that favor it. The evidence that once reinforced the Big Bang can now also support new theories, such as the "dead universe" theory discussed in this article. The Big Bang theory is undeniably a well-accepted model, but the cosmological model of the dead universe theory may prove to be inevitable. The validity of this new theory may be more clearly demonstrated through technological advancements and mathematical calculations in the area of quantum computing than merely by the work of astrophysicists seeking precision to corroborate the theory.

Before Edwin Hubble cemented his mark in the study of the cosmos, Alexander Friedmann and Georges Lemaître had already laid the theoretical groundwork that would challenge prevailing conceptions of the universe. In 1922, Friedmann, a Russian mathematician, pioneered the application of the equations of the theory of relativity to predict an expanding universe, an idea initially met with skepticism. In parallel, in 1927, the Belgian priest and astronomer Georges Lemaître independently proposed a similar model that included the notion of a "primeval atom"—the theoretical precursor to what would later be known as the Big Bang.

In the landscape prepared by these visionary minds, Edwin Hubble emerged as a transformative figure. Throughout his career, he dedicated himself to the study of the redshift of galaxies, a phenomenon that he himself highlighted through meticulous observations. In 1929, Hubble published his results establishing a direct relationship between the redshift and the apparent brightness of galaxies, corroborating and expanding upon the theories of Friedmann and Lemaître.

This discovery, known as Hubble's Law, transcended existing theoretical models and transformed the concept of the universe's expansion from a mere mathematical abstraction into an empirically verifiable reality. With this contribution, Hubble not only reinforced the work of his predecessors but also ushered in a new era in cosmology, where the idea of a dynamic and expanding universe became a central pillar in the modern understanding of space and time.

Hawking (1988) posited that Hubble's observations suggested that there was a moment, called the Big Bang, when the universe was infinitesimally small and infinitely dense. Under such conditions, all the laws of science, and therefore all capacity to predict the future, would fail. If there were events prior to this moment, they could not affect what happens in the present. Their existence could be ignored because it would have no observational consequences. It can be said that time began at the Big Bang, in the sense that earlier times simply would not have a definition [1]. Hawking, S. (1988). A Brief History of Time.

The "dead universe" theory postulates the existence of an ancient universe, perhaps more than a trillion times larger than our known cosmos, that "died" and, consequently, generated primordial black holes. This theory does not suggest that the initial black holes, after the collision, started the formation of our universe. Instead, it proposes that the observable universe comprises only the finest particles of a dead universe. It presents a revolutionary cosmological model that offers a more comprehensive explanation of the origins of the universe and a new model for the expansion process, different from that proposed by the Big Bang theory. In fact, there is a simple separation of galaxies explained throughout this theory, and not an aggressive expansion that leads to the disintegration of matter and the death of the universe, as suggested by the theory of universal expansion.

Astrophysicists cannot afford to be unjust regarding the perspectives on the size of the universe proposed in this work, nor can they be frivolous about the possibilities this methodology presents concerning the moribund universe of yore. Should the critiques be ironic, this very treatise reserves the right to dismiss the theories of multiverses and the concept of the universe as an information processor. This model proposes the influence of the laws from a dead array of stellar bodies and other elements on our observable cosmos.

Two hypotheses are advanced within the framework of the "dead universe" theory. Initially, the term "dead" is redefined, transcending the traditional notion of stellar extinction, to denote a universe whose fundamental characteristic from its inception is the intrinsic absence of light. In this model, light is regarded as a cosmic anomaly that arises from fusion and collision events among supermassive bodies within the expanse of a primordially dark universe. Moreover, this theory asserts that black holes and fusions are not the creators of the universe in which we reside.

The first hypothesis posits that phenomena such as supermassive black holes, dark energy, and dark matter constitute the elementary components of this primordial universe. Intriguingly, light appears under specific circumstances, possibly as a byproduct of complex gravitational interactions, acting as a catalyst for the transition to an illuminated cosmos akin to what we observe today.

The second hypothesis proposes that an ancestral universe, vastly larger than the cosmos currently known, serves as the final reliquary for the death that ravaged all galaxies and extinguished the light of a

once vibrant universe. This predecessor universe could provide crucial evidence of cosmological processes that culminated in the current observable state of the universe.

It is postulated that the observable universe pre-existed in a state of death trillions of years before the Big Bang. The emergence of light, sparked by intense activities in this dead universe, would be analogous to the peculiarity of black holes within the context of known physics.

Hence, galaxies and the universe existed, thus, in the absence of light, submerged in the darkness of the dead universe, yet preserved in an organized state by the laws of physics. This perspective suggests that the universe did not merely emerge but has always been present, formerly in a state of darkness. This conjecture finds parallels with the "cosmic dark ages" proposed by the Big Bang theory, describing a prolonged period after the Big Bang, yet before the formation of the first stars, when the universe was permeated by darkness.

Thus, galaxies and the universe existed, thus, in the absence of light, submerged in the darkness of the dead universe, but preserved in a state organized by the laws of physics. This perspective suggests that the universe did not merely emerge but has always been present in a state of death, previously in full darkness. This conjecture finds parallels with the "cosmic dark ages" proposed by the Big Bang theory, describing a prolonged period after the Big Bang but before the formation of the first stars, when the universe was pervaded by darkness.

Light as a Cosmic Anomaly:

Beyond the conventional view that supports the natural paradigm of the universe in its current state, a second hypothesis can be considered. This second perspective, grounded in the theory of the Dead Universe, proposes an alternative interpretation of celestial phenomena, including the behavior of stars.

As we gaze upon the Sun and other stars, it's hard not to ponder the strangeness of their apparent frenzied activity. The intense emissions of light and radiation emanating from these celestial bodies may appear incompatible with the conception of a dead and inert universe. However, by embracing the theory of the Dead Universe, we can perceive this activity as an anomaly that precipitated the existence of the universe as we comprehend it.

Within the framework of the Dead Universe theory, two hypotheses hold sway. The first postulates a universe in its natural state of death, wherein light would be regarded as an alien presence amidst the otherwise dormant cosmos. The second hypothesis introduces a grander notion: a universe trillions of times larger than our current one, which gradually slipped into a continual state of death. In this expansive cosmos, comprised of light and normal stars, the very essence of existence was altered, manifesting a state where light and stellar phenomena were commonplace. By delving into these hypotheses, we are compelled to reevaluate our understanding of cosmic phenomena. Rather than mere aberrations, they become enigmatic clues, hinting at the profound intricacies of the universe's genesis and its potential demise.

According to the Dead Universe theory, the natural state of the cosmos would be one of total inactivity, without the presence of bright stars, solar flares, or any other form of radiant energy. In this paradigm, starlight and the energetic events associated with it would be seen as unusual disturbances in a universe that would otherwise remain in a state of eternal calm.

Solar flares, coronal mass ejections, and other stellar phenomena would be interpreted as temporary deviations from the inert equilibrium that characterizes the Dead Universe. These manifestations of extreme energy activity would be considered anomalies that arose from exceptional conditions or catastrophic events within this supposedly static universe.

Therefore, by embracing the Dead Universe theory, we are led to reassess our understanding of starlight and celestial phenomena. Instead of being viewed as natural aspects of the cosmos, they become signs of a fundamental disruption that gave rise to the universe as we know it. This alternative perspective challenges our conventional perception and invites us to explore new ways of understanding the nature and origin of the cosmos.

Anomaly of Light: Light, a fundamental manifestation of electromagnetic energy, occupies a pivotal role in the physics of the universe as we know it. To propose that light is an anomaly in this theory is not simply to invoke complexity; rather, it offers answers to some of the most profound questions in classical

physics. This approach does not just reinterpret established physical concepts but also proposes a new way to understand the nature of the universe.

The creation of light in stars is a complex process that primarily occurs through thermonuclear reactions in their cores.

Nuclear Fusion: The primary mechanism for creating light in stars is nuclear fusion. In the stellar core, especially in stars like the Sun, hydrogen atoms are fused to form helium in a process called nuclear fusion. During this fusion, a small fraction of the atoms' mass is converted into energy according to the famous equation by Einstein, $E = mc^2$. This energy is released in the form of light and heat.

Pressure of Radiation and Gravitational Pressure: Within a star, nuclear fusion generates an immense amount of energy in the form of radiation and high-energy particles. This radiation exerts an outward pressure in all directions. Simultaneously, the star's massive mass creates a significant gravitational attraction, attempting to compress it toward the center. Hydrostatic equilibrium occurs when these two forces radiation pressure outward and gravity inward - balance each other.

Fusion Cycle: In the sun and other stars of similar size, the primary fusion process is the proton-proton cycle, where four hydrogen nuclei combine to form a helium nucleus, releasing photons (light particles) in the process.

Gravitational Pressure: Nuclear fusion only occurs in stars due to the immense gravitational pressure in their cores, which forces the hydrogen nuclei to approach close enough to overcome the electrical repulsion between them and allow fusion.

Hydrostatic equilibrium: The light generated by nuclear fusion exerts an outward pressure, balancing the force of gravity that is trying to compress the star. This hydrostatic equilibrium keeps the star stable and in its current state.

Pressure of radiation and gravitational pressure: Within a star, nuclear fusion generates an immense amount of energy in the form of radiation and high-energy particles. This radiation exerts an outward pressure in all directions. At the same time, the massive mass of the star generates a significant gravitational attraction, attempting to compress it toward the center. Hydrostatic equilibrium occurs when these two forces - radiation pressure outward and gravity inward - balance each other.

Stellar stability: When hydrostatic equilibrium is achieved, the star becomes stable. Any disturbance that causes an imbalance between radiation pressure and gravity will result in changes in the stellar structure. For example, if radiation pressure decreases, gravity will begin to compress the star, increasing pressure and temperature at its core. This may lead to an acceleration in the rate of nuclear fusion to restore equilibrium. On the other hand, if radiation pressure becomes too intense, it can overcome gravity and expand the star, resulting in an eventual explosion or ejection of stellar material.

Stellar lifecycle: Hydrostatic equilibrium is crucial to understanding the lifecycle of stars. For most of their lives, stars maintain this equilibrium, remaining stable and generating energy through nuclear fusion. However, as nuclear fuel is consumed, radiation pressure decreases and gravity begins to dominate. Depending on the mass of the star, this can result in different fates, such as transformation into a red giant, supernova, or even a black hole.

Dynamic equilibrium: It is important to note that hydrostatic equilibrium is not a static state but rather a dynamic balance. Conditions within a star are constantly changing due to energy production, movement of stellar material, and other physical interactions. However, hydrostatic equilibrium is essential to ensure that these changes occur in a controlled and balanced manner, keeping the star relatively stable throughout its life.

The premise that, in the origins of the universe, light was not present; it was created subsequently. Whether according to the belief of creationists, who suggest that the universe was shrouded in darkness and that God said "let there be light," or from the scientific perspective of these primordial events, it is undeniable that darkness preceded light.

Primitive Elements: While black holes, dark matter, and dark energy are well-established concepts in modern cosmology, they are generally regarded as emergent phenomena and not necessarily as primordial components of the universe. Nevertheless, the dead universe theory provides a plausible explanation for

their origins, presenting them as fundamental elements of a previously inert cosmos. Although dark matter and dark energy are areas of intense research and debate, with their origins still undefined by consensus, this theory presents one of the first rational approaches attempting to elucidate these enigmatic phenomena.

Expansion of Cosmic Understanding: These ideas challenge our imagination regarding the universe and provide fertile ground for theoretical discussions and speculative narratives. Although they remain distant from current scientific consensus, these theoretical considerations seek to expand our comprehension of the possible states of the universe and the fundamental forces that govern its evolution and potential finality. Thus, while respecting the limitations of endorsed scientific knowledge, these propositions allow for speculative exploration based on alternative theories and hypotheses.

The "dead universe" theory implies that the cosmos we know is the residual aftermath of a bygone vastness, where the concept of stellar birth is reversed to universal death. In this scenario, black holes are not the catalysts of creation but rather the epitaph of a universe that has expended its vitality. Rather than being generative singularities, these primordial black holes are the remaining gravitational beacons of a cosmos that no longer exists.

The galaxies and stars we observe, in their seeming youthfulness, are actually the embers of a cosmic fire long extinguished.

Dark matter and dark energy, the enigmatic elements of our universe, may be interpreted as the faint echo of this ultimate cataclysmic event.

Among the theories describing the ultimate fate of the universe, hypotheses of the "Big Freeze," "Big Rip," "Big Crunch," and "Big Slurp" suggest dramatic scenarios based on the continuous expansion, contraction, or phase transitions of space-time. However, the theory of the "Dead Universe" presents a more serene and fundamentally different outcome for the cosmos.

According to the theory of the "Dead Universe," there is no cataclysmic or explosive event marking the end of the cosmos. Instead, the universe simply returns to its natural state, a state without the anomalies that characterize the observable universe. In this theory, light is considered an anomaly, something that does not spontaneously arise but requires nuclear fusions and other energetic processes to manifest. In this context, the existence of light is seen as a temporary disturbance in the primitive and eternally dark state of the universe.

From this perspective, if there were living beings in this primordial universe, they would consider light as something strange, a curiosity, or an intruder in the perennial state of darkness. The theory posits that, unlike stellar death, which can be a spectacular explosion, the universe does not end with a bang, but with a silent and inexorable return to darkness.

From a scientific point of view, life as we know it may have emerged from this anomaly, from a series of accidents and powerful mergers in the primitive universe that would ultimately draw the cosmos back to its native reality. The theory suggests that, just as light and life emerged from extraordinary events, the universe will one day reabsorb everything back into its original state, devoid of light and life, where dominant gravitational forces would facilitate this reversion to the primitive and dark state.

The theory of the "Dead Universe" challenges the conventional view of continuous expansion proposed by the Big Bang and other cosmological theories. It does not predict a violent or cataclysmic end, but a gradual decline into a silent equilibrium, where the cosmos slowly fades into the dark background of its primitive existence, remaining forever in a cycle of transient light and eventual darkness. The expansion of the universe, a phenomenon observed and described by Hubble's Law, shows that galaxies are moving away from each other at a speed proportional to their distance. This central fact of modern cosmology is in harmony with the theory of the "Dead Universe," albeit with a substantially different interpretation of the implications of this expansion.

In the theory of the "Dead Universe," the observed expansion is not the result of an initial impulse from an explosion, as in the Big Bang, but is seen as a simple distancing of galaxies due to the influence of gravity and other yet-to-be-understood laws emanating from the nature of the "Dead Universe" itself. This movement is interpreted as a manifestation of the intrinsic and residual properties of a cosmos that is no longer active in the traditional sense.

In other words, while Hubble's Law describes what we observe, the theory of the "Dead Universe" attempts to explain why we observe it. It suggests that the unknown laws of the "Dead Universe" may be residual forces or echoes of a previous cosmic reality, which now direct the dynamics of the observable universe. These forces could be different from the known classical gravity and could explain why galaxies continue to move apart even when the original energy of the Big Bang should have dissipated.

Therefore, the expansion would not be a sign of continuous growth or birth, but a gradual return to the quiescent and fundamental state of the "Dead Universe", a final state of rest after the end of anomalies like light and the complex structures that characterize our current universe. Thus, the theory of the "Dead Universe" adds a new layer of understanding to the ultimate fate of the cosmos and offers an intriguing counterpoint to prevailing cosmological theories.

Your description suggests an application of Newton's law of universal gravitation, which states that bodies with mass exert a gravitational attraction on each other, and this force is directly proportional to the masses of the bodies and inversely proportional to the square of the distance between their centers. According to the theory of the "Dead Universe" you are exploring, gravity would play a fundamental role in influencing the movement of the observable universe.

Adopting this perspective, we could theorize that a "Dead Universe" containing bodies of incalculable mass is exerting a gravitational attraction on our observable universe, pulling it back to a state of greater uniformity and tranquility. This would imply that the forces responsible for the expansion of the universe, such as dark energy, could eventually be countered or even overcome by the gravity of such cosmic super-structures.

This theory is distinct from other cosmological models and does not align with the Big Bang, multiverse theories, or cyclic models of creation and rebirth. Instead, it supports the idea of a continuously decaying universe, which generates smaller galaxies and occasionally some larger ones as it dies in stark contrast the multiverse concept.

The various theories propose a dramatic end to the cosmos, perhaps about 200 billion years in the future. However, in the theory of the dead universe, this event has already occurred in the past, and the universe is simply following its trajectory towards total extinction. Perhaps the difficulty of these theories lies in their perspective on the study of time and space. This new theory leans more towards the ideas of Penrose (2004) [2].

"Let us begin by exploring the arena within which all the phenomena of the physical universe appear to take place: spacetime." This notion, as described by Penrose, plays a vital role in most of the rest of this book. Despite what seems to be the common perception, and despite Einstein's superb use of this idea in his framing of the general theory of relativity, spacetime was not Einstein's original idea, nor was he particularly enthusiastic about it when he first heard of it. We must first ask why "spacetime"? What is wrong with thinking of space and time separately, rather than attempting to unify these seemingly very different notions into one? Moreover, looking back with hindsight to the magnificent older relativistic insights of Galileo and Newton, we find that they, too, could have potentially gained great benefit from the spacetime perspective [2]. Penrose, R. (2004). "The Road to Reality: A Complete Guide to the Laws of the Universe".

The theory of the "Dead Universe" suggests a vast and singular universe where the process of death still influences the observable universe, which can be considered as the last particles of the once vigorous dead universe, the remnants of its energy still leading to the continuous creation of galaxies, as memories of death. However, even as new galaxies are being formed, the universe is shrinking instead of growing in number, as proposed by the Big Bang and other existing theories. Our observable universe is likened to a large balloon that is gradually losing its stellar vitality. Today, the observable universe represents only a minuscule fraction, about 0.001%, of the previously active universe, now comparable to almost nothing compared to its past glory.

Furthermore, the theory of the "Dead Universe" suggests that this process of mortal decay results in a gradual reduction in the size of galaxies. We are unlikely to see a galaxy larger than the largest ones we know emerging before our eyes. This contrasts starkly with the Big Bang theory and the data that will be

analyzed in the future by the James Webb Telescope. The activity of galaxies will follow a course of total and silent death on the margins of time. This view contrasts sharply with the four main theories about the end of the universe: the Big Rip, the Big Crunch, the Big Freeze, and the Big Bounce.

Big Rip: This theory suggests a catastrophic expansion that tears everything apart, from galaxies to atoms.

Big Crunch: Proposes a scenario where the universe's expansion reverses, leading to a collapse into a singularity.

Big Freeze: Predicts a universe that expands forever, becoming increasingly cold and dark as stars burn out.

Big Bounce: Suggests that the universe goes through infinite cycles of expansion and contraction.

In contrast, the "Dead Universe" theory does not predict any aggressive end. Instead, it posits a gradual, silent drifting apart of galaxies, influenced by the gravitational remnants of the dead universe. This slow separation lacks the violent dynamics suggested by other models.

The theory rejects the concept of cosmic inflation and traditional expansion, replacing it with the idea of a silent, steady detachment of galaxies, influenced by the decaying forces of a much larger, now largely dead universe. This subtle separation is devoid of the catastrophic elements proposed by other models, emphasizing a more tranquil end.

The decaying universe's influence also suggests a gradual winding down of cosmic activity, leading to increasingly smaller and less active galaxies until complete cosmic silence is achieved. This process is thought to be influenced by the gravitational remnants and the creative remnants of the dead universe, which continue to affect the formation of new galaxies within our observable universe.

The "Dead Universe" theory's distinctiveness lies in its rejection of the traditional expansionist and inflationary models, opting instead for a model where cosmic events and the formation of galaxies are dictated by the decaying remnants of a vastly larger universe. This leads to a steady, quiet dispersal of matter and energy, contrasting with the violent or cyclic endings proposed by other cosmological theories.

In summary, the "Dead Universe" theory provides a unique perspective on cosmic evolution, emphasizing a slow, peaceful decline and the formation of galaxies as a memory of a once-living, now largely decayed universe. This theory offers a novel framework that stands apart from the more dramatic cosmological models, suggesting a universe that quietly fades away rather than ending in a catastrophic event.

We can also incorporate the concept of a membrane (brane) to further develop this theory. As the dead universe decays, it creates new galaxies as a form of cosmic memory. These galaxies are not random but are influenced by the decaying universe's remaining structures and gravitational forces. This process does not support the creation of multiple universes but rather the continuous formation of galaxies within a singular universe.

The "Dead Universe" theory posits that our universe is not expanding, inflating, or undergoing cycles of rebirth. Instead, it is gradually diminishing and has been in a state of decay for perhaps trillions of years. This model suggests that the universe is slowly entering a state of total death, with galaxies continuously forming and then fading away under the influence of the dead universe's remnants. Rather than growing or regenerating, our universe is progressively winding down, moving towards a silent and complete cessation of cosmic activity.

Our entire observable universe may exist within a distinct brane that floats in a higher-dimensional space. This brane represents a segment of the dead universe that is transitioning into a state of death. However, the creative remnants of the dead universe could lead to the formation of new galaxies within this brane. These galaxies are formed as the dead universe's remnants exert their influence, leading to the creation of progressively smaller galaxies. Explosions and other cosmic events within this decaying process contribute to the formation of these new galaxies [3]. "The universe may be governed by hidden dimensions, beyond the familiar three of space and one of time, opening up new avenues for exploration and understanding" - Lisa Randall, "Warped Passages: Unraveling the Mysteries of the Universe's Hidden Dimensions" [3].

We can postulate that the entirety of our dead universe exists within a brane, which floats in a larger

dimensional space. Within this volume, our universe exists as a membrane distinct from other potential universes, entering a state of death. This brane could be influenced by the physical laws and remnants of the dead universe, leading to the continuous creation of galaxies. These galaxies, as part of the cosmic memory of the dead universe, are generated by the interactions and remaining energies of the dead universe's structures.

This model suggests that the gravitational anomalies and the curvature of time and space observed in our universe are the result of the dead universe's physics influencing the observable universe. The dead universe's decaying remnants, particularly supermassive bodies and dark energy, are key elements in shaping the structure and behavior of our observable universe.

To substantiate this theory, it would be appropriate to refer to various recognized physical principles and discoveries:

Newton's Law of Universal Gravitation: As a basis for understanding gravity on a large scale.

Einstein's General Relativity: This theory updated the understanding of gravity as the curvature of space-time. The role of singularities and event horizons in black holes could be explored in relation to the "Dead Universe".

Hubble's Laws and Observations from the Hubble Space Telescope: They provide empirical evidence of the expansion of the universe, which could be interpreted in light of the attraction of a massive "Dead Universe".

Quantum Cosmology: Investigating the implications of quantum mechanics on cosmological scales, this area could provide insights into how a "Dead Universe" could influence matter and energy in our universe.

Research on Dark Energy and Dark Matter: Studies on these mysterious components of the universe could be useful in understanding the forces that are competing with or interacting with gravity in the "Dead Universe".

Notable scientists for reference could include:

Stephen Hawking: For his work on singularities and the properties of black holes.

Roger Penrose: Who collaborated with Hawking and developed theories on the nature of space-time.

Saul Perlmutter, Brian P. Schmidt, and Adam G. Riess: Astronomers who were awarded the Nobel Prize for their discoveries regarding the acceleration of the expansion of the universe.

Kip Thorne: A theoretical physicist who made significant contributions to the understanding of gravitational waves and the nature of gravity.

2. THEORY FOUNDATIONS

The "Dead Universe" theory suggests that what we perceive as our cosmos is the legacy of an ancestral reality whose grandeur has long faded into the mists of time. The universe we inhabit may be akin to a cosmic aftermath, a diluted echo of a once vibrant and expansive cosmic past. Rather than being the catalysts of genesis, the black holes that populate our night sky are posited as remnants of a previous cosmic end, markers of the graves of galaxies and stars that have long since perished. Each star system, every nebula we capture through our telescopes, might be a manifestation of cosmic memory, a lingering whisper from a universe that has run its course. In this view, dark matter and dark energy are reimagined as the residual hallmarks of this ancient epoch, perhaps the last vestiges of a once dynamic cosmic framework.

The young galaxies we witness are not born from a void but are conceived from the vestiges of a pre-existing structure in a state of stately and measured dissolution. Similarly, to the birth of stars from the dense cosmic nurseries, our universe may have been partially shaped from the detritus left by its predecessor. The vibrant stars and galaxies we observe, in their billions of years of existence, could very well be the ultimate creations of a bygone universe. On the verge of its cessation, it still possessed the capacity to engender new celestial structures, intimating that the end of one cosmic cycle and the inception of another are intrinsically interconnected, leading to a culmination projected to be in about 200 billion years. These phenomena, observable in our present universe, abide by the unalterable laws of conservation and transmutation that govern all of natural reality.

These fledgling galaxies might be interpreted as the final echoes or gleaming reminiscences of a cosmos that exists no more. They are fragments of a vast stellar heritage, the ultimate murmur of a universe that once thrived in scale and energetic wealth. We are thus residing in the twilight of a glorious cosmic history, witnessing what may be deemed the "last dance" of light and matter sourced from a universe that has ebbed away. What we discern as our stellar reality is merely the residue—a modest yet still animated segment of an existence far grander than we can grasp, extending beyond our temporal and spatial reach. Essentially, all that exists, all that we behold, and all that we may come to understand are but the enduring fragments in time and space, the everlasting signature of the dead universe. "Space tells matter how to move, and matter tells space how to curve." - Brian Greene, "The Fabric of the Cosmos: Space, Time, and the Texture of Reality" [4].

As this process unfolds, the density and complexity of the universe wane. Where once there were dense clusters of matter and energy, now there are increasingly vast and empty spaces, dotted with isolated islands of stellar activity. The observation of young galaxies by the James Webb Space Telescope thus serves as a glimpse into this process of decline, revealing the final stages of a cosmos we are just beginning to understand.

In this picture, the death of the ancestral universe was not an abrupt event but a prolonged phenomenon that allowed the gradual emergence of new structures from its ruins. Black holes, rather than being the catalysts of a new birth, are the final guardians of the cosmic memory of the preceding universe, storing in their gravitational abysses the history of all that once was.

Indeed, black holes have mass. The mass of a black hole can be comparable to that of the Earth, the Sun, or even vastly greater, depending on the type of black hole. There are stellar black holes, which generally have masses ranging from a few to tens of times that of the Sun, and supermassive black holes, which can have masses equivalent to millions or billions of times the mass of the Sun.

The term "black hole" refers to the fact that these objects are regions of space where gravity is so intense that nothing, not even light, can escape from them. The word "hole" is a way to describe this "trapping" feature, although it is not a hole in the traditional sense of a cavity or opening. The adjective "black" is used because, since light cannot escape from a black hole, it is completely dark, neither emitting nor reflecting light, rendering it "black" to any observer.

When certain stars, much more massive than the Sun, reach the end of their lives, they can undergo a process known as gravitational collapse. After exhausting all their nuclear fuel, the pressure that supports the star against gravity disappears, and it collapses in on itself. Depending on the original mass of the star, this collapse can result in a supernova, and the remaining core may form a stellar black hole. This is an example of a black hole that originates from a "dead star". In this way, we advance toward the theory of a dead universe with dimensions greater than our observable universe.

If the Sun were to cease to exist, that is, if it suddenly stopped emitting light and heat, the consequences would be dramatic, but the orbits of the planets in the solar system, including Earth, would initially remain unchanged, at least for some time. This is because gravity, not light, is the force that keeps the planets in orbit around the Sun.

Gravity is a consequence of an object's mass, and light is a form of energy emitted by it. If the Sun suddenly stopped emitting light, it would mean that it is no longer performing nuclear reactions in its core, but its mass would still be present, and therefore, its gravity would continue to influence the planets. However, the absence of light and heat would have catastrophic effects on life on Earth and the planet's climatic conditions.

Over time, if the Sun were to transform into a white dwarf or undergo some other process that significantly altered its mass, the orbits of the planets could be affected. Changes in the Sun's mass would alter its gravitational force, which, in turn, would affect the trajectory of celestial bodies orbiting it.

It is not strange to postulate the existence of a universe without the activity of light emission but still composed of galaxies, supermassive black holes, dark matter, dark energy, and where the laws of physics remain active. I can affirm, based on the theoretical argument developed, that such a universe exists and that, soon, it may be revealed to the light of scientific knowledge.

From a scientific viewpoint, however, the claim to the existence of a fundamental reality such as a "dead universe" requires a substantial set of empirical and theoretical evidence that can be verified through independent observations and experimentation. Until such evidence is provided and validated by the scrutiny of the scientific community, such a concept should be considered with caution, currently residing in the realm of theoretical speculation, similar to many hypotheses and theories that have preceded it.

These black holes are found at the centers of almost all large galaxies, including our own Milky Way. They have masses ranging from millions to billions of times that of the Sun. It is believed that they grow by accumulating matter and other black holes over time, but their exact origin is still a subject of research. They are not considered "dead galaxies," but they are a fundamental part of the dynamics and evolution of galaxies.

The term "dead galaxy" typically refers to a galaxy that has ceased star formation. Galaxies can "die" in terms of stellar production due to various processes, such as the loss of gas (the fuel for star formation) or interactions with other galaxies. These galaxies do not transform into black holes, although they may harbor supermassive black holes at their centers. The "dead universe" theory is legitimized and worthy of study by proposing that the collective deaths of celestial bodies converge in the formation of a singular predecessor universe, as opposed to the concept of multiverses suggested by various speculative theories. These theories often deviate from the mathematical models and the rigorously tested and proven scientific evidence. In contrast, the dead universe theory, which harmonizes with established discoveries and laws of physics, offers a perspective that integrates into the contemporary understanding of the universe while providing a potential platform for future investigations.

In the next article, in partnership with astrophysicists, I aim to advance the presentation of a consistent model that, to gain validation by the scientific community, must be capable of formulating testable predictions and be robustly grounded in existing empirical demonstrations and data that favor the theory. Currently, the consensus around the Big Bang theory appears to be weakening, while, on the other hand, the "dead universe" theory not only conforms to the already established physical laws but also proposes alternative explanations that can be readily subjected to verification through observation and experimentation.

Thus, the "expansion of the universe" can be interpreted not as an indicator of dynamic growth but rather as a gradual separation driven by the laws of gravity from a preceding universe, a relic still influencing the current cosmos. This phenomenon could be regarded as the final exhale of a universe that is gradually surrendering its energies. We are witnessing a process of cooling and quiescence, where matter and energy are smoothly redistributed, and space-time stretches, aspiring to a state of enduring serenity. As this process progresses, the formation of new galaxies will tend to decrease and eventually cease, resulting in a universe filled with contemplative silence—the true quiet that follows the luminous interlude of the stars. Just as its parent universe died, so too shall its offspring, the observable universe, pass away...

3. PRIMITIVE ELEMENTS AND THEIR ROLE

Thus, the legacy of the "dead universe" is key to understanding our cosmic fate, focusing not on active galaxies, but on the contemplation of the most ancient structures and the careful observation of celestial phenomena like black holes. Such investigations may uncover crucial clues about the primordial universe and provide a more comprehensive understanding of its beginning and end, without resorting to repetitive cycles. The firmament that extends beyond the known stars and galaxies is not a vacuum devoid of existence, but rather a vastness filled with supermassive black holes in constant fusion, a universe where the most complete absence of light reigns, planets submerged in darkness, and where dark matter predominates with an incomparable density, even suggesting the presence of particles unknown to our visible universe. Undoubtedly, a cosmos wrapped in mystery awaits to be deciphered and, in time, will reveal itself before advanced instruments such as the James Webb Space Telescope and forthcoming technologies. The existence of supermassive entities whose dimensions exceed by tens of billions those of the largest entities cataloged, and whose gravitation shapes entirely inert galaxies hidden in the shadows, is in perfect harmony with the laws that govern the mechanics of this still palpable universe, even in the complete absence of light. According to the "dead universe" theory, light, or its absence, is not the determining criterion in the characterization of a universe. The advent of such understanding, which challenges the notion that our universe is limited to an age of 13.5 billion years, suggests we must prepare for a paradigm shift, as we undoubtedly have but a brief interval to realize that our previous conceptions may have been mistaken for a long period.

As we journey towards truth, it is necessary to detach from less comprehensive theories like the Big Bang, which, while predictive, now makes way for a simpler and more elucidative model. The "dead universe" theory stands out for its clarity and the way it rationalizes observational data, offering a direct perspective on the empirical evidence that points to a universe characterized by a singular genesis followed by a definitive conclusion. We are on the right path but embraced by the wrong theories.

Many black holes are nothing more than the tombs of new galaxies, just as our universe contracts within the vast abyss of a massive black hole from the dead universe. Therefore, this explains a response to the large amount of dark matter that surrounds our observable universe. We are existing within a great cosmic tomb; when we die as a universe, our funeral and burial have already been provided for by the old deceased dead universe.

Black holes, often envisioned as catacombs of nascent galaxies, exemplify the inexorable decline of our cosmos towards the vast emptiness of a colossal black hole, a remnant of the preceding universe. This viewpoint offers an illuminating interpretation of the enigmatic proliferation of dark matter pervading the visible universe. We thus dwell in the cradle of a stellar cosmic sepulcher; and when the time comes for our universe to succumb, its epitaph will have been preordained by the long-consumed dementia of the ancient defunct universe.

As intrinsic residents of this cosmic tomb, we are witnesses to our own final abode, already lodged within its confines. We are not headed towards this somber destination; we are already immersed within it. Therefore, when our universe ultimately falls, we will indeed be within our own sepulcher, provided by the deceased universe that preceded us.

Turning our focus to the study of the dead universe seems more prudent than searching for any signs of life, extraterrestrial intelligence, or even distant galaxies. We should dedicate our efforts, resources, and energy to investigating the prior death, to better understand the annihilation, the inevitable end of what once was our beginning and is now heading towards the end of the end.

The young galaxies recently discovered by the James Webb Space Telescope may be perceived as the final echoes of an observable universe that is, at its core, the luminous vestige of an extinct cosmos. These galaxies are the heiresses to a broad stellar legacy, merely the ultimate whispers of a universe once expansive and energy-rich. We live, therefore, in the shadow of an ancient cosmic splendor, witnessing what may well be regarded as the twilight of the interaction between light and matter—the radiant denouement of a universe in decline. Our current stellar reality is but a distant echo—a delicate, yet still resonant fragment of a far more extensive reality that transcends the boundaries of time and space known to us. At the heart of our existence, all that is, all that we observe, and all that is within our grasp of understanding are merely the preserved remains of a larger universe that has vanished, the enduring and undying signature of a dead universe.

Just as stars are born from clouds of dust and gas, our universe may have been partly formed from the "dust" left by its predecessor, and even the younger celestial bodies are objects that were born as the ancient universe was dying. In other words, it created new galaxies with the signature of a future death, even as it was dying, a process that can be observed in our observable universe, following the laws of conservation and transformation that govern all maturity.

4. EXPANSION OF COSMIC UNDERSTANDING

The universe is certainly slowing down, despite any theory suggesting its continuous expansion. Even

the "dead universe" theory proposes that galaxies may drift apart. On the other hand, we will never witness the emergence of a galaxy larger than those we know today in our own universe. This should be reason enough for the scientific community to take this theory more seriously, instead of just looking for faults in the theory.

A dating model of the universe based on the Big Bang theory would be comparable to looking for a living dinosaur to explain its origins and life expectancy. The truth is that we will only reach a consensus through the study of the dead universe. By doing so, we will be setting precedents for understanding a universe that may have existed for trillions of years, where our 13.5 billion years represent nothing more than an insignificant fraction. We are just particles wandering in space-time that was once almost infinite in magnitude.

I am addressing observable phenomena such as black holes, and I do not see my proposition on the dead universe as more speculative than the theories ventured by notable scientists, such as Lawrence Krauss concerning dark matter when it was still considered an unimaginable conjecture. Or even the various theories proposed by Albert Einstein and Stephen Hawking, which were proven many years after their initial formulation.

Therefore, to consider the existence of the dead universe as lacking evidence seems more absurd than any criticism that could have been directed at these pioneering scientists. Moreover, the "dead universe" theory is already finding support in new data, including those provided by the James Webb Telescope in relation to supermassive black holes. Perhaps it is time to look in the rearview mirror of the Big Bang theory to see what is emerging behind it, unveiling the mysteries of the universe to the eyes of the scientific community.

Thus, this theory could offer an alternative explanation for the origin of the universe and its subsequent developments. To say that the universe has always existed would be akin to asserting the eternal existence of God; however, these primordial black holes, originating from the demise of the preceding universe, could vary greatly in size, from very small to extremely large. They remain an active area of research, particularly in their potential contribution to dark matter. As stellar or intermediate black holes interact with each other in binary systems or in dense regions of stars, such as the centers of galaxies or star clusters, they may collide and merge, forming a more massive black hole. These mergers are now regularly detected through gravitational waves, a form of radiation emitted by merging black holes. Indeed, to some extent, the theory of universe expansion finds better support in the "dead universe" theory than in the Big Bang theory, since young stars, in this process of the "dead universe", are heading towards death. Thus, it can be contemplated that the known universe consists merely of "living sparks" of the dead universe, which will also die in about billions of years and are located within the center of a black hole of the dead universe, akin to a womb with unknown dimensions of dark matter originated from the death and fusions of black holes of exorbitant dimensions.

The "dead universe" theory does not advocate the eternity of the universe nor does it argue that the universe is the outcome of an endless cosmic cycle. Instead, it proposes that our universe is the product of a former universe, marking an end point in its existence, rather than a story of endless creation and re-creation as proposed by some theories of cyclical cosmology. This approach not only challenges the no-tion of uncritical acceptance but also presents itself as a direct and understandable explanation for the origin of the universe.

While the Big Bang theory is widely accepted by the scientific community due to its precise predictions and concordance with observations, the "dead universe" theory aligns and potentially surpasses the Big Bang in terms of explaining the universe's origin with a simplicity comparable to creationist views, yet without relying on unscientific assumptions.

This alternative theory not only fits well with the evidence supporting the Big Bang but could also offer even more precise and testable predictions. The "dead universe" theory could thus become a crucial field of study in theoretical cosmology, challenging and possibly replacing the Big Bang paradigm as the primary explanation for the origin and evolution of the cosmos. Such a proposal has the potential to revitalize scientific debate and provide new directions for the study of cosmology and astrophysics. The "dead universe" theory, suggesting a cosmos devoid of light activity but fully active in its origin, may have been born in a state of advanced maturity, immeasurably vast and replete with energies such as dark energy that influences our universe. Over incalculable eons, this ancestral universe entered a phase of decline, where each subsequent stellar life cycle presented itself as of lesser magnitude and duration than the previous, always headed toward death.

In this context, the formation of new galaxies and stars, such as those observed by modern technology, does not signal the vibrant birth of an expanding universe, but the last throes of vitality of a senescent cosmic structure yearning for life, even as it marches toward death. At the time of its birth, our universe held an advanced state of development, intertwined with signs of cosmic old age.

As it ages, instead of expanding and growing in complexity and diversity, the universe is paradoxically rejuvenating in terms of its galaxies and stars, which are emerging increasingly younger and smaller, denoting a progressive loss of energy and mass that will lead to its total death in 200 billion years.

The "Dead Universe Theory" is built on a solid foundation of observational data and established mathematical models. Although it does not make specific predictions now, it aligns with a series of scientific evidences that could be interpreted as congruent with its central postulates. The theory is proposed as a coherent and rational framework, offering a new perspective on the cosmos that is consistent with current physical and astronomical knowledge. The history of particle physics, particularly the prediction and subsequent discovery of the Higgs particle, highlights the patience necessary for scientific advancement. Significant theorizations often precede the experimental capability of verification by many years, if not decades. In this spirit, the "Dead Universe Theory" stands as an invitation to ongoing investigation, awaiting the development of technologies and methodologies that may, in the future, test its premises and enrich our understanding of the universe.

Under the "dead universe" theory, the accelerated expansion of the universe is a natural phenomenon resulting from the immense energy released by the destruction of the old cosmos and the subsequent formation of the new one.

Dark energy could then be viewed as an energetic vestige of this cosmic transition, a residual force propelling the continued expansion of the universe. The theory requires a reinterpretation of existing cosmological data, including the cosmic microwave background and the distribution of galaxies. For instance, variations or anomalies in the background radiation could be interpreted as evidence of a transitional event between the dead universe and the new one.

5. THE DEAD UNIVERSE AND OBSERVABLE PHENOMENA

To support the theory, advanced computational models could simulate scenarios of black hole collisions and the subsequent formation of a new universe. These models would help better understand how the described events might manifest in the observed structure of the current universe.

Black holes, long predicted theoretically, have only recently had their existence empirically solidified. The "dead universe" theory could explain phenomena that the Big Bang theory may never be able to, such as certain characteristics of black holes and other cosmic phenomena. This theory has accepted, clear, and verifiable foundations, which not only align with observations made from the Big Bang perspective but also predict phenomena that the Big Bang cannot efficiently explain. These collision events could be responsible for the anomalies observed in the cosmic microwave background, which the Big Bang only partially explains. In the context of the "dead universe," these would be remnants of the last intense gravitational interactions of the previous cosmos.

Dark matter, an essential component of the cosmos that the Big Bang does not fully explain, finds its place in this theory as a direct remnant of the previous universe. The "dead universe" theory suggests that dark matter is composed of particles or compact objects that are remnants of the collapse of the old universe.

Now, the interpretation of dark matter provides a new angle for investigating its properties, as its distribution and behavior could reveal more about the conditions of the preexisting cosmos than our observable universe.

6. EMPIRICAL EVIDENCE AND THEORETICAL PREDICTIONS

The acceptance of a theory by the scientific community is not just a matter of accumulating evidence but also of a paradigm shift. The history of science is filled with widely accepted theories that were eventually supplanted by new theories that provided more precise or comprehensive explanations. The "dead universe" theory proposes a reinterpretation of already known phenomena and the possibility to explain more adequately observations such as the cosmic microwave background radiation, the abundance of light elements, and the accelerated expansion of the universe.

It is crucial that the "dead universe" theory be debated, tested, and potentially validated by the scientific community. This debate will not only contribute to the advancement of knowledge but will also challenge the foundations of established theories, promoting a deeper and more integrated understanding of the universe.

The substantial presence of dark matter in the universe suggests the validity of the "dead universe" theory. Although the Big Bang is recognized for explaining the cosmic microwave background, it fails to precisely determine the universe's age. Astrophysics and cosmology, by basing the dating of the universe on still-active celestial bodies, propose that the universe is approximately 13.5 billion years old; however, this conception is destined for revision under the light of the "dead universe" theory. The new methodology suggested by advances like the James Webb Space Telescope indicates that the observation of extinct stars may point to a much greater antiquity, possibly in the range of trillions of years.

This approach challenges the interpretation of gravitational waves within the Big Bang paradigm. In the "dead universe" theory, the existence of an astronomical number of extinct stars in a chaotic and random universe, where collisions are frequent, offers a more plausible explanation for the gravitational waves detected near Earth. General relativity, therefore, strengthens the "dead universe" theory, presenting a divergent perspective on the expansion of the universe.

In the view of the "dead universe", the visible universe consists of young galaxies emerging from the death of a precursor universe, propelled by intense conflicts and collisions, phenomena until then unexplained by black holes, as observed.

The notion that our young universe represents the final throes of a bygone cosmos—a "dead universe" composed of trillions of galaxies and quantities of energy that defy our capacity to quantify—is supported by the latest observations from the James Webb Space Telescope. These observations point to the birth of still young galaxies, emerging from the last energetic pulsations of a universe that, although dying, is still capable of generating new celestial structures.

The existence of these galaxies, propelled aggressively by a cataclysmic past, challenges the chronologies based on the Big Bang, which presupposes a uniform expansion from a single point.

At the intersection of geology and astrophysics, we find divergent dating methods: while geology offers robust dating techniques through analyses of terrestrial residues, astrophysics and cosmology continue to explore the age of the universe through observations of active celestial bodies. This discrepancy underlines the importance of a methodological review. Recent observations made by the James Webb Space Telescope suggest that, in the vastness of the cosmos, the existence of our cosmic singularity aligns more with the theory of a "dead universe" than with the idea of a universal expansion originating from a singular point. Our universe, seemingly effervescent in generating new galaxies, might not be an independent and expansive entity but a mere reflection, a diminutive and nostalgic simulacrum of the fullness of a preexisting universe. Here, each new stellar and galactic formation is a replica, an echo of the memory and mechanics of a cosmos once full, now dissipated in its magnificence and dead.

The perspective that our universe may be the remnant of an ancient cosmos, stretching across vast expanses of time and space, challenges traditional narratives about cosmic origins and evolution. Recent observations from the James Webb Space Telescope reveal nascent galaxies emerging from the remnants of a "dead universe," suggesting a direct inheritance from a stellar realm spanning trillions of years, brim-

ming with energy and galaxies beyond our current comprehension. Michio Kaku, in "Physics of the Impossible: A Scientific Exploration into the World of Phasers, Force Fields, Teleportation, and Time Travel" [5], underscores the myriad challenges and opportunities for scientific advancement presented by the exploration of space."

This understanding suggests that the continuous formation of galaxies is not indicative of an infinite cyclic process of cosmic births and deaths, but rather of a singular occurrence subsequent to the death of a primordial universe. The appearance of new stellar clusters is not a simple act of repetition but the transformation of an ancient universe, marking a new phase in the cosmological continuum.

The indications of vibrant and young galaxies discovered by James Webb may be considered the most concrete vestiges of the ancestral universe, whose fundamental elements transfigure and give rise to new celestial bodies. These discoveries serve not only to confirm the diversification of the cosmos; they also represent a valuable document of stellar lineage, a narrative of a deeply rooted and intricate cosmological past.

Faced with these new understandings, it is urgent to revise and adapt our cosmological models to encompass and reflect on the concept that the end of an ancient universe does not represent a conclusion but the beginning of a new galactic generation. This renewed paradigm may pave the way for a new frontier of astrophysical discoveries, replacing the notion of finality with that of continuous transformation.

The integration of these concepts into the theoretical framework of the "dead universe" will not only enrich contemporary scientific debate but will also provide a robust foundation for future investigations that aspire to elucidate the mysteries about the origins, evolution, and final destiny of the cosmos.

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The integration of these concepts into the theoretical framework of the "dead universe" will not only enrich contemporary scientific debate but also provide a robust foundation for future investigations aiming to elucidate the mysteries surrounding the origins, evolution, and ultimate fate of the cosmos.

This theory presents an innovative perspective on the genesis and dynamics of the cosmos, in which the universe we perceive is shaped not only by its own substance and history but also by the reminiscences and gravity of a predecessor universe. Here, creation does not arise from a singular inflationary event like the Big Bang but emerges from the silence of an ancient and already vanished cosmos. Although absent in direct manifestation, this preceding cosmos inscribes its laws and structures into the fabric of our own universe, influencing both its expansion and its mass distribution. Thus, the universe we inhabit is not a creation out of nothing as proposed by Lawrence Maxwell Krauss, but a continuation—a posthumous universe that carries the gravitational and structural legacy of a previous reality on a smaller scale, deeply intertwined in our cosmic existence and evolution.

The beauty of this theory lies in its ability to offer verifiable predictions. For example, it suggests that certain anomalies in universal expansion are normal and can be explained by the influence of the previous universe, offering a new field of study for astronomical observations. Detailed analyses of the cosmic microwave background radiation or the distribution of dark matter could reveal unexpected patterns, serving as empirical evidence for the Theory of the Dead Universe.

It can be speculated that the dead universe, with its constant mergers, released a field of dark energy and matter that permeates the space of the current universe and affects and causes galaxies to drift apart. If the previous universe underwent gravitational collapse or another extreme phenomenon, it caused residual quantum or relativistic effects that may influence the space-time metric of the remaining active universe, altering how galaxies drift away from each other.

The foundation of this theory can be supported by modifying the Hubble's Law, traditionally expressed by the equation $v = H_0 D$, where v represents the velocity at which galaxies recede, D is the distance to those galaxies, and H_0 is the Hubble constant. We propose an expansion of this law to incorporate the

impact of the predecessor universe, introducing an influence factor, F(Umorto), which adjusts the Hubble constant based on the properties of the "dead universe".

The influence of the dead universe is captured by the function $F(\text{Umorto}) = a\rho_{res} + \beta C$, where *a* and β are constants that translate the relationship between the residual density (ρ_{res}) of the ancient universe and other final conditions (*C*), such as residual gravitational or quantum effects. Thus, the velocity of galaxies' recession in our universe is redefined as $v = (a\rho_{res} + \beta C) \times H_0 \times D$, an equation that reflects the interaction between the current cosmos and the fabric of spacetime of the dead universe.

Despite observations indicating galaxies drifting apart, I do not conceive the traditional expansion model but apply the same laws that better fit the theory of the dead universe. I remain skeptical of the expansive model suggested by the Big Bang theory. The dead universe theory emerges not only as an alternative cosmological model but aspires to the elegance of a "theory of everything", a unifying conception that promises to intertwine all empirical evidence, scientific data, and calculations into a single explanatory fabric. It is proposed that the current universe, with its twinkling stars and spiral galaxies, is not an isolated system but a fragment, the smallest remaining fraction of a much vaster antecedent cosmos. This preexisting universe, now in a state of cosmic twilight, has left us as heirs to its last vibrant portions of complexity and order.

Like residual cells of a once-vibrant organism, our universe contains within itself the fundamental information, the intrinsic memory of the larger body of which it once was a part. In the structure of every subatomic particle, in the curvature of spacetime, and in the orchestrated movements of the constellations, we find the echo of this majestic origin. Everything we consider to be natural laws, constants, and fundamental variables may be the reflection of the eternal dynamics of this "dead universe", with its laws still whispering through the expansion of space, guiding our expansion and gravitation, our light and our darkness.

This perspective suggests that what we seek to understand about our universe—dark matter and energy, the quantum nature of reality, the very fabric of the cosmos—are residual characteristics, preserved aspects of a larger and more comprehensive reality. Thus, in our quest to comprehend the origin and destiny of our universe, we may actually be deciphering the legacy of what we once were, a complete cosmos now only whispering the secrets of its past existence in the shadow of its own stellar death.

Grounded in the theory of the dead universe, I venture, speculatively, the possibility that the universe may actually be condensing toward a singular point of death with a new model of galaxy distancing as happened before and expelled us from the womb of the dead universe. The Dead Universe theory could clarify the existence of supermassive objects distanced from any previous reality, as well as radio waves, echoes, dark matter, dark energy, and even reveal that a UNO and still "invisible" matter permeates the known cosmos.

Grounded in the theory of the dead universe, I venture, speculatively, the possibility that the universe is, in fact, condensing toward a singular point of death with a new model of galactic separation as it happened before, expelling us from the womb of the dead universe. The Dead Universe theory could shed light on the existence of supermassive objects far removed from any previous reality, as well as radio waves, echoes, dark matter, dark energy, and even reveal that UNO and still "invisible" matter permeates the known cosmos.

My intention in this work is to delve into the concept of the universe originating from nothingness. This exploration aims to set the stage for a consistent approach throughout the entire piece. I will introduce the notion of "uno", derived from the Greek term (" $έv\alpha$ "), which serves as the name for this particle. Rather than representing a complete absence of matter, this "uno" remains undetectable due to its unique properties, which are beyond the capabilities of our current technologies. Acting as a connecting thread among all particles, it functions as a fundamental element, perhaps akin to the vacuum. I intend to utilize the potency of this term to illustrate the absence of matter while emphasizing its existence as an essential element emerging from the vacuum, potentially catalyzing antiparticles.

In the scientific context, the idea of Uno matter can be associated with various theories and speculations about particles or substances that may exist beyond the reach of current observation tools. For example, in particle physics, there are hypotheses about the existence of exotic subatomic particles, such as sterile neutrinos, which have extremely weak interactions with ordinary matter and are therefore difficult to detect.

Another possibility is that Uno matter is related to concepts in theoretical physics, such as dark matter or dark energy, which make up the majority of the observable universe but whose exact nature is still unknown. These forms of matter may be present in significant quantities in the cosmos; however, their lack of interaction with light and other forms of radiation makes direct detection challenging.

At a more speculative level, Uno matter can be conceived as a form of matter that exists in additional dimensions beyond the three spatial dimensions and one temporal dimension that we perceive in our everyday universe. Theories such as string theory and loop quantum gravity posit the existence of extra dimensions, where new forms of matter and energy may reside, thus escaping direct detection.

Both Lawrence Krauss and Stephen Hawking are known for exploring the idea that the universe may have originated "from nothing" or from a state of quantum vacuum. Their perspectives on this subject are quite similar in some respects, but they also have subtle differences.

Lawrence Krauss, in his book "A Universe from Nothing," argues that the universe may have arisen spontaneously due to quantum fluctuations in the vacuum. He suggests that, according to the laws of quantum physics, it is possible for particles and antiparticles to emerge from the vacuum, and under certain circumstances, these quantum fluctuations may result in the creation of an expanding universe.

Stephen Hawking, on the other hand, also discussed the possibility of the universe coming from nothing in his book "The Grand Design", co-written with Leonard Mlodinow. He suggests that, due to the laws of gravity and quantum mechanics, the universe may have spontaneously arisen without the need for an external cause. Hawking argues that, given the highly compressed and hot state at the beginning of the universe, the laws of physics would allow it to emerge "from nothing" as a singularity.

Both scientists are dealing with the complex concept of "nothing" in a somewhat different way than is commonly understood. Instead of "nothing" meaning a true absence of anything, they are referring to a state of quantum vacuum that, although empty of matter and energy as we know it, is rich in quantum fluctuations and potentially capable of generating entire universes. Their ideas challenge more traditional conceptions of the creation and origin of the universe and continue to be subjects of debate and investigation within the scientific community.

As we contemplate the cosmic microwave background (CMB), we observe the primordial vestige of the cosmos's inaugural luminosity, which permeates the universe uniformly—a true cosmic fossil. This evidence harmoniously aligns with the dead universe theory I am proposing. It posits that the CMB is the indelible impression of a prior stage of the universe, an era of quiescence or equilibrium before a significant cosmic transition. The neutrality of the early atoms metaphorically reflects the universe in a state of latency or "death", a phase preceding the complexity and structuring observed in the present. This speculative theory suggests that we live only one phase in a much broader, and perhaps eternal, cosmic cycle, where the universe oscillates between periods of activity and inactivity.

At the heart of the unfathomable cosmos, we dare to hypothesize beyond the scope of current scientific consensus: it is possible that our universe, with its majestic expansion and intricate complexity, far exceeds the age estimated by our contemporary methods, reaching or even surpassing the 100 billion-year mark. This audacious conjecture is based on the previous existence of a "dead universe", a cosmic structure whose longevity would have extended for a period exceeding 900 billion years. It is suggested that such an ancient domain, ending its extensive cycle of existence, would have been the precursor to our current universe, originating through a phenomenon of rebirth or cosmic metamorphosis. The conception that we inhabit a universe succeeding an even older and more expansive reality not only broadens the horizons of our understanding of the temporal dimension of space but also inaugurates new paths of inquiry into the universe's life cycle and the primordial laws that govern its trajectory. Although this theory resides on the fringes of scientific speculation, it invites thinkers to ponder the veracity of a space-time whose fabric and matter may represent not the beginning, but a more recent phase of a universal cycle of immeasurable scope and ancient reverberations. Despite the assertions of astronomers and cosmologists, I stand on an elemental question: what is the true age of supermassive bodies? What changes with a dating method that takes this premise into account? Should the chronology of the universe be measured exclusively by the activity time of stars? If indeed we are mistaken in this methodological model, how then should we interpret the recent findings of the James Webb Space Telescope? The newly observed galaxies are remarkably vast and contain stars whose red chrominance signals an ancient provenance, dating back to mere 500 to 700 million years after the event known as the Big Bang. In the early cosmos, we observe that black holes already had gigantic masses, far superior to that of our Sun, a finding that challenges current explanations, suggesting that they may have formed before the initial event proposed by conventional cosmology. It's not that celestial phenomena are inherently inexplicable by the laws of traditional physics, which cannot be used in the future for universe dating issues.

Therefore, timing based on galaxies and stars, whose existence is finite, may not be the most accurate method for dating the extent of cosmic history. By analogy, the "age" of the universe could be inferred by studying the "fossils" of a previous cosmos, similar to how the age of a living descendant can be contextualized through the study of the remains of the progenitor. The investigation of these cosmic remnants may reveal not only the duration of the past existence of the deceased "father" but also provide insights into the potential longevity of the "son" - the observable universe.

This finding aligns coherently with the theory of the Dead Universe, from which these colossal structures would have emanated. Faced with the bewildering massiveness of black holes, one questions their reconciliation with the theory of the primordial explosion and the subsequent expansion of the universe, often illustrated as an inflating "balloon". How can we incorporate such colossal entities into current cosmological equations? It seems plausible that such black holes are not mere by-products of our emerging universe, but rather remnants of a preceding cosmos, existing long before the coalescence of galaxies that outlined the cradle of our universe.

Based on emerging astronomical observations, my assertion maintains that the age of our universe may well exceed 100 billion years, emerging not from the dawn of a new reality but from the decline of a previous universe. This premise is not unfounded but anchored in data pointing to an older and more complex origin. If we accept that less massive galaxies have the potential to exist for approximately 1 trillion years, then why should we dismiss the hypothesis of a universe with more than 100 billion years as mere fiction?

In an immeasurable universe, I contemplate the possibility that the cosmos in which we reside is the descendant of a predecessor universe. A dead universe. The colossal stars of this ancient domain, billions of times larger than the largest ones we know, would have lived and died, with their deaths sowing the seeds of a new beginning. As these giants succumbed, the celestial bodies orbiting around them would have been drawn into a central birth point—the womb of our own universe. The residual radiation, such as cosmic radio waves, would be the signature of this colossal process, concentrating around our nascent universe, which is filled with notably smaller stars. This narrative is reinforced by the observations of the James Webb Space Telescope, which reveal immense and mature galaxies prematurely in the young universe, suggesting a cosmic cycle of death and rebirth. I am skeptical of a cosmos limited to a mere 13.8 billion years, and I "nurture" the conviction that the divine inaugurated his creation by the end, orchestrating all existence with a transcendental design from its inception.

As evidence emerges for the existence of supermassive bodies and various types of black holes, demonstrating a universe that exists in a state different from the observable universe, this theory solidifies. While the Big Bang fails to explain these phenomena, it gives way to a new theory. If correct, the presence of dark matter in the observable universe would be a strange element, not belonging to this universe, but present as residue from the predecessor universe, as well as the dark energy itself. The constant mergers and residual phenomena of this dead universe would directly influence the observable universe, providing more objective explanations for the equations of general relativity and inexplicable phenomena of quantum mechanics, considering the existence of a neutrality, which would be the matter sustaining the observable universe in conflict with elements that should not be present in our universe. "Dark energy emerges as one of the most fascinating mysteries of contemporary cosmology, originally introduced to elucidate the remarkable observation that the expansion of the universe is accelerating—a discovery made in 1998 through the study of the brightness of distant supernovas. The pioneering research of Saul Perlmutter, Brian P. Schmidt, and Adam G. Riess, deserving of the Nobel Prize in Physics in 2011, consolidated the acceptance of dark energy as a vital component in the current cosmological description. However, contrasting with this paradigm, the theory of the 'dead universe' offers an alternative explanation for the galaxies" recession that dispenses with the need for continuous expansion, attributed by conventional theory to dark energy. According to the theory of the "dead universe," what is perceived as dark energy could be interpreted as residual traces of a previous cosmos, and dark matter, a relic of that preceding cosmic death. From this perspective, the presumed dark energy does not play a role in the accelerated expansion of the universe; galaxies recede under the residual influence of physical laws from a "dead universe". Thus, the presence of dark energy, instead of indicating accelerated expansion, aligns with possible evidence corroborating the existence of the "dead universe".

Recent theoretical propositions have challenged our understanding of the cosmos and its genesis, among which stands out the hypothesis of the universe as an information processor, conceived by scholars from the prestigious University of Oxford. This approach suggests that the universe operates as a complex system of informational exchange, where each element, from subatomic particles to celestial bodies, actively participates in a dynamic network of data exchange.

In parallel, the theory of the "dead universe" harmoniously resonates with this view, postulating that there are informational interactions between the defunct cosmos and the universe in which we find ourselves. This continuous dialogue between what was and what is presents an alternative paradigm to the traditional Big Bang model, contemplating the possibility that the fabric of spacetime is permeated by a constant flow of information from a preceding cosmological reality.

Furthermore, everyday objects such as chairs and computers are considered participants in this gigantic cosmic processor, integrated into a universal informational matrix. In contrast to more complex models, the theory of the "dead universe" offers an elegant and explanatory simplification of the cosmos, a system that may be, in essence, a vast archive of perpetually interconnected and timeless information.

A nuclear physicist poses an intriguing question: how is it possible that an empty atom forms the ground around us? For a long time, it was not known that the atom was largely empty. It was only through the advancement of science, especially in the study of physics and quantum mechanics, that this discovery was made. Projects like the Large Hadron Collider (LHC) were developed with the aim of exploring these questions and seeking answers. One of these questions led to the discovery of the Higgs particle, fundamental to our understanding of the origin of all things.

The James Webb Space Telescope, now in orbit, is truly a remarkable feat in the quest for knowledge of the cosmos. This epic endeavor not only recalls the adventures seen in space movies but also reflects the hard work and collaboration of over 10,000 people who came together to launch it into space. This mission represents an extraordinary challenge, as the equipment is incredibly sensitive, presenting 344 potential points of failure.

Exploring the "observable universe" is essential for deepening our understanding of the mysteries of the dead universe because, uniquely, this truth will be discovered. The term "visible universe" refers to the part of the cosmos that we can directly observe, whether through terrestrial or space telescopes. This region encompasses everything we can detect through light and other forms of electromagnetic radiation. The visible universe includes stars, galaxies, nebulae, and other celestial bodies that emit light or are illuminated by light sources. However, this observable portion of the cosmos represents only a small fraction of the total universe that is actually dead, as there are vast regions inaccessible to direct observation due to distance, darkness, or other factors.

Several scientists have discussed the idea that the universe arose from nothing, using different definitions of what that means in a physical and philosophical context. Lawrence Krauss is one of the best-known proponents of this idea, which he details in his book "A Universe from Nothing". He explores the notion that the universe could have arisen from a state of potentiality, where "nothing" is not an absolute absence of everything, but a state where the sums of all energies in the universe could result in zero, making the emergence of the universe a physical possibility.

Stephen Hawking also ventured into discussions about the origin of the universe. In his explorations of the complete theory of the universe, he suggested that if we could find a complete theory, it would allow us to participate in the discussion of why the universe exists and potentially know the "mind of God". He previously stated that the existence of a creator was not incompatible with science, although his later positions seemed to contradict this.

In attempting to understand the origin of the universe, scientists like Stephen Hawking and Lawrence Krauss have explored concepts that echo ancient ideas, some of which find parallels in religious texts, such as the notion of creation ex nihilo ("creation out of nothing"), a concept present in various religious traditions, including the Bible. While these scientific perspectives are generally well-received in academic circles due to their empirical and theoretical basis, similar interpretations from theological sources are often viewed with skepticism or disregarded for not following traditional scientific methodology. This contrast in the reception of ideas highlights the complex interplay between faith and science, and the importance of methodology in validating theories within the scientific community. However, the historical recognition that concepts of creation from nothing exist in millennia-old texts opens an interesting dialogue about the evolution of human thought regarding the origins of the cosmos.

Black holes, far from being mere relics of collapsing stars, may represent residual phenomena of a previous cosmic era, possibly acting as sentinels of distant cosmic events not yet fully understood. These enigmatic entities may hold clues to physical processes from a predecessor universe, challenging astronomers to decipher their history and contribution to the framework of the current cosmos. Contemplating the hypothetical origin of a dying universe, extending for trillions of years and whose essence seems to have been transplanted into the present configuration of spacetime, leads us to reconsider the traditional narrative of the Big Bang. The scenario that presents itself suggests that if a major explosion event occurred, its advent may have been much earlier than the chronology proposed by George Lemaître, prompting a reflection on the temporal and structural complexity of the universe in which we reside.

As we delve into the understanding of these celestial mysteries, we are led to speculate on what else may exist beyond the reach of our telescopes and measuring instruments. Black holes emerge as silent guardians of cosmic secrets long buried, patiently awaiting the moment when science will reveal them in their fullness, unraveling the mysteries of cosmic existence and our own origin in our small universe.

From this understanding, we can begin to explore the properties of black holes within the perspective of this theory, as there will be a dating for them as proposed. One of the most intriguing characteristics is the event horizon, which is the boundary beyond which nothing can escape the gravitational pull of the black hole, becoming understandable in the light of this theory. This horizon is a well-defined boundary in space-time, and any object that crosses this limit is destined to fall into the black hole.

Another interesting aspect is the singularity at the center of the black hole, where the density and curvature of space-time become infinite. This singularity is a point where the laws of physics that we currently know cease to apply and is one of the great mysteries of theoretical physics.

Now, considering my theory about black holes as gateways to an alternative reality of a dead universe that existed perhaps trillions of years ago, much larger compared to our known and small cosmos, "empty in darkness, but with dimensions of space-time in different unexplainable laws", we can speculate on how this fits into the overall structure of general relativity. An interesting approach would be to investigate whether black holes can somehow connect different regions of space-time, creating portals to other dimensions of the dead universe.

I conjecture that the universe from which the visible universe emerged that we can observe has nearly infinite dimensions and almost incalculable gravity, which would explain its ability to influence and curve space-time in some known axis in our visible universe.

At the forefront of cosmological research, the study of black holes reveals that we reside in a fraction of a universe of nearly limitless mass, filled with known matter, encompassed by a space of astronomically expanded pre-existing dimensions. The overwhelming gravitational influence, along with cataclysmic

mergers of black holes and events yet to be elucidated, may have propelled active galaxies beyond the confines of a previous cosmos—a dead universe. This process, for reasons still uncertain, seems to have triggered a singularity, a new distinct entity, in which a smaller universe, yet rich in observable phenomena such as life and light, emerged with dark energy and matter and physical laws remaining in effect.

From this new perspective, we can deduce that the legacy of an extinct and obscure universe maintains its influence on the architecture of the cosmos we inhabit. The existence and complexity of black holes, as well as other still unexplained astronomical phenomena, may be indicative of this influential continuity, suggesting that the cosmic past persists in shaping the present reality.

This hypothesis offers a potential interpretation for the presence of dark matter and other entities not fully elucidated by traditional physics. The proposal suggests the existence of an underlying or superimposed structure to the known fabric of our universe, a dimension where light, as we know it, is not present. In the catastrophic scenario of a dying star, either by explosion or the cessation of its nuclear activity, it is proposed that the release of energy is of such magnitude that it could disturb the spatial structure of the known universe. This would result in the manifestation of a void, a gap that would provide a window into an unknown domain, possibly a remnant of a pre-existing universe devoid of luminosity. My analysis suggests that the force to create a fold in space-time, as proposed in this theory, may derive from the essence of the ancestral primordial universe, which, due to its exceptional density and gravity, distorts space-time.

As we contemplate the ultramassive bodies and the nearly inconceivable density of the ancestral universe, it becomes evident that the laws of gravity operating on these scales are not only intense but extraordinarily powerful. These forces not only curve space-time but are capable of bending it to the point of radically transforming the structure and evolution of the cosmos as we know it. Such massive gravitational distortions could theoretically alter the rate of temporal flow, challenging our conventional understanding of causality and continuity in the universe.

The remnants of the dead universe in activity, where we live, communicate with the ancestral dead universe, where there must also exist, in addition to the incomprehensible gravity by physics, an also incalculable concentration of dark matter, which we also attribute to the equation of space-time folding in the observable universe, with the existence of light. A universe that lines another universe, but with powerful gravitational density, and an exorbitant layer of dark matter interacting with a universe where there is light and also with a cosmic fabric less dense than the ancestral universe, causing distortions in space-time in our young universe of about 13.8 billion years.

If we consider the hypothesis of cellular memory, where cells beyond neurons are capable of retaining and transmitting memories and behaviors, we could establish an intriguing parallel with the cosmos. Just as transplanted organs carry echoes of past experiences to new bodies, perhaps our observable universe, in its genesis and evolution, is the manifestation of a "cosmic DNA" inherited from a dead universe. This current universe, filled with stars being born and galaxies in rotation, can be seen as a celestial body also in decline towards the end that, although distinct in form, continues to echo the "habits and tastes"-or the laws and mechanics—of its past existence. The new galaxies would be like acquired behaviors, remnants of a deep universal memory of the dead universe, indelible and perpetuated beyond the death of the ancient universe, supporting the notion that even in the depths of forgetfulness, the essence remains, guiding the rhythm of cosmic creation of new galaxies. The theory of the dead universe postulates that the fabric of the cosmos that surrounds us is intrinsically marked by cosmic memories, recorded in the essence of every existing particle. This ancestral legacy could explain the seemingly bizarre quantum behavior of subatomic particles, which, in the depths of quantum mechanics, reveal interaction patterns that defy our conventional understanding of space and time. It could be conjectured that such particles, now distant from the harmony of a full universe, behave as if displaced, longing for the intrinsic order of a larger and more complete cosmos, of which our observable universe is only a shadow or fragment. Thus, phenomena such as quantum entanglement and superposed probabilities may not only be fundamental characteristics of our universe, but also echoes of a previous cosmic symphony, where the laws of physics operated on a scale of complexity and unity that now seem strange and unattainable.

This conjecture proposes that dark matter, along with other cosmic singularities, may actually be remnants of a still unmapped primordial cosmos, each one a latent evidence of the persistent influence of that original universe on the conditions of our current cosmos. Under the scrutiny of contemporary physics, the cataclysm of a star—whether by its thermal death or by supernova—releases colossal amounts of energy that, hypothetically, have the potential to break the boundaries of observable space-time. This could create conduits to the dimensions of a "dead universe", providing a glimpse of the fundamental structures of the vast cosmos from which our reality emerged.

The James Webb Space Telescope, which has unveiled galaxies with unexpected attributes, the theory of the "dead universe" offers a new interpretation. Instead of a young and incipient universe, the observations can be seen as evidence of an older heritage, a continuity of a previous cosmos. This alternative paradigm suggests that galaxies are not newly formed but may have evolved from an already established cosmic infrastructure, an inheritance from the universe that came before.

The theory of the Dead Universe, and the observations of the James Webb, which revealed ancient galaxies with unexpected characteristics for the Big Bang model, clearly demonstrate the existence of the Dead Universe FACTOR. According to this theory, the concept of a "dead universe" may offer an alternative explanation for the observation of galaxies and cosmic structures that appear mature and exist in advanced states of development. Such formations, which exhibit unexpected complexities for their presumed age according to the standard Big Bang chronology, could be interpreted as remnants of a pre-existing cosmos. The assumption is that the conditions of an ancestral universe influenced the accelerated maturation of such systems, suggesting that the distribution and evolution of these galaxies may not be restricted to the temporal framework imposed by the Big Bang model but possibly extending over a more extensive and intricate period, inherent to the deep past of the universe.

The theory of the "dead universe" seeks to coexist with the fundamental principles of physics. My theory of the Dead Universe proposes that the gravitational attraction of this previous universe, although not directly observable, shapes the fabric of space-time in a manner compatible with the theory of general relativity. The influence of this primordial universe could be investigated as an underlying force that transcends the current understanding of quantum mechanics and gravity, challenging scientists to rethink the interaction between the grand structures of the cosmos and the behavior of subatomic particles.

Based on the theory of the dead universe, I anticipate that future observations may unveil unexpected patterns in the distribution of dark matter and dark energy. These patterns may challenge the explanations offered by the Big Bang model, as my theory suggests an ancestral gravitational influence that still permeates the cosmos. I predict that black holes may be more than just the end of stars; they may act as channels to this primordial universe, revealing properties of space-time that are distinct from what we know.

There is anticipation of the opportunity to observe patterns of galactic motion that defy the established expectations by the Big Bang projections. Such discrepancy may be attributed, according to my theory, to the residual gravitational influence of an ancestral universe, characterized by an almost limitless density that surprisingly may still be impacting the dynamics of our observable universe. Furthermore, interpretations of the redshift in distant galaxies may require revision in light of this concept, suggesting that universal expansion may be a more intricate and heterogeneous phenomenon than a mere isotropic expansion proposed in conventional models. Thus, mathematical models that provide the foundation of the Big Bang theory could be questioned as new evidence and analysis corroborate the nuances presented by this alternative theory.

It is postulated that black hole mergers, along with careful analysis of space-time curvature, may offer fundamental clues. Under the prism of my theory, black holes would not be mere gravitational anomalies but rather luminous indicators that point us towards a deeper understanding of the cosmos. They could represent points of connection with the legacy of a universe that preceded us, an extinct entity whose darkness still permeates and shapes the foundations of our current cosmos.

7. COSMIC DYNAMICS AND GRAVITATIONAL FORCES

The theory of the "Dead Universe" presents itself as an alternative conception and potentially more

congruent with the phenomena described by general relativity and quantum mechanics, compared to the model established by the Big Bang. This theory advances the hypothesis that the extraordinary gravitational forces of a preceding cosmos may have been the shaping agents of space-time in the universe we observe today. This would imply that the formulations of general relativity are not restricted to our visible cosmos but extend to encompass interaction with a previous and more comprehensive domain.

Furthermore, the enigma of dark matter and energy could be elucidated within this theoretical framework as remnants of this "Dead Universe." Such remnants would not merely be floating in the vacuum of space but actively shaping the structure and evolution of the visible cosmos. This could provide a new perspective for observing the accelerated expansion of the universe, or even offer clues to a possible future contraction, as well as explain the gravitational anomalies we have recorded. In summary, the theory of the "Dead Universe" has the potential to redefine our understanding of cosmic fabric and the very essence of gravity and universal dynamics.

In the "Dead Universe" theory, there is no expansion similar to the Big Bang model or inflationary theory. Instead, it proposes that the dead universe is potentially trillions of times larger than our observable universe and has largely decayed. Our universe is just the remnant, perhaps just 0.0001% of the dead universe still alive. The gravitational laws of the fallen part, although not directly observable, influence our universe. These influences are indicated by the presence of supermassive bodies, billhoes times larger than the Sun and other primitive elements, and other anomalies that are currently not fully explained by existing theories.

Thus, there may still be 0.1 billion times the size of what would be our universe, which is still an extremely large amount. This is a simplified way to visualize this issue, assuming that the proportions and the "death" of the universe are uniform throughout its extent.

Dead universe Vs observable universe equation: (Figure 1)

Equation of the influence of the dead universe on the observable universe: (Figure 2)

Provides a quantitative and flexible approach to modeling how these losses occur over time. This equation suggests that the rate of loss is not only proportional to the remaining mass but also modulated by an exponential factor that decreases over time, representing the diminishing influence of a "dead" universe. This modulation is critical to capturing the complexity of cosmological processes affecting our current universe, from expansion to unknown interactions that may have origins in past events. This advanced model allows for the exploration of scenarios where the rate of mass or energy loss is not constant but varies according to the remaining mass/energy and other dynamic factors. By adjusting the parameters k, a, and λ , researchers can simulate different initial conditions and predict how our universe evolves under various cosmological influences. The application of this equation not only refines our theoretical understanding but also provides a valuable tool for validating hypotheses with observational data. This type of modeling is essential for advancing the field of cosmology, offering new perspectives on the evolution of the universe and the role of the dead universe in shaping the cosmic structures we observe today.

The theory of the dead universe also connects to observations from the James Webb Space Telescope, which revealed ancient galaxies with unexpected characteristics for the Big Bang model, suggesting that this model is coming to an end as a reliable cosmological paradigm. In 2022, the telescope enabled the detection of an ultramassive black hole, with 30 billion times the mass of the Sun, being the first to be measured using gravitational lenses. This method observes the attraction of a celestial object by the passage of light, providing strong evidence for the theory that there existed a previous, supermassive universe, whose amount of mass is incomprehensible, perhaps hundreds of billions of times larger than our known universe. The amount of energy, certainly, could be hundreds of billions of times greater than our universe, which is contained within a small black hole in the womb of this immense dead universe.

The formation and nature of black holes remain one of the deepest mysteries within the context of modern cosmology, challenging the explanations provided by the Big Bang paradigm and the theory of relativity. Additionally, the ubiquitous presence of dark matter may be more coherently addressed when considering the theory of the "Dead Universe", which posits a predecessor cosmos as the source of such phenomena.

Let U be the original size of the universe and p the percentage of the universe that still remains. Then, the remaining size of the universe, $U_{\text{remaining}}$, can be calculated as:

$$U_{\text{remaining}} = U \times p$$

where:

- *U* is the original size of the universe.
- *p* is the fraction of the universe remaining after the loss (for example, 0.01 or 1% if 99.99% was lost).

Applying to Your Situation

Original Size of the Universe: Assume that the original universe is 1 trillion times larger than our universe. If we denote the size of our universe as $U_{\rm our}$, then:

U = 1 trillion × U_{our}

Remaining Percentage: If 99.99% of the universe has died, then 0.01% remains. This is expressed as a fraction of 0.0001.

Remaining Size of the Universe: Substituting in the formula: $U_{\text{remaining}} = (1 \text{ trillion} \times U_{\text{our}}) \times 0.0001 = 0.1 \text{ billion} \times U_{\text{our}}$

Mathematical Expression

The final mathematical expression that describes the remaining size of the universe would be: $U_{\text{remaining}} = 0.1 \text{ billion} \times U_{\text{our}}$

This equation is sufficient to calculate how much of the hypothetical universe remains after the loss of 99.99% of its total mass or energy, assuming that the loss is uniformly distributed throughout the universe.

Figure 1. Basic equation to calculate the remaining size of the universe after the loss of 99.99% of its total mass or energy. The formula uses the original size of the universe and the remaining fraction to determine the current size. An application example shows an original universe 1 trillion times larger than ours, with the assumption of 99.99% loss, resulting in a remaining size of 0.1 billion times our universe.

Intriguingly, this theory finds a surprising resonance in ancient narratives, such as the Genesis account, which, interpreted metaphorically, describes a process of formation and transformation of the cosmos. The passage alludes to a "recreation" of the universe, an idea that, over the centuries, has intrigued both theological thinkers and scientists. (Gen 1:1-2)

The image of a universe emerging from disorder and obscurity, as described in sacred texts, can be seen as an allegory for a cosmic event of great magnitude—possibly a singularity or a primordial state that precedes our current understanding of physics. While the Big Bang does not offer an explanation for a preceding existence or for the transition from "nothing" to "something", the idea of a cosmological recreation or rebirth echoes the notion of a universe that is more of a continuum than a singular and absolute origin.

Suppose we want to model the rate of change of the mass or energy of the universe over time, considering that the rate of loss may depend on the amount of remaining mass or energy. We can define M(t) as the mass of the universe at time t, and assume that the rate of mass loss is proportional to the remaining mass but also affected by a factor that decreases over time due to some physical process or expansion.

Equation:

$$\frac{dM}{dt} = -k \cdot M(t)^{\alpha} \cdot e^{-\lambda t}$$

where:

- *M*(*t*) is the mass of the universe at time *t*,
- k is a proportionality constant,
- lpha is an exponent that determines how the rate of mass loss depends on the current mass,
- λ is a constant that modulates the decrease in the influence of the remaining mass on its own rate of loss (for example, due to the expansion of the universe or other cosmological effects),
- $e^{-\lambda t}$ is an exponential factor that diminishes over time, representing the reduction in mass loss capacity as the universe expands or cools.

Solution to the Equation

This is a nonlinear differential equation that can be solved for M(t) given appropriate initial conditions, such as $M(0) = M_0$ (the initial mass of the universe). The exact solution may depend on the value of α and may require numerical methods for cases where analytical solutions are not practical or possible.

Implications of the Model

This model allows for the exploration of scenarios where the rate of mass or energy loss of the universe is not constant but varies according to the remaining mass/energy and other dynamic factors. It can be especially useful for simulating advanced cosmological scenarios where the properties of the universe change in complex ways over time.

Figure 2. Model with an equation to describe the rate of change of the mass or energy of our universe over time, influenced by a previous universe. The equation considers the rate of mass loss as proportional to the remaining mass and modulated by an exponential factor that decreases over time due to the expansion of the universe or other cosmological effects.

Based on the theory of the "Dead Universe", it is proposed that the death of an ancestral cosmos, over trillions of years, was marked by the progressive production of dark matter, culminating in a force that directed newly formed galaxies towards a central nexus, known today as the observable universe. It is postulated that from this epicenter, containing approximately 200 billion galaxies, emerged our current universe.

The recent observations of the James Webb Space Telescope corroborate with this notion, evidencing structures that can be interpreted as the "three pillars of creation" within this context. This theory provides

an explanatory framework for the abundance of dark matter, suggesting that the phenomenon of universal expansion may, in fact, be a manifestation of a preceding matter concentration.

Additionally, it is conceivable that, in the decline of this primordial universe, cataclysmic explosions and hitherto unknown laws acted to coalesce galaxies, stars, and planets towards a singularity, possibly a supermassive black hole. The laws of gravity, within this new context, could be adjusting to the clustering of these massive celestial bodies.

Therefore, our universe may face a fate similar to that of its predecessor, either through continuous expansion or eventual contraction culminating in a new singularity. This process could occur on a time-scale of less than 100 trillion years.

"The idea that the universe expanded without being created may seem contradictory within the perspectives of the Big Bang, making the concept of expansion vague. However, the notion of a universe emerging from another universe that is in the process of dying seems like a more reasonable conclusion. The analogy of a daughter being born from the womb that is in its final days of life illustrates this premise, just as the daughter, in turn, will generate other offspring. The introduction of the concept of a mother universe and a child universe seems plausible and not merely speculative when Weinberg's ideas are carefully analyzed. "In the beginning, the universe was not created—it expanded. The energy of the Big Bang created matter, antimatter, and radiation in equal amounts, and then, as the universe cooled, the antimatter was annihilated in collisions with matter, leaving behind only a small excess of matter to form everything we see today" [6]. - Steven Weinberg, "The First Three Minutes: A Modern View of the Origin of the Universe". The introduction of the concept of the UNO particle in this context elevates the spirit of scientific inquiry beyond merely speculative conceptual frameworks that seek not to provide answers but rather to pose further questions for scientists.

8. THE INTEGRATION OF DARK AND UNOL MATTER

Furthermore, the interaction between general relativity and subatomic particles of quantum mechanics may be influenced by remaining laws of the "Dead Universe". The existence of a form of matter thus far undetected, perhaps "UNO matter", could be responsible for suturing the fabric of our universe in order to maintain the integrity of the laws of physics currently observed.

Recognition must be given to the need to construct a substantial theoretical framework to lend scientific credibility to this hypothesis. Such a structure must rigorously describe the properties and dynamics of interaction of the postulated "UNO matter", elucidating its role in shaping spacetime and the origin of the universe. It is imperative to draw inspiration from advances in particle physics, notably the Standard Model and quantum field theory, which provide a deep understanding of elementary particles and the fundamental forces that orchestrate cosmic interactions. Deepening and expanding these paradigms may shed light on the underlying mechanisms that possibly govern the manifestations of the "Dead Universe", encouraging the scientific community to refine and test this theory with the necessary rigor for possible integration into the canon of contemporary cosmology.

Furthermore, it is clear to me that overcoming the challenges of detecting UNO matter will require significant technological advances. Just as the Large Hadron Collider was crucial in identifying the Higgs boson, we will need new instruments and experimental methods to explore UNO matter. This could mean the construction of even more advanced observatories, the conduct of experiments in high-energy physics not yet conceived, or even the development of revolutionary computational techniques.

9. CONCEPT OF MEMBRANE (BRANE) IN THE DEAD UNIVERSE

In the "Dead Universe" theory, there is no expansion similar to the Big Bang model or inflationary theory. "The basic idea of inflation is simple and seductive: if the universe was once extremely small and extremely hot, then it should have expanded and cooled, resulting in a universe that is incredibly large and very cold. This is the logic that led to the theory of the inflationary universe" [7] (Guth, 1997).

Instead, it proposes that the dead universe is potentially trillions of times larger than our observable

universe and has largely decayed. Our universe is merely the remnant, perhaps only 0.1% of the dead universe still alive. The gravitational laws of the decayed part, though not directly observable, influence our universe. These influences are indicated by the presence of supermassive bodies, billions of times larger than the sun, and other anomalies that are currently not fully explained by existing theories

This theory is distinct from other cosmological models and does not align with the Big Bang, multiverse theories, or cyclic models of creation and rebirth. Instead, it supports the idea of a continuously decaying universe, which generates smaller galaxies as it dies. Unlike the multiverse concept, the "Dead Universe" theory suggests a singular, vast universe where the process of decay leads to the continuous creation of smaller galaxies.

We can also incorporate the concept of a membrane (brane) to further develop this theory. As the dead universe decays, it creates new galaxies as a form of cosmic memory. These galaxies are not random but are influenced by the decaying universe's remaining structures and gravitational forces. This process does not support the creation of multiple universes but rather the continuous formation of galaxies within a singular universe.

"The enthusiasts of multiverses and string theory have filled cinemas with fiction surrounding this imagination. Although gaining support among serious astrophysicists and scientists, it leans more towards fiction than reality, as it leaves vast unexplained gaps compared to the Big Bang theory and other contemporary theories."

"String theory has led to the realization that the universe we observe is only one of an enormous number of possible universes. Each universe comes with its own unique properties, determined by the details of the compactification of extra dimensions and the values of the fundamental constants. This vast landscape of possibilities challenges our traditional notions of uniqueness and fine-tuning" [8] (Susskind, 2005).

All our observable universe may exist within a distinct brane floating in a higher-dimensional space. While this notion may hold some truth, compared to the theory of the dead universe, there's no perspective for infinite universes. However, the idea of a large membrane could be incorporated into the concept of the womb of the dead universe.

This brane represents a segment of the dead universe transitioning into a state of death. Yet, the creative remnants of the dead universe could give rise to the formation of new galaxies within this brane. These galaxies are formed as the leftovers of the dead universe exert their influence, leading to the creation of progressively smaller galaxies. Explosions and other cosmic events within this decaying process contribute to the formation of these new galaxies.

10. POSTULATED STRUCTURE OF THE DEAD UNIVERSE IN A HIGHER DIMENSION

We can postulate that the entirety of our dead universe exists within a brane, which floats in a larger dimensional space. Within this volume, our universe exists as a membrane distinct from other potential universes, entering a state of death. This brane could be influenced by the physical laws and remnants of the dead universe, leading to the continuous creation of galaxies. These galaxies, as part of the cosmic memory of the dead universe, are generated by the interactions and remaining energies of the dead universe's structures.

This model suggests that the gravitational anomalies and the curvature of time and space observed in our universe are the result of the dead universe's physics influencing the observable universe. The dead universe's decaying remnants, particularly supermassive bodies and dark energy, are key elements in shaping the structure and behavior of our observable universe.

11. MATHEMATICAL MODEL EXPLANATION: NATURAL SEPARATION

This mathematical model describes the interaction of uno particles with dark matter and dark energy, focusing on the natural separation caused by the gravitational influence of the dead universe rather than traditional expansion (Figure 3).

1. Density of Uno Particles (q_{uno}):

$$\frac{d\varrho_{\rm uno}}{dt} = \beta \varrho_{\rm dm} - \gamma \varrho_{\rm uno} \varrho_{\rm de}$$

- β : This coefficient represents the interaction rate of uno particles with dark matter, suggesting that uno particles may convert into dark matter.
- γ: This coefficient describes the interaction of uno particles with dark energy, influencing the density of uno particles as dark energy accumulates.
- 2. Density of Dark Matter (ϱ_{dm}):

$$\frac{d\varrho_{\rm dm}}{dt} = \delta \varrho_{\rm uno} - \epsilon \varrho_{\rm dm}$$

- δ : This represents the conversion of uno particles into dark matter, suggesting that dark matter can form from the uno particles left over from the dead universe.
- *E*: Refers to the natural dissipation rate of dark matter, indicating a gradual loss of density over time.
- 3. Density of Dark Energy (Q_{de}):

$$\frac{d\varrho_{\rm de}}{dt} = \eta \varrho_{\rm uno} - \zeta \varrho_{\rm dm}$$

Figure 3. Representation of the temporal rates of change in the densities of uno particles, dark matter, and dark energy. Each equation is accompanied by a description of the coefficients that govern the interactions among these fundamental components of the universe.

 η : Defines the generation of dark energy from uno particles, suggesting that uno particles contribute to the accumulation of dark energy.

 ξ : Describes the interaction of dark matter with dark energy, indicating that dark matter can influence the density of dark energy.

Validation through Observations:

To validate the predictions of this model, we propose the following experiments and observations:

- Monitoring Galactic Rotation Curves: Measure variations in the rotation curves of galaxies in different regions to detect anomalies that may indicate the presence of uno particles influencing dark matter.
- Gravitational Wave Observations: Conduct detailed observations of gravitational waves to identify signatures that could be attributed to the interactions of uno particles with dark matter and dark energy.
- Dark Matter Distribution Studies: Map the distribution of dark matter across the universe and look for patterns that correspond to the model's predictions, such as higher concentrations in areas where uno particles are more abundant.
 - Comparison with Other Theories

Comparison with the Big Bang Theory and Other Cosmological Models

- Origin of the Universe:
- Big Bang Theory: Proposes an initial expansion from a singular point.
- Dead Universe Theory: Suggests that the current universe formed from the remnants of a previous, much larger universe, with uno particles as fundamental components.
- Cosmic Expansion:
- Big Bang Theory: Exponential expansion due to cosmic inflation.
- Dead Universe Theory: Natural separation due to the dispersion and interaction of uno particles with dark matter and dark energy.
- Dark Matter and Dark Energy:
- Big Bang Theory: Explains dark matter and dark energy as unknown components added to the model to explain observations.
- Dead Universe Theory: Proposes that dark matter and dark energy are directly derived from uno particles, providing a unified explanation for their existence and behavior.
- Gravitational Waves:
- Big Bang Theory: Predicts gravitational waves originating from cosmic inflation and astrophysical events like black hole mergers.
- Dead Universe Theory: Suggests that gravitational waves can be generated by the interactions of uno particles with dark matter and dark energy, offering a new potential source for these observations.

Influences from a Previous State of the Universe: Unlike the Big Bang, which treats the universe as having a defined beginning, the Dead Universe theory suggests that our universe was preceded by a "dead universe" billions of years old, whose residual forces still influence current cosmology; Thus, the observable universe is merely a cosmic memory of the dead universe.

Gravitational Waves from a Different Source: It proposes that gravitational waves can also be generated by interactions between unknown particles from the Dead Universe (uno particles) and dark matter/dark energy, which are no longer inexplicable in light of this theory. This adds an additional and potentially detectable source of gravitational waves not predicted by the Big Bang theory.

Expanded Interpretation of Dark Matter and Dark Energy: While the Big Bang explains dark matter and dark energy as components that affect the expansion and gravity of the universe, the Dead Universe theory might suggest that these elements have more complex and dynamic interactions, influenced by laws or conditions from a previous cosmic state.

Potential Implications for the Destiny of the Universe: The Dead Universe theory offers new perspectives on the ultimate fate of the universe, different from those proposed by other theories, influenced not only by expansion but also by natural separation by the laws of physics of the dead universe, by current matter and energy, as well as by residual forces from previous states of the universe (**Figure 4**).

 β : Represents the interaction rate of UNO particles with dark matter, contributing to their natural separation.

 γ : Describes the interaction of UNO particles with dark energy, influencing their density and contributing to the separation of galaxies.

 δ : Indicates the conversion rate of UNO particles into dark matter, affecting galaxy separation.

 ϵ : Represents the dissipation rate of dark matter, influenced by the dead universe's gravitational legacy.

 η : Defines the generation rate of dark energy from UNO particles, influenced by the gravitational remnants.

 ζ : Describes the interaction rate of dark matter with dark energy, contributing to the overall separation process.

The gravitational effects of the dead universe, though not explicitly stated in the equations, are implicitly included in the interaction coefficients. This results in the natural separation of galaxies, as described by the "Dead Universe" theory. The process is gradual and influenced by the interactions of UNO particles, dark matter, and dark energy, leading to a steady dispersion rather than an aggressive expansion.

Therefore, I see the quest for UNO matter not as an escape into the fantasy of metaphysics, which I

1. Density of UNO Particles (q_{uno}):

 $\frac{d\varrho_{\rm uno}}{dt} = \beta \varrho_{\rm dm} - \gamma \varrho_{\rm uno} \varrho_{\rm de}$

2. Density of Dark Matter (q_{dm}):

$$\frac{d\varrho_{\rm dm}}{dt} = \delta \varrho_{\rm uno} - \epsilon \varrho_{\rm dm}$$

3. Density of Dark Energy (Q_{de}):

$$\frac{d\varrho_{\rm de}}{dt} = \eta \varrho_{\rm uno} - \zeta \varrho_{\rm dm}$$

Figure 4. Equations describing the dynamics of density variations for uno particles, dark matter, and dark energy. The coefficients in the equations represent different types of interactions and conversion rates between these entities.

am absolutely against, but as an exciting and legitimate challenge for modern physics. This effort not only compels us to deepen our understanding of the cosmos but also to innovate in the tools and theories that, I hope, will one day unravel the mysterious nature. I am convinced that we are on the eve of a new era of discoveries, where the shadows of the unknown will finally dissipate under the light of knowledge and technological innovation.

The existence of this UNO matter causes particles to behave differently in the face of unknown gravitational fields. The existence of two distinct entities of undetectable dark matter and UNO matter, originating from the twilight of the previous universe, signals a transcendental influence on the dynamics of elementary particles and, by extension, on the phenomena that permeate the very essence of life. The detection and understanding of these elusive forms of matter constitute one of the most pressing puzzles of contemporary physics, evoking a cosmic dance that shapes not only the structure of the observable universe but also the intricate patterns that govern the very fabric of existence.

UNOI matter as an antithesis to dark matter suggests a fundamental duality that echoes the principle of wave-particle duality in quantum mechanics. In this conception, it is possible to interpret the peculiarities observed in the behavior of subatomic particles, such as quantum leaps and the seemingly divisible nature of matter, as reflections of a mirrored reality between UNO matter and dark matter. From this perspective, the continuous interaction between these forms of matter offers an explanation for seemingly paradoxical phenomena, such as the dual behavior of light and the observation of interference in the double-slit experiment.

This approach suggests that the constant exchange of information between UNO matter and dark matter plays a fundamental role in structuring the fabric of the universe and in the manifestation of observed quantum phenomena. Furthermore, it is proposed that the interconnection between these entities transcends the traditional boundaries of classical physics, paving the way for a deeper understanding of the nature of reality and the fundamental laws that govern it.

By considering this perspective, we can envision a new approach to solving persistent mysteries in quantum mechanics and advancing towards a more complete understanding of the nature of the universe and our own existence within it.

These mysterious entities, by their very elusive nature, challenge the boundaries of human knowledge, suggesting the presence of hidden dimensions and fundamental laws that transcend our conventional conceptions. Their intrinsic role in shaping the cosmos and sustaining cosmic order sheds light on an intricate web of interconnections, where each particle, each galaxy, each manifestation of life is woven into a cosmic pattern of complexity and harmony.

As we venture into the abysses of space and time, we contemplate not only the distant past of the universe but also its uncertain future. The duality between expansion and concentration, between stellar birth and death, between light and darkness, confronts us with the cosmic imperative of incessant change and transformation. In this constantly flowing cosmic panorama, we are compelled to question not only our understanding of the universe but also our own existence and place within it.

Thus, the investigation of dark matter and UNO matter transcends the boundaries of conventional science, inviting us to explore the deepest mysteries of the cosmos and contemplate the most intimate mysteries of our own human condition. In our quest for understanding and meaning, we are guided by the promise of unraveling the secrets of the universe and, perhaps ultimately, the secrets of our own souls.

The theory of the dead universe better explains the theory of the "expansion of the universe" in the light of Hubble's laws. We cannot believe in any way in an expansion from the explosion of the Big Bang that at some point is unexplained; it makes no sense, as indeed the universe would decelerate at some point in the billions of years of its existence. In fact, galaxies are moving away from each other in both theories, but not due to the expansion of a previous explosion, since there is not enough energy in the cosmos to cause continuous expansion. The gravity of the previous universe and facts of unknown laws, as I explained in the question of the gem, are attracting the observable universe back into itself; this strong attraction explains many phenomena that were previously complex for quantum physics to explain. This theory will certainly be elucidated soon in light of scientific evidence, as research focuses mainly on the study of black holes. When astrophysics discovers all the potential behind this divine architecture, we will certainly have a precise answer to the theory I am proposing in this treatise. Perhaps, on the other hand, when a star implodes and forms a black hole, this is also explained by the perspective of the gravity of this predecessor universe that exerts a strong influence on the formation of this strange phenomenon, which we can imagine as open cracks to the dead womb of the universe.

12. OBSERVATIONAL EVIDENCE FROM THE JAMES WEBB SPACE TELESCOPE

Traditionally, the Big Bang theory has been the backbone of cosmology, providing us with a model of a universe born from a singularity, expanding for approximately 13.5 billion years. However, in light of new evidence, it becomes increasingly clear that this narrative faces significant challenges, making room for a new perspective: the theory of the "dead universe" that I propose.

The Dead Universe theory suggests a radically different approach. Instead of conceiving the universe as the result of an explosion, it proposes that the universe is a vast and possibly eternal continuum, where concepts of beginning and end are relativized. This is not just a vague hypothesis; the discoveries of the James Webb offer concrete evidence that challenges the fundamental premise of the Big Bang. Ancient galaxies that should display signs of interactions and mergers, as predicted by the standard model, remain surprisingly intact, suggesting a much more complex and less linear cosmic history.

The observation of astronomical objects that appear to be older than the age of the universe defined by the Big Bang model represents a significant challenge for contemporary cosmology. How can the existence of these mature structures be reconciled with a universe that, according to current estimates, is approximately 13.5 billion years old? The hypothesis of the "Dead Universe" seeks to address this contradiction by proposing that such galaxies are not mere discrepancies, but rather clues to an ancestral universe, whose timeline extends beyond the temporal scale demarcated by the event of the Big Bang. This theory suggests that conventional cosmological timelines may need to be revised in light of new evidence, possibly expanding our understanding of the history and evolution of the cosmos.

Furthermore, the supposed uniform expansion of the universe, a cornerstone of the Big Bang model,

is called into question by recent observations. Distant and ancient galaxies do not behave in a way that would corroborate constant and accelerated expansion. This raises a fundamental question: what if the universe is not expanding uniformly, or even if it is not expanding at all? My theory suggests that the cosmos may be in a more complex and static or inverse state than previously imagined, a state where time and space are not absolute, but relative and interconnected in a way that we are still beginning to understand.

This is not just a challenge to the dominant narrative; it is an invitation to radically rethink our understanding of the cosmos. The theory of the "dead universe" offers a path to explore these questions, proposing a "timeless" universe or one that generates its own strange body, light, as its primordial nature was not light but rather the darkness of dark matter and supermassive bodies, where beginning and end are human concepts, not universal realities.

In the perspective of the dead universe, the fusion of black holes and the consequent creation of stars may be considered incomprehensible events for beings inhabiting this universe. Imagine a civilization evolving amidst eternal darkness, where light is an abstract, almost mythological notion. For them, the sudden emergence of bright spots in the sky would be beyond comprehension, an anomaly in a predominantly dark environment. Perhaps the equation of UNO matter also resembles a window tint or solar control film, so that when we are inside we perceive the existence of light, but if we look from outside in we perceive no light at all and everything appears to us as lightless and in darkness. Therefore, a universe immersed in death within a dark fabric may present a reality of splendid light that we cannot see because of the presence of a matter that I describe as neutral.

The theory of the Dead Universe proposes a new interpretation of the observational boundaries of the universe through an analogy with window tint. We argue that dark matter and other cosmic anomalies may be analogous to layers that, although transparent from within, are opaque when viewed from outside. We explore how this metaphor can be applied to the study of astrophysics and offer insights into the properties and behavior of dark matter. Just as an internal observer perceives light through a layer of window tint, while from the exterior transparency is obscured, our visibility of the cosmos may be limited by material layers that are not immediately apparent to our conventional detection methods.

The theory of the "dead universe" proposes that we live in a remnant of a previous cosmic reality, where dark matter acts as a "cosmic window tint" that distorts our perception of the universe. This matter not only influences the trajectory and speed of galaxies but may also be the reason why we observe the universe in such a dark and enigmatic manner. Gravitational waves and other observations can be seen as the light that permeates this dark layer, offering glimpses of the underlying structure of the universe. Our understanding of the expansion of the universe and the distribution of dark matter may be enriched by considering the idea that, just as light passing through window tint, there is inherent luminosity and active phenomena beyond our current vision awaiting discovery. Therefore, future research should focus on penetrating this layer of "cosmic window tint," revealing the true extent and nature of the universe in which we reside.

Cosmological theories that propose various forms of "barriers" or transition zones in the universe. For example, the event horizon of a black hole acts as a point of no return where gravitational attraction is so strong that not even light can escape, making it invisible from the outside. This is somewhat like looking at a dark window from the outside; you cannot see through, suggesting an absence of light or activity when, in reality, there is hidden wealth.

Extending this to your notion, if there were a "UNO matter" that acted as this kind of cosmic hue, it could be something that exists within the structure of the universe - a hypothetical substance or field that interacts with light and other forms of energy in a way that masks the activity or underlying structure of the cosmos when seen from a certain perspective. Such material could theoretically be responsible for the phenomena we observe, like the effects attributed to dark matter, which influences the movement of galaxies and yet emits no detectable light or radiation, remaining "UNOI" or "invisible" to our current methods of observation.

The notion of a "domain wall" in cosmology is a hypothetical structure that could act as a boundary between different phases or types of vacuum states in the universe, similar to the interface between two

bubbles. It's a speculative concept, but one that could potentially explain cosmic separation or transition areas, much like your concept of "UNO matter" film. Note that while analogies can be useful for illustrating concepts, in scientific publications, they are typically used sparingly and always anchored in rigorous argumentation and empirical evidence.

Furthermore, the very nonexistence of light as a primordial element may challenge the fundamental laws of this dead universe. While they inhabit a domain where darkness reigns supreme, the presence of light could be seen as an intrusion or even as a metaphysical impossibility.

These reflections lead us to question whether we can truly comprehend the totality of the universe from our limited perspective as observers of the cosmos. What we consider as universal truths may be just a small fraction of cosmic reality, and the dead universe may represent a spectrum of existence that escapes our full understanding.

Perhaps the very nature of light is indeed opposed to the essence of the dead universe. The mergers of supermassive bodies and black holes, which were the original nature of this universe, gave birth to light, an object strange to its reality. This universe will persist forever, immersed in its own eternal darkness, while light shines in contradiction. However, this does not mean that our observable universe is the essence of this dead universe. The mergers and anomalous behaviors of particles altered the original order of this universe, giving rise to strange bodies, such as the galaxies we observe. In this sense, we are mere intruders of chance in this reality, unless there exists a creator entity for the dead universe.

Light is something strange to the reality of the dead universe, if we may say so, as it will always exist with its nature and its own laws, and it is calling this strange universe that has light as a primordial factor to its nature and essence. In this sense, it is not up for discussion the existence of humanity and life as we know it. "No one can deny that the universe is more for darkness, chaos, and obscure mystery than for a reality of light," as the wise Solomon expressed. "The Lord said he would dwell in darkness." - 1 Kings 8:12. "A black hole is a place where God divided by zero." - Steven Wright [9] (Thorne, 1994).

It's an exciting moment to question, explore, and perhaps discover the true nature of the cosmos. Our time will always be the present because we are within the eternal time of the dead universe.

"A single understanding that unifies the quantum and classical worlds would sweep through cosmology like a wind, stirring up all the old questions and many new ones, answering some but leaving most unanswered." - Lee Smolin, "The Life of the Cosmos" [10].

Physics deals with the enigma of dark matter. It is conjectured that such matter may consist of compact and supermassive objects, such as primordial black holes, or perhaps of hypothetical and indescribable particles, known as sterile neutrinos. However, the very concept believed to elucidate dark matter finds a stronger resonance within the scope of the "Theory of the Dead Universe" than within the confines of the Big Bang paradigm. The existence of a past and extinct universe, devoid of all luminance, supports the belief that this process generated energy, similar to the unexplained cosmic enigma of dark energy. According to this theory, dark energy is not the agent of universal expansion, but rather the residual laws of the preceding universe still in effect.

If we assume that the predecessor universe contributes an additional gravitational effect that alters the apparent rate of expansion, I can add a term to Hubble's Law to represent this. Consider the following hypothetical equation, which includes such a term:

$$V = H_0 \times d + FDU(d)$$

where:

- *v* is the recessive velocity of galaxies,
- H_0 is the Hubble constant,
- *d* is the distance to galaxies,
- FDU(*d*) is a function I define to model the influence of the dead universe on the recessive velocity, which may depend on distance. I define the function FDU(*d*) as follows.

 $FDU(d) = a \times (MDU/d^2) + \beta \times SDU$

In this case:

- a and β are constants to be determined empirically,
- MDU represents the combined mass or gravitational influence of the dead universe,
- $1/d^2$ represents the inverse of the square of the gravitational law, assuming that the influence decreases with the square of the distance,
- **SDU** represents the structural or quantum effects of the dead universe that may affect expansion. In the proposed equation, the term $a \times (MDU/d^2)$ could represent a gravitational effect of the universe predecessor, while $\beta \times SDU$ could represent additional unknown structural or quantum effects. To test this modified law that I am proposing, I will need to:
- Determine appropriate values for α , β , MDU, and SDU based on observational data.
- Make predictions about the recessive velocities of galaxies at various distances that can be verified against astronomical observations.
- Adjust the values of α , β , MDU, and SDU to better fit the observations if necessary.

The Theory of the Dead Universe takes into account dark matter, radio waves, and particle behavior. My conviction that our universe is descended from its predecessor is supported by the biblical account of Genesis 1:1-2. However, a creative agency does not nullify the Theory of the Dead Universe for purely scientific purposes. Science does not strive to substantiate the existence of the Divine; it only seeks to investigate natural phenomena and elucidate them through the lens of empiricism. Likewise, it does not exist to deny the Divine. So let us set aside what escapes explanation and channel our energies into what can be explained – into the Theory of the Dead Universe.

"Imagine a universe in which any one of these numbers was different. It would be a universe without atoms, stars, or planets; a universe without people, or any other form of life as we know it. It would be a universe without history. Yet such a universe would be entirely consistent with the laws of physics as we understand them. Why then do we find ourselves in a universe that is just right for us?" - Martin Rees, "Just Six Numbers: The Deep Forces That Shape the Universe" [11].

13. AN EXPLANATION FOR THE "COLD SPOT" IN THE UNIVERSE

The "Cold Spot" is a vast area in the sky, noticeably colder than the surrounding regions in the cosmic microwave background (CMB) radiation. It was discovered through observations made by the WMAP (Wilkinson Microwave Anisotropy Probe) satellite in 2004 and later confirmed by data from the ESA's Planck mission. This spot is about 70 microkelvins colder than the average CMB, which challenges the standard explanation based on the homogeneity of the universe predicted by the Big Bang theory.

This perspective implies that abnormalities like the Cold Spot are not just statistical fluctuations or effects of unknown cosmic superstructures, but rather direct manifestations of the extreme conditions and laws of the prior universe. Gravitational influences or other residual forces from this dead universe may be causing the temperature variations observed in the cosmic background radiation. Temperature is a condition inherent to the dead universe and not the observable universe due to its state of cosmic demise. The notion that multiverses are colliding with this universe seems improbable over a history of billions of years; certainly, various other cold spots would have been encountered, yet they do not exist because this cold spot was the link between this universe and the mother universe over trillions of years of its existence.

14. LIMITATIONS OF THE BIG BANG THEORY

The Big Bang theory, while successful in explaining most of the observed features of the universe, such as cosmic expansion and the abundance of light elements, struggles to fully explain anisotropies like the Cold Spot. According to the standard model, temperature fluctuations in the CMB should be relatively uniform across large scales due to cosmic inflation. The Cold Spot, due to its scale and depth, does not easily fit into this model without requiring more complex explanations, such as rare statistical fluctuations or huge, undetected cosmic superstructures.

15. CONTRADICTION WITH COSMIC RADIATION THEORY

While cosmic background radiation generally supports a uniform and homogeneous universe as predicted by inflation, the Cold Spot suggests anisotropies that may require new physics or adjustments to current cosmogonic models. In this context, the Big Bang theory does not provide a direct explanation for this anomaly, raising questions about possible revisions or extensions to the model.

16. PROPOSED SOLUTION BY THE DEAD UNIVERSE THEORY

The Dead Universe theory offers an alternative explanation for the Cold Spot, suggesting that it represents an "umbilical cord" from a previously collapsed universe. This theory proposes that our observable universe is just a remnant of a much larger and older universe—the dead universe. Gravitational laws and influences from this previous universe, now only partially existing, may be responsible for irregularities like the Cold Spot. This approach not only offers an explanation for the anomaly but also expands cosmological understanding by incorporating the idea of a multiverse or cosmic cycles of death and rebirth.

The Dead Universe theory provides an intriguing insight into the origin of anomalies like the Cold Spot in the cosmic microwave background radiation. This theory suggests that the Cold Spot is not a mere random fluctuation, but a direct consequence of the thermal state of a now-extinct precursor universe. Imagine a gigantic, aging universe, progressively cooling until it becomes a vast space of low thermal energy—akin to a cold chamber in the cosmos.

This analogy can be likened to opening a small door between an extremely cold environment, such as a freezer, and a warmer area, like a kitchen. The instant thermal exchange that occurs is similar to the effect the dead universe could have on the space around it, especially at points where the interaction is most intense. This thermal interaction results in a noticeably colder area in the context of the observable universe, which we detect as the Cold Spot.

This equation seeks to quantify the direct influence of the extreme cold of the dead universe on the observable universe, in a manner similar to how cold air from a freezer mixes with the warmer air of a kitchen. The use of this analogy and the corresponding equation provides a vivid and scientifically plausible way to explain how an ancient and cold universe can impact the temperature of the cosmos we observe today. Validation of this theory will require detailed observations and rigorous analysis of the anisotropies in the cosmic microwave background radiation, looking for specific patterns that would corroborate this thermal interaction on a cosmic scale (Figure 5).

17. DISCUSSION

The theory of immense gravitational magnitude of the predecessor universe may naturally warp space-time, a phenomenon known in astrophysics as a "gravitational well", responsible, for example, for bending light. The idea that the observable universe is within the womb of a dead mother universe that died trillions of years ago, the same fate as our universe, which emerged from the womb of the previous mother, may explain what astrophysics has not been able to. The gravitational force of the ancient universe may bend the fabric of the universe in such a way that it creates a "slippery" advancing through space without actually moving. The Big Bang theory, while accepted to explain the origin of the Universe, has gaps, such as the lack of explanation for continuous expansion. Studies involving particle accelerators, which evidence phenomena similar to micro-explosions, can be interpreted as support for this alternative hypothesis. If the observable universe emerged from a "dead universe", such an event could be interpreted as an expansion driven by the lingering action of the gravity of a previous universe, a concept that could be inferred from the presence and behavior of black holes, which offer indirect evidence of this process. The continuity of gravitational laws, which seem to govern without alteration since the primordial state, may be a testament to the deep connection between the current universe and its possible origin in a previous and broader context.

Proposed Equation

The thermal influence of the dead universe can be modeled by an equation that accounts for heat transfer by radiation, given the enormous scale of distances involved:

$$\Delta T = -\frac{\sigma \cdot A \cdot (T_d^4 - T_u^4)}{d}$$

where:

- ΔT is the observed temperature variation in the CMB,
- σ is the Stefan-Boltzmann constant,
- A is the area of interaction between the dead universe and the observable universe,
- T_d is the average temperature of the dead universe,
- T_u is the average temperature of the observable universe,
- *d* is the distance between the interaction regions.

This equation attempts to quantify the direct impact of the cold from a formerly energetic universe, now extinct, on the observed temperature fluctuations within our cosmic microwave background. The incorporation of radiation heat transfer principles provides a scientifically grounded method to explore how remnants of a prior cosmic era might still be influencing our current universe's thermal dynamics.

Figure 5. This equation proposes modeling the thermal influence of the dead universe on the observable universe, considering heat transfer by radiation. ΔT represents the observed temperature variation in the cosmic microwave background (CMB), σ is the Stefan-Boltzmann constant, A defines the area of interaction between the dead and observable universes, T_d is the average temperature of the dead universe, T_u is the average temperature of the distance between the interaction regions. This approach seeks to explain temperature fluctuations in the CMB through a thermal analysis based on the temperature differences between a dead universe and the current one.

A pertinent issue in contesting the Big Bang model lies in the observation that expansions resulting from explosive events generally introduce a level of randomness in the movement of the involved particles. However, the expansion observed in the universe suggests a more orderly and systematic progression, possibly guided by principles not yet fully elucidated by contemporary physics. Regarding the characterization of the "Explosion" associated with the Big Bang itself, the term may be deemed inappropriate if interpreted in the light of conventional explosions. If such an event does not fit within the traditional parameters of an explosion, then what would be the physical mechanisms sustaining such a model? The proposition of the Big Bang, which posits the expansion of the spacetime fabric itself, demands a source of energy capable of enabling such a phenomenon.

Furthermore, the process described by the Big Bang does not correspond to an explosion within a pre-existing space but rather to the expansion of the spacetime structure itself. In this context, the hypo-

thesis of the "Great Dead Universe" offers an alternative explanation that could provide a detailed description of cosmic expansion, filling gaps left by the Big Bang model, which sometimes seems to oscillate in its explanations about the exact nature of the initial event.

Additionally, the regularity and organized structure observed in the cosmos may seem antithetical to a chaotic and random origin suggested by a conventional explosion. Scientific studies, including those based on principles of quantum physics, have indicated that the nature of the universe may incorporate explosive aspects. Consequently, if the observable universe is influenced by a previous cosmic legacy, then the initial conditions and physical laws of this preceding universe could be the regulating keys of the expansion we witness today.

"The theory of everything is an ambitious quest in theoretical physics to unify all four fundamental forces of the universe: gravity, electromagnetism, weak nuclear force, and strong nuclear force." - Sean Carroll, "From Eternity to Here: The Quest for the Ultimate Theory of Time" [12].

18. CONCLUSION

"Every atom in your body came from a star that exploded. And, the atoms in your left hand probably came from a different star than your right hand. It really is the most poetic thing I know about physics: You are all stardust." - Lawrence M. Krauss, "A Universe from Nothing: Why There Is Something Rather than Nothing" [13].

The theory of the "dead universe" not only challenges the foundations of the Big Bang but also offers more cohesive explanations for the existence of celestial phenomena. By proposing a new model for the origin of the universe, this theory paves the way for a deeper and possibly more accurate understanding of the cosmos, transcending the limitations of current science.

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