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Short Communication

The Dark Matter Illusion

Rowland D*

Independent Researcher registered with ORCID, Canada.

Corresponding Author: David Rowland, Independent Researcher registered with ORCID, Canada.
E-mail: david222@hush.com

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Abstract

Dark matter is hypothetical matter that supposedly suffuses the entire universe, filling the dark spaces between stars and galaxies. It is inferred to exist only because of a falsely presumed gravitational pull it appears to have on visible matter. Dark matter has none of the properties of visible matter nor any properties whatsoever, for the simple reason that dark matter does not exist. Because of a fundamental cosmological error regarding the nature of redshift, the universe has falsely been presumed to be expanding at a predictable rate. When evidence suggested that this rate of expansion may be slowing down, it was hypothesized that there must be mysterious, invisible, undetectable dark matter imposing a gravitational effect in opposition to the universe's supposed rate of expansion. When the redshift error is corrected, however, we are left with the inescapable conclusion that the universe is not expanding and that there is no mysterious force playing tug-of-war with its rate of non-expansion. Dark matter is a mythical diversion from the true nature of the universe.

Keywords

Dark Matter; Dark Energy; Big Bang; Gravitation; Universe; Astrophysics; Cosmology; Redshift; Expansion Theory

Introduction

Dark matter is hypothetical matter that allegedly suffuses the entire universe and fills the dark spaces between stars and galaxies. Dark matter is inferred to exist only because of a presumed gravitational pull it appears to have on visible matter rather than from any intrinsic luminosity [1].

Knowledge has a hierarchical structure. Advanced concepts are developed from and built upon earlier foundational concepts. If the assumptions underlying the initial concepts turn out to be faulty, then the entire structure collapses. This is exactly what has happened to mainstream astrophysics.

In 1915, Vesto Slipher misunderstood the nature of redshift and falsely believed that he was observing galaxies moving apart from each other. In 1927 and based on the Slipher misinterpretation of redshift, Georges LeMaître published his hypothesis of the primeval atom (aka big bang theory) in which he believed the universe had been created by a central colossal explosion. In 1929 and based on the erroneous big bang theory, Edwin Hubble compounded the Slipher error by imagining that galaxies are retreating from each other at an accelerating rate and contrived mathematics to justify his foregone conclusion that the universe is expanding.

For decades, astrophysicists have been using Slipher's false interpretation of redshift to measure the universe's alleged rate of expansion. At some point their false calculations revealed that the universe is not expanding as fast as expected and so they imagined there must be an unknown gravitational force (*dark matter*) opposing said presumed expansion [21].

The fundamental redshift mistake is the false foundation upon which big bang theory, expansion theory, and dark matter theory are based. The entire structure has come crumbling down.

The Fatal Redshift Error

In 1915, astronomer Vesto Slipher observed that light from some spiral nebulae is redshifted and falsely presumed he was witnessing a light source rapidly moving away from the observer and somehow stretching the wavelength of light it emits [22]. Slipher did not understand how light attenuates and mistakenly believed he was witnessing a Doppler effect [23]. This is the fundamental error that permeates all of mainstream astrophysics.

Redshift and Doppler are two fundamentally different phenomena. Redshift applies to light. Doppler applies to sound. In redshift there is an actual increase in wavelength. In Doppler there is only the illusion of a change in wavelength. To presume that they are the same Doppler-redshift is rather like referring to a line in geometry as a straight-curve [23].

Light waves are transverse (i.e., oscillate perpendicular to their path) and do not require any medium through which to travel. Sound waves are longitudinal (i.e., vibrate parallel to their path) and can only propagate by compression and rarefaction of the medium through which they travel (e.g., air, water, solids) [23].

Doppler is distortion. If a source of a sound is moving toward you, identical length waves hit your ear more frequently, distorting the perceived sound to a higher frequency. As a sound source moves away from you, identical length waves hit your ear less frequently, distorting the perceived sound to a lower frequency. This is the Doppler effect.

Redshift is attenuation – meaning that the further that light travels over extreme distances, the greater degree to which its frequency slowly diminishes as its wavelength correspondingly increases. We observe this attenuation as a *redshift*, i.e., the tendency of visible light to drop toward the red end of the spectrum [11].

Redshift is a function of distance from stationary light sources. Galaxies are not moving away from each other. They are in the same positions relative to each other that they have always been in. The alleged "big bang" never happened, and Hubble's law is a fatally flawed theory [12].

The universe is not expanding. There is no gravitational force opposing any falsely presumed rate of expansion. Dark matter is thus a fictional diversion that obscures cosmology rather than explains it [19].

The Big Bang Never Happened

In 1927, Georges LeMaître published "A Homogeneous Universe of constant mass and growing radius accounting for the radial velocity of extragalactic nebulae" [24]. LeMaître initially called his theory the *hypothesis of the primeval atom* and described it as the "cosmic Egg exploding at the moment of creation." The mathematics used to justify this wildly speculative hypothesis were based on the false assumption that redshift measures velocity of source away from the observer. In addition to being an astronomer, LeMaître was also a Catholic priest who felt comfortable with the notion that God had created the atom/egg that subsequently blew up to create the universe. Thus, what later became known as *big bang* theory had its origin in metaphysics.

LeMaître calculated what he believed to be radial velocities of nebulae. He did so by taking presumed velocities he claimed to have measured between Earth and each nebula in question, then applying trigonometry to estimate what the velocity would be on a vector from the Earth's presumed origin without having the foggiest idea where or even if said origin could possibly be located. LeMaître started with the a priori assumption that the universe was created by a singularity that happened at some point in time and at some place in space, then developed calculations to justify his foregone conclusion [25].

Proposing a big bang or other singularity as cause does not answer the question as to how the universe was created. It simply raises another question as to how the singularity was created [12].

According to big bang theory, the entire universe began from some tiny point violently exploding out pure energy that almost instantly became particles that eventually combined to form elements, molecules, gases, stars, and galaxies. In other words, the universe spontaneously created itself from nothing, a whimsical idea that defies physics. Nothing cannot be the cause of something. Aristotle expressed it this way, *"The notion that there could be nothing that preceded something offends reason itself"* [12].

The universe is defined as everything that exists. Big bang theory falsely claims that the something which created the universe pre-existed existence – a contradiction in terms [12].

Space is defined as the expanse of the universe beyond Earth's atmosphere. Space is in the universe; the universe is not in space. Big bang theory falsely claims that the something which created the universe was located somewhere before the concept of location (i.e., in space) existed – a second contradiction in terms [12].

Time is defined as the continuous duration of existence as seen as a series of events. Without existence and events, the concept of time has no meaning. Time is in the universe; the universe is not in time. Big bang theory falsely claims that there was a point in time at which time began – a third contradiction in terms [12].

The Universe is Not Expanding

In 1929, Edwin Hubble presented data from which he formulated Hubble's law, which theory is considered the ultimate observational base for expanding universe theory. Hubble selected five sets of nebulae data that demonstrated a perfect straight-line relationship between distance and falsely presumed velocity of light source [26].

Hubble repeated the LeMaître error of taking a presumed velocity of each nebula he claimed to have measured between it and Earth, then applying trigonometry to estimate what the velocity would be on a vector from the Earth's presumed origin without having the foggiest idea where or even if said origin could possibly be located. Hubble started with the a priori assumption that the universe was created by a colossal explosion that happened at some point in time and at some place in space, then developed calculations to justify his foregone conclusion that the universe is expanding [25].

Hubble based his theory on the classic Slipher error of mistaking redshift for a Doppler effect. The velocities he used in his calculations are fictitious numbers. Redshift data can tell us only how far away light sources are. It is a false presumption that said light sources could be in motion.

Hubble used contrived estimates of distance to develop his straight-line relationship between distance and presumed velocity. He imagined Virgo to be 3.4 time closer and the other star clusters to be from 12 to 68 times farther away than NASA's measurements indicate. If he had used realistic estimates of distance, there would be only random points on his distance-velocity graph thus indicating a zero correlation between the two supposed variables [20].

Hubble's false law is based on fictitious velocities and falsified distances. Thus, expanding universe theory is entirely without foundation.

In 2014, Eric Lerner and a team of astrophysicists measured

the surface brightness (per unit area) of 1,000 near and far galaxies. If galaxies had been moving away from Earth, they would have appeared fainter the farther away they are, i.e., their surface brightness would have been diminishing. Lerner's team found that in every case surface brightness is constant regardless of distance. If any far distant galaxy had been moving away from us, its surface brightness would have been much less than that of nearby galaxies, a phenomenon that has never been observed [13]. This surface brightness test tells us that galaxies are in the same position relative to each other that they have always been in. This is overwhelming evidence that the universe is not expanding.

Falsely Presumed Dark Matter

Originally known as the missing mass, dark matter's supposed existence was first inferred by Fritz Zwicky, who in 1933 discovered that the mass of all the stars in the Coma cluster of galaxies provided only about one percent of the mass ostensibly needed to keep the galaxies from escaping the cluster's presumed gravitational pull [2].

In 1970, astronomers Vera Rubin and W. Kent Ford supposedly confirmed dark matter's existence by the observation of a similar phenomenon: the mass of the stars visible within a typical galaxy is only about 10 percent of that presumed to keep those stars orbiting the galaxy's center [3].

Measurements of its apparent gravitational effects on galaxies suggest that dark matter accounts for approximately 85% of the matter in the universe and about a quarter of its total energy density. Its presence is implied by supposed gravitational effects that cannot be explained by accepted theories of gravity unless more matter is present than can be seen. For this reason, dark matter is presumed to be abundant in the universe, having had a strong influence on its structure and supposed evolution [4-8].

Dark matter is called dark because it does not interact with observable electromagnetic radiation, such as light, and is undetectable by astronomical instruments. Primary evidence for dark matter supposedly comes from calculations suggesting that many galaxies would fly apart or not have formed if they did not contain a large amount of unseen matter. The total mass–energy of the universe is falsely believed to contain 5% ordinary matter and energy, 27% dark matter and 68% of an unknown form of energy known as dark energy. Thus, dark matter is presumed to constitute 85% of total mass, while dark energy plus dark matter constitute 95% of total mass–energy content of the universe [9].

Dark matter is believed to be caused by some new kind of as-yet undiscovered subatomic particle. Experiments to detect and study dark matter particles are ongoing but none have succeeded [5].

Dark matter cannot be seen by telescopes nor detected by any other means. Light passes right through dark matter, which neither emits nor absorbs light nor any other electromagnetic energy. Dark matter does not interact with normal matter and does not participate in nuclear fusion. Dark matter does not have any properties of matter. Dark matter does not have any properties at all, because dark matter does not exist [19].

In 2017, a sensitive detector (XENON1T) finished a 34-day run inside an Italian mountain. This unit is 33 feet wide and includes a central tank that stores over three tons of ultrapure xenon, which should have reacted with dark matter to produce dim flashes of light. Even though XENON1T is the most sensitive detector of its type, it did not see any dark matter reactions [10].

Dark matter was hypothesized to explain a presumed gravitational effect on galaxies that is supposedly keeping the universe from expanding too quickly. However, the universe is not expanding [11]. There is no gravitational force controlling this non-expansion and no reason to postulate dark matter [19].

Erroneous Dark Energy

Cosmological errors are hierarchical. First level in this scenario is the fundamental redshift error. Second level is the impossible big bang theory based on redshift misinterpretation. Third level is expansion theory based on big bang theory. Fourth level is mythical dark matter postulated to explain why the universe's rate of expansion appeared to be slowing down. Fifth level is erroneous dark energy postulated to explain why recalculations seemed to indicate that expansion may be speeding up [14-18].

Both dark matter and dark energy are examples of misinterpreting evidence to support the theory rather than changing the theory to explain the evidence. For many decades, astronomers could have asked themselves these two questions: (1) Does non-material dark matter make any sense? (2) What assumptions are we making that led us to postulate a mysterious substance that has no properties? Perspicacious answers to these questions would have revealed astrophysics' biggest blunder of the century, that of mistaking redshift attenuation for a Doppler effect [11].

In 1998, dark energy was allegedly "discovered". Thus, for the last two decades astronomers could have asked themselves these two questions: (1) Does it make any sense to postulate unknowable dark energy as a force in opposition to unknowable dark matter? (2) What assumptions are we making that led us to postulate a mysterious substance and a mysterious form of energy, for neither of which is there any physical evidence for their existence? Again, discerning answers to these questions would have revealed astrophysics' classic blunder of all time, that of mistaking redshift attenuation for a Doppler effect [11].

Conclusions

Because of a fundamental cosmological error regarding the nature of redshift, the universe has falsely been presumed to be expanding at a predictable rate. When evidence suggested that this rate of expansion may be slowing down, it was hypothesized that there must be mysterious, invisible, undetectable *dark matter* imposing a gravitational effect in opposition to the universe's supposed rate of expansion. When the redshift error is corrected, however, we are left with the inescapable conclusion that the universe is not expanding

and that there is no mysterious force playing tug-of-war with its rate of non-expansion. Dark matter is a mythical diversion from the true nature of the universe.

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