Scientific And Quranic Explanation Of The Collapse Of The Universe

Dr. HM Azhar Usama¹, Hafiz Muhammad Hamid², Msroor Ahmad³, Muhammad Khalid⁴, Dr.Shafaqat Ali⁵

¹Assistant Professor, Department of Islamic Studies, the University of Lahore, Lahore, Pakistan <u>muhammad.azhar@ais.uol.edu.pk</u>, (Corresponding Author)

²PhD Scholar, Department of Islamic Studies, Lahor Garrison University Lahore, Punjab, Pakistan

³PhD Scholar, Department of Islamic Studies, the University of Lahore, Lahore, Punjab, Pakistan

⁴PhD Scholar, Department of Arabic GCUF Faisalabad, Punjab, Pakistan

⁵Assistant Professor, Department of Islamic Studies, the University of Lahore, Lahore, Pakistan

Abstract

This article is a research and analytical review of the scientific and Qur'anic interpretation of the universe being wrapped up, but it presents a vast collection, and there is a large collection of discussions on various aspects arising from it. The science of astrophysics clarifies the matters related to the Day of Resurrection exactly as they have been described in the Holy Qur'an. The Holy Qur'an also confirms black holes or invisible collapsed stars as invisible passages. The picture of the universe created by modern science is a very solid and organized universe. It was first hypothesized that it is a kind of mechanical system that operates on its own due to causes, but a deeper study proved this hypothesis baseless. It turns out that the system of the universe is solid as well as completely non-mechanistic. He calls for a motivator and organizer every time. Similarly, with the increase of information, it was assumed that men own knowledge would be sufficient to know all the facts; there would be no need to resort to revelation. The main points of this research are that the readers will get familiarity with the scientific and Quranic interpretation of the wrapping of the universe.

Keywords: Collapse, Universe, Scientific, Quranic, Scriptures, Philosophy.

INTRODUCTION

Our age is more surprising than ever. New space discoveries are forcing astronomers to revise their theories about the origin of the universe. Many people are puzzled by the universe and are repeating the same old questions about our existence. How did the universe and life begin and end? The origin of the universe can be explained by this verse of the Holy Quran:

"He (Allah) is the creator of the heavens and the earth."¹

Then he explained the process of expansion of the universe.

"We have made the sky with our own hands and surely we are the openers."²

Allah mentions this end of the universe in the Holy Qur'an as follows:

"On the Day when we will roll up the sky like the scrolls are rolled up. We will do it again like the first time we were born. This is our promise and we must keep it." Will do.³

The Holy Quran presented the concept of the end of the universe along with the creation of the universe. Science agrees in many aspects of this Qur'anic theory, which has been reviewed in the previous chapters.

Overview of salient features of scientific research:

First, I briefly review the salient features of scientific research on this topic:

• Our material universe, which began between 11 and 20 billion years ago, will end about 80 billion years later in another 'Big Bang'-style explosion, called the Universe. It is referred to as the 'Big Crunch'.

• There will come a time when our expanding galaxy will contract due to mutual attraction. Galaxies expanding outward will slow down; until they stop, and then fall towards the center and collide (destroy) each other.

• This collision (i.e. Big Crunch) will be like an extremely large explosion like the Big Bang. Celestial matter will collapse into black holes, and the universe's hydrogen and helium will burn up in the thermonuclear fires of stars. No new stars will be born and the universe will consist of dead stars, meteors, rocks and other cosmic debris.

• When the universe is 27 10 years old, it will consist of black holes surrounded by clusters of dead stars. After some more time, all the galaxies will rotate towards each other and collide to form a 'big cosmic black hole'. Finally, after 106 10 years, the great black hole will vaporize and explode in a burst of particles and radiation equivalent to the explosion of a billion megawatt hydrogen bomb.

• This process of destruction will begin 65 billion years from today and will be completed after 140 10 years.⁴

• Eventually this process will turn the entire universe into a black hole or invisible, and perhaps all matter, energy, space and time will collapse into it and shrink back to 'unity' and zero mass and nothing and non-existence. (Nothing & Naught) will be done.

In this regard, Stephen Hawking writes in "Time Travel" that Einstein's theory of general relativity itself predicted that space-time began with the unit of the Big Bang and ended with the unit of the great black hole. Within a unit (if a local region e.g. a star decays), any matter falling into it will be destroyed by the unit and only the gravitational effect of its mass will be felt outside, on the other hand quantum effects., it seems that the mass and energy of matter will eventually be returned to the rest of the universe and the black hole will evaporate with its internal unity and then disappear. Will have such dramatic effects on the units of? What happens during the very early or extreme stages of the universe when gravitational fields are so strong that quantum effects cannot be ignored? Does the universe actually have a beginning or an end? If so, what is their nature?

In order to interpret my and others' ideas about the origin or beginning of the universe and the possible implications of quantum mechanics for its fate, it is necessary to first understand the generally accepted history of the universe according to the hot big bang model. Go, his hypothesis is that the interpretation of the universe through the Friedman model can go back to the Big Bang. At the time of the Big Bang itself, the size of the universe was considered zero, that is, it must have been infinitely hot, but the universe The radiation temperature decreased with the expansion, one second after the Big Bang it may have dropped to about ten billion degrees, but this is about 1,000 times higher than the temperature at the center of the Sun, but the temperature in hydrogen bomb explosions. It reaches here.⁵

This picture of the early hot phase of the universe was presented by the scientist George Gamow in a joint paper with his student Ralph Alfred in 1948. Gamow also had a good sense of subtlety, he convinced the nuclear scientist Hans Bethe. He also wanted to add his name to the authors of this paper because Alfred, Bethesda and Gammo resemble the first three letters of the Greek alphabet, alpha, beta, and gamma, which is very appropriate for a paper on the beginning of the universe. In this paper, he made the unusual prediction that the universe the radiation emitted from its initial and very hot state should still be present in the form of photons, but its temperature would be reduced to a few degrees above absolute zero (273-C). Discovered in 1965. At the time Alfred, Bethe, and Gamow wrote their paper, not much was known about the nuclear interaction of neutrons and protons. As it cooled, it gained an atmosphere from the outgassing of the rocks done, this early atmosphere was not one we could live in, and it had no oxygen but many other toxic gases such as hydrogen sulphide. They are thought to have grown in the oceans, possibly by chance combinations of atoms in large combinations to form macromolecules capable of similarly combining other atoms in the oceans. This is how they propagated and multiplied....This picture, in which the universe began at a very hot state and cooled, as it expanded, is consistent with all our observational evidence today. It leaves many important questions unanswered,⁶ which are as follows.

(1) Why was the early universe so hot? (2) Why is the universe so uniform on a large scale? (3) Why did the universe begin at a critical rate of expansion that separates the collapse models from the continuously expanding models, even Now even after ten billion years it is spreading at the same decisive rate? If the rate of expansion had slowed by even one part in a hundred

thousand trillion after the Big Bang, the universe would have collapsed again before reaching its current size. (4) Despite the fact that the universe is so massive, it is uniform and homogeneous. It contains local irregularities such as stars and galaxies. It is thought that this may have arisen from slight differences in density in different parts of the early universe. What was the source of this density variation? The general theory of relativity itself cannot explain these properties or answer these questions because it predicts that the universe began at unit infinite density at the Big Bang, at unit general relativity and all other physical laws. will be invalid and it will not be possible to predict what will emerge from the unit, as mentioned earlier this means that the Big Bang and earlier events can be excluded from the theory because they cannot affect the events we observe., there will be a space-time boundary at the beginning of the Big Bang. One possible answer is that we cannot hope to understand the reasons for which God chose to create the universe in the first place. If it is, then why not let it evolve according to laws that we can understand? The whole history of science is a gradual recognition that events do not happen by themselves but follow a certain hidden order, which may or may not be inspired! It would be natural to assume that this arrangement would only apply to laws. There may be many model universes with different initial conditions that all obey the laws, but there must be some principle that selects an initial state and represents our universe. Choose a model for If the universe is truly infinite in space, or if there are countless universes, then perhaps there are some large regions somewhere that started out smooth and uniform. Suppose only in smooth regions that galaxies and stars were born and complex selfpropagating organisms like ours. The conditions were favorable for the development of those who had the ability to ask the question that. Why is the universe so smooth? This is an example of the

application of the anthropological principle, which in other words can be described as 'since we exist, we see the universe as it is'.⁷

To predict how the universe might have begun we need laws that apply to the beginning of time. Since time must have started with infinite density and infinite spatio-temporal curvature, at such a point, all known laws of science would be invalid; it can be assumed that there were new laws applicable to units! However, it will be very difficult to formulate such laws and that too on points with the same large behavior and from observation; we will not get any guidance in this regard, as to how those laws will be.

If the Euclidean space-time extends to an imaginary infinite time, then, like the classical theory, we will face the problem of determining the basic state of the universe. God knows how the universe began, but we cannot. cannot provide any particular justification for the idea that the universe did not begin like this but in some other way, on the other hand quantum theory of gravity has created a new possibility in which space-time has no boundaries, so There is no need to explain the behavior of the limit, there is no unit where the laws of science break down, and there is no edge of space-time at which to invoke God or a new one. Laws have to be applied which define the limits of space-time, it can be said that 'the limit of the universe is that it has no limits' the universe will be completely selfsufficient and not affected by anything external. It will neither be created nor destroyed, it will simply exist.8

I would like to emphasize that the unbounded infinity of space and time is only a proposition, it cannot be derived from any other principle and, like scientific theories, it is initially put forward for aesthetic or metaphysical reasons. Can be done, but the real test is whether the idea makes predictions that are consistent with observation.

Each history in the chronology would explain not only space-time but also everything in it, including the human beings who could observe the universe. All histories are possible, so while we exist in one history to explain why the universe is in the state it is now; it is not clear what meaning is given to histories in which we do not exist. Go, however, the quantum theory of gravity would be much more satisfying if we could use a set of histories to show that our universe is not just one of the possible histories, but one of the most likely. To do this we would have to follow the collection of dates for all possible Euclidean space-times without limits.⁹

Under the no-limit proposition it is very unlikely that the universe will be found to follow many possible histories, but there is a particular family of histories that are more likely than others, and these histories can be pictured as That these dates should be like the surface of the earth in which the distance from the north pole represents the fictitious time and also shows what is the size of the circle at a constant distance from the north pole and this is representative of the spatial distance of the universe, the universe. Beginning as a single point at the North Pole, the latitude circle increases at a constant distance from the North Pole as it moves southward, corresponding to a hypothetical time-expanding universe.

However, the history of the universe in real time or time will look very different, about ten or twenty billion (thousand million) years ago it will have a minimum size that is half the maximum diameter of history in hypothetical time, later. Over time the universe will expand like Lande's chaotic inflationary model (no longer having to assume how the universe was created in the correct state) the universe will expand to enormous size and eventually collapse into a unit in real time. would look like, so in a way our destruction is certain even if we stay away from a black hole, only if we look at the universe in terms of hypothetical time then it is likely that there is no unity.

If we were to go back to the real time we live in, then the units would be assumed, the hapless astronaut who would fall into a black hole would be doomed only to encounter no units if he lived in the imaginary time.¹⁰

This may lead to the conclusion that the known imaginary time is actually real time and that what we call real time is just an invention of our imagination that the universe in real time begins and ends at the units that define space-time. Is and in which

The laws of science become redundant, but imaginary time has no units or boundaries, so what we call imaginary time may actually be more fundamental, and what we call real time may be just a concept that We may have invented to help explain the universe, but a scientific theory is just a mathematical model, so it is pointless to ask what is real. What is real and fictitious time? Interpretation is most effective of a simple matter.

Gravitational collision of the universe (destruction of the universe):

• The theory of the black hole:

According to 'Stephen Hawking', the term 'black hole' is still new. An American scientist, John Wheeler, for tabular clarity of a concept that is at least 200 years old, coined it in 1969. At that time, there were no (existing) theories about light. (Among the ancient theories) One theory was that of 'Newton' that light is made of particles and according to the other, it consists of waves. Today we are well aware that both theories are correct (in their place). Due to the duality of waves and particles in 'quantum mechanics', light can be transmitted as both a wave and a particle.

Introduction to Black Hole

When a star 20 times the size of the Sun explodes in a supernova at 3,50,00,000 degrees Celsius, it usually leaves behind a large enough crater that that of a neutron star. There is no final stage. It is possible that its gravity is so great that it pulls everything into it to an unimaginable extent. As its density increases, so does its force of attraction, even light does not escape its attraction. This is called 'Black Hole'. At the center of a black hole, the debris from the former star collapses to an infinite density while having zero mass. This point is called 'Singularity'. According to modern theories of 'astrophysics', there is no way to prevent such a dense star's core from endlessly collapsing under its own gravity. (According to a conservative estimate) there may be about a million black holes in our galaxy that have been exposed by supernova explosions of massive stars.¹¹

• Emergence of a black hole:

To understand the process of formation of the black hole, first we have to understand the entire life cycle of any star. A star is (initially) such a gas. . . which consists mostly of hydrogen. . . caused by the gravitational contraction of a large amount of In this case, the atoms of that gas collide freely and at high speed and start heating the gas. Eventually the gas becomes so hot that when the 'hydrogen' atoms collide, they do not stick together for long, but merge together to form 'helium'. This process releases heat. . . Just like a 'Hydrogen Bomb' explodes. . . Due to this, the stars appear to shine. This extra heat increases the pressure of the gas enough to balance gravity, and so the gas stops compressing further. It is somewhat like a balloon that is balanced by the air inside. The air wants to expand the balloon, but the tension of the (balloon) rubber wants to make it smaller. (Thus, the balance between the air and the balloon's rubber keeps the balloon inflated to a certain equilibrium.) Similarly, stars remain stable for long periods due to the balance between the heat produced by nuclear reactions and gravity. Are eventually the star runs out of hydrogen and nuclear fuel? Obviously, the more fuel a star starts with, the sooner it will run out. This is because the more massive a star is, the hotter it has to stay in order to balance with its own gravity, and the hotter it is, the faster it will

use up its fuel. Our Sun may have enough fuel to last another 5 billion years, but stars larger than that can exhaust their fuel in only 50 billion years, which is much shorter than the age of the universe. When a star runs out of fuel, it begins to cool and contract. Then what will happen after that? It was first discovered in the late 1920s.

'Black holes' occur at the end of the life of massive stars in the form of supernova explosions. After the explosion, the dense core of such a star continues its internal destruction due to its own gravity until it disappears, as a black hole and then even light cannot escape from it. Some astronomers believe that black holes act like giant black holes through which matter escapes from our universe. In a sense, black holes are as mysterious as 'quasars'. They do not appear to obey the laws of physics because they are the perfect example of innate invisibility.

When a star 10 times the size of our Sun has spent (all) of its energy, its outer layers begin to collapse toward the center. Then the star explodes, throwing off the outer layer with a 'supernova' explosion. After the explosion, the star's dirty core remains, possibly as highly pressurized as a 'neutron star'. Rapidly rotating stars have been detected as glowing 'radiation sources' or 'pulsars'. If the remaining core of the star is too important, it takes the form of a black hole, shrinking under its own gravity. Matter can fall into that hole, but nothing can escape from it. Not even light can escape from a black hole.

As depicted by Oppenheimer's research (turning into a black hole), the star's 'magnetic field' changes the path of the rays found in any space and time. Those 'cones' of light. . . Which mark their path through space and time by the brightness of light emitted from their edges. . . Near the surface of the star, they slowly turn inward. This can be well observed in the bending of light from distant stars during a solar eclipse. As a star shrinks, its surface magnetic field becomes stronger and the cones of light bend further inward. This makes it more difficult for

the light to escape from the star, and for a distant observer the light becomes relatively dim and red. Eventually, as the star shrinks to its minimum possible radius, its surface magnetic field becomes so strong and the cones of light bend toward it that all possible escape routes for light are blocked. They remain. According to the 'acceleration theory', nothing can travel faster than light. So if even light cannot escape from it (a dead star that becomes a black hole), then (obviously) nothing else can escape from it, its 'magnetic field' will pull everything towards it. . Due to those circumstances, it is not possible for a viewer sitting far away, to go near that particular region of time and space for observation and return safely. This is the place we now call the 'Black Hole'. Its true boundary is called the 'event horizon' and is located at the end

Invisibility of black crack from external view:

black hole.12

of the path of light waves that fail to escape the

'Stephen Hawking' (Stephen Hawking) says that his and 'Roger Penrose's research from 1965 to 1975 shows that according to the 'general theory of relativity' there is a unit of infinite mass inside the black hole and ' the existence of the bending of time and space is essential. It is somewhat like the big bang at the beginning of time, which will (prove) the end of time for the destroyed body and the astronaut (travelling through it). At that point, of unity, the laws of science and our ability to know the future (both) will be answered. However, any viewer who stays away from the black hole will be deprived of the ability to anticipate (possible concerns) in advance, but will not suffer any damage because) From that 'unit', nothing including light (goes out to harm it) can reach it. This important fact led Roger Penrose to propose the argument of cosmic calculus, which can surely be interpreted as a terrorized unity with God Almighty. In other words, these entities or entities are created due to 'gravitational collapse' occurring in black holes, where they are invisible to external view from

any horizon. In particular, what has been called the 'Weak Cosmic Censorship Hypothesis' protects the viewer outside the black hole from the consequences of being deprived of the ability to prematurely perceive 'unity'.¹³

• Collision of Earth with Sun:

The 'General Theory of Acceleration' reveals that massive moving bodies (astrobodies) will emit gravitational waves that are created by the curvature of space and travel at the speed of light. These are similar to light waves created in an 'electromagnetic field', but they are very difficult to detect. The bodies from which it emits energy like light. One can (easily) surmise that the system of these massive bodies will eventually come to rest because the emission of gravitational waves (generated) in any motion carries energy with it. For example, the rotation of the Earth in its orbit around the Sun creates gravitational waves. (Because of which) the effect of energy loss will change the Earth's orbit and thus it will move closer and closer to the Sun and eventually collide with it and assume a stationary state. In the case of the Earth and the Sun, the rate of energy loss is so low that even a small electric stove cannot be powered by it. This means that it takes about one sunkh for the Earth to fall into the Sun.

gravitational collapse of a star to form a black hole, the motions would be so fast that the rate of energy loss would be very high. However, it will not be long enough to reach a steady state.¹⁴

• Number and size of dark spots present:

So far, we have seen our own galaxy and two neighboring galaxies. . . They are called 'Magellan Clouds'. . . Evidence of many black holes in systems such as Cygnus X-1 has been

available. However, the number of black cracks is actually much higher. Over the course of the universe's longest history, many stars will have exhausted their fuel and suffered internal collapse. Black holes may outnumber visible stars, which number about a trillion in our galaxy alone. The extra gravity of such a large number of black holes can explain the current rate of rotation of our galaxy, while the number of visible stars alone cannot explain that rate. We also have evidence that there is a supermassive black hole at the center of our galaxy with a mass of one hundred thousand times that of the Sun. The stars in the galaxy that come closer to the black hole are part of the storm (orbiting around the black hole) due to the difference in the gravitational force between their near and far sides.15

It is also believed that the same. . . Rather bigger than him in size. . . Black holes 10 million times the mass of our Sun are found at the center of 'quasars'. The (continuous) collapse of matter into such massive black holes provides a force source large enough to explain the energy released by these black holes. The direction in which the matter falls into the rotating black hole is the direction in which the black hole begins to rotate. From this his 'field of attraction' (field of attraction) develops, just like that of our own Earth. The collapse of matter into a black hole produces particles of very high energy near it.

It is also possible to assume that black holes with less mass than our sun are also found. Such black holes cannot form due to 'intrinsic gravitational collapse' as their mass is less than the 'Chandrasekhar Mass Limit'. Stars of such low mass can only support their existence by resisting gravity when they have completely exhausted their nuclear fuel. Black cracks of low mass can only form when the material is subjected to extreme external pressure and becomes extremely impure.

Black crack. . . An Impenetrable Narrow Passage:

As their name implies, black holes cannot be seen because they emit no light at all. Although a black hole itself may not be visible, it can still be detected by the 'emission of X-rays' as it pulls in a neighboring star and swallows its material. Becomes

Black holes act as a passageway to another universe, so it is possible that the matter that goes to the black hole is sent to another region of time and space, which we are not fully aware of.

• The Scientific Explanation of the Collapsing Universe:

We find an unimaginable unity and harmony between modern scientific research and Quranic teachings about the apocalyptic destruction of the universe. The science of astrophysics clarifies the matters related to the Day of Resurrection exactly as they have been described in the Holy Qur'an. Black fissures or invisible collapsed stars are also confirmed by the Holy Quran as invisible passages.

Engineer Fateh Khan's statement is correct that there is a miraculous harmony and uniformity between the physical science of the twentieth century and the Holy Qur'an.¹⁶

The translator of the Holy Quran has described most of the scientific facts in a literary, metaphorical or allegorical way, some of which are:

- The creation of man
- Human reproduction
- Creation and evolution of the universe

• Expansion of universe according to 'Hubble's Law'

• The indestructibility of the universe

• Creation of atomic structure by force, explained by Einstein's equation E=mc2.

- Interrelationships in matter and energy
- The universe came into existence from nothingness and nothingness

- The impermanence and non-existence of the universe
- Presence of water in protoplasm
- The 'DNA' of Humankind
- 'Chromosomes' and genetic engineering
- Einstein's Tragic Law and Unbelievable Principle
- Niels Bohr's illusory principle related to quantum
- Max Plank's inexplicable theory of quantum
- Newton's law of motion
- Particle physics in advanced mathematics
- Theory of excess
- Law of exchange of matter and energy
- Quantum theory of light
- Process of annihilation and creation of 'electron' and 'positron'
- Laws of 'Kinematics' (Mechanical Energy).
- The Law of Absolute Quantities
- The process of radioactivity
- Nuclear explosions of hydrogen in the Sun

• The process of transferring solar energy to plant tissues through 'photolysis', which will eventually cause decomposition, resulting in a mixture of matter, and energy.¹⁷

According to 'Einstein's' theory, gravity is just a bounding dimension that is embedded in the presence of matter and energy, just like a mattress squishes under the weight of a heavy body. The greater the local concentration of a substance, the greater the curvature of space around it. What will happen when the thermonuclear fire runs out of fuel and gravity collapses it inward? (Today we are unable to even imagine it).

A star the size of our Sun shrinks to become an Earth-sized 'White Dwarf', while larger stars can be crushed by gravity to form a solid ball of 'neutrons'. The weight of one spoonful of the substance. Which is the condition of connecting nuclear nuclei with a diameter of 20 miles. It is several billion tons. After that, in the 'neutron star' phase, its density becomes so high that matter wraps around it like a black fist and nothing, including light, can ever leave the star. The

remnant (debris) of the star compresses itself so tightly that its density becomes infinite and the orbit twists to an infinite extent. This results in a cosmic death known as the 'Singularity', where the general laws of relativity, space, time and many other laws of physics break down.¹⁸

The picture of the universe that modern science has created is a very solid and organized universe. It was first hypothesized that it is a kind of mechanical system that operates on its own due to causes, but a deeper study proved this hypothesis baseless. It turns out that the system of the universe is solid as well as completely nonmechanistic. He calls for a motivator and organizer every time. Similarly, with the increase of information, it was assumed that men own knowledge would be sufficient to know all the facts; there would be no need to resort to revelation. However, the research proved this baseless. It is known that human knowledge and abilities are decisively insufficient to reach the

References:

- ¹ Qur'an: Al-An'am 101:6
- ² Qur'an: Al-Dhariyat 47:51
- ³ Qur'an: The Prophets 104:21
- ⁴ https.ur.wikpedia.org/w/index.php?title Kainat 30-01-2017.11:35am

⁵ Stephen Hawking, A Brief History Of Time, Bantom Books, England, 1998, Page: 21 (Translator: Nazer Mahmood)

⁶ Stephen Hawking, Time Travel (Translator: Nazer Mahmood) p: 274

⁷ Stephen Hawking, Time Travel, (Translator: Nazer Mahmood) p: 175

⁹ Bagwi, Bashir Ahmad, Kitab al-Falkiyat, Mulat Bookshop, Islamabad, 2009, p: 65 total knowledge of the universe. We have no choice but to resort to an external teacher to answer the questions of human nature.

Modern studies have also proved that the passion of religion is a natural passion of man; it cannot be separated from man in any way. Satisfactory answers to the questions of the human mind about the real explanation of the universe and its laws, the beginning and the end of the world are not just a matter of science and philosophy. Only religion can give the answer to this that all the mysteries of feelings and non-feelings are visible on his gaze, all the details of existence and nonexistence are visible and every part of the past and future is bright. She is also able to see with this faith and trust. Just as she enjoys the sight of martyrdom in this world, with its splendor and splendor. In this time, in the future chapters, we will present a religious review, which is "Ved and Qur'an". Will consist of the study of

¹² Stephen Hawking, Time Travel, (Translator: Nazer Mahmood) p. 167

¹³ Stephen Hawking, A Brief History Of Time, Bantom Books, England, 1998, P:267 (Translator: Nazer Mahmood)

¹⁴ Robert Cwiklik, Albert Einstein and the Theory of Relativity (Translator: Faisal Ijaz), P:140

¹⁸Robert Cwiklik, Albert Einstein and the Theory of Relativity (Translator: Faisal Ijaz), P:76

⁸ Tahir-ul-Qadri, Islam and Science, p. 164

¹⁰ Harun Yahya, Theory of Time and Destiny, p.78

¹¹ Aleem Ahmad, The Complete Theory of the Universe, Fazli Sons, Karachi, 1993, p:45

¹⁵ Aleem Ahmad, The Complete Theory of the Universe, Fazli Sons, Karachi, 1993, p:156

¹⁶ Fateh Khan, Engineer, Quran, Universe and Man, Saba Publishers, Aligarh, 2009, p: 153

¹⁷ Fateh Khan, Engineer, Qur'an, Universe and Man, p. 155