

Black Holes and the Event Horizon as a Sample of the Scientific Astronomical Miraculousness in the Holy Quran

Dr. Majeed M. Jarad and Dr. Taha A. Shebeab

Abstract--- *The Holy Qur'an spoke in many verses about things that science came after many years to prove them. Among these issues were matters related to astronomy, the locations of stars, and the types of these stars, and others. In this research, the focus is on the newly discovered black holes as a model of the astronomical scientific miraculousness in the Holy Qur'an, and in order to make the image clearer in the glory of this miraculousness. The present research begins by explaining how some stars evolved into black holes, as the research points to specifications and the features that distinguish the black hole and how the Holy Qur'an spoke more than 1400 years ago in many verses about this creature and described it as a faint and subtle star, meaning that this star cannot be seen and that it is in a constant running and it sweeps the sky, as it was mentioned in the noble verse (No! I swear by the slinkers, the runners, the sinkers) (Al-Takwir: 15-16) in which Almighty Allah swore by the of the revelation of the holy Qur'an. This credibility is in full conformity with what has been proven by modern science in the field of astronomy and space research at the present time, which is one of the modern scientific astronomical discoveries. Thus, science reveals to us whenever it offers hidden secrets for this strange universe that the Qur'an spoke about hundreds years ago.*

Keywords--- *Black Holes, Scientific Astronomical, Miraculousness.*

I. INTRODUCTION

Praise be to Allah, and prayers and peace be upon the prophet Muhammad, his family and companions, and he who followed his path and guidance. However, Almighty Allah has sent his prophet Muhammad peace be upon him to all of humanity and revealed the Quran to him to be a constitution for all people of different cultures and perceptions. Almighty Allah included many miracles among them news about the unseen matters that were not known to those who were revealed to them by these verses and were discovered recently after the development of science which was not discovered until now, until the specialists recognized it and fit it for every time and place. We are with our certainty that the Holy Qur'an is not a book of physics, medicine, or other sciences. The Black Holes which were recently discovered as a model of the astronomical scientific miraculousness in the Holy Qur'an, and in order to make the image clearer in the glory of this miracle. This research began by explaining how some stars have evolved into black holes. The research also pointed to the specifications and features of the black hole and how that the Holy Qur'an has spoken more than 1400 years ago in many of its verses about this creature and described it as a faint and sloppy star, meaning that it cannot be seen and that it is constantly running and sweeping the sky, as stated

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in the verse (No! I swear by the slinkers, the runners, the sinkers) (Al-Takwir: 15-16) in which Almighty Allah swore by the of the revelation of the holly qur'an.

The research is about the aspect of astronomical scientific miraculoosness in some of the verses of the Holy Qur'an that have been spoken of the Black Holes recently discovered as a model of the astronomical scientific miraculoosness in the Holy Qur'an, and to make it clear in the best of these miracles.

The reason of choosing this topic, in addition to the desire to research in the Holy Qur'an as being the most honorable science at all, is an attempt to explore the verses that spoke about cosmic phenomena that did not appear until recently and which modern science has revealed.

The present research begins by explaining how some stars evolved into black holes, and the research also points to the characteristics and features of the black hole and how the Holy Qur'an spoke in many verses about this creature and described it as a faint and subtle star more than 1400 years ago meaning that it cannot be seen. In addition, the Holy Qur'an explained that this star is in a constant running and it sweeps the sky as it was mentioned in the verse (No! I swear by the slinkers, the runners, the sinkers) (Al-Takwir: 15-16) in which Almighty Allah swore by the of the revelation of the holly qur'an.

This is in a full conformity with what has been proven by modern science in the field of astronomy and space research at the present time which are considered among the discoveries of modern astronomical science.

The importance of this topic lies in the fact that the Noble Qur'an came to bring people out of darkness into the light, and then we wanted to prove that there is no intersection between the verses of the Qur'an and the data of modern science, which was recently discovered as this Qur'an was issued by a knowledgeable expert. The subject of the scientific miraculoosness mentioned in the Qur'an does not contradict modern science in the Qur'anic view, at the same time it is a thorny and ramified topic, and it has many origins and branches.

Finally, the present research is a work of human being. What was right in it, whoever has the grace of Almighty Allah and what was wrong or misleading in it is the researchers' defect and Almighty Allah and His Messenger peace be upon him are innocent of any of these defects.

II. HOW THE STAR TURNS INTO A BLACK HOLE

The star usually consists of a cloud of hydrogen gas (and a little helium) that begins to accumulate on each other and then rotate around itself. With this condensation the pressure on its nucleus increases greatly and the gas heats up in the nucleus until it becomes too hot to the point that the hydrogen atoms merge into helium In this process, the star can generate pressure towards the outside in itself, preventing it from collapsing on itself, but when the star's fuel runs out of hydrogen it threatens to collapse on itself as a result of the pressure of its mass, then it starts burning helium and then carbon down to iron, then the star is no longer able to merge iron into elements Heavier because the energy generated by nuclear fusion is not enough to prevent it from collapsing, so massive energy collapses upon itself. But what determines the fate of the star after its explosion is the size of its mass. " Chander Isikhar," this limit is the amount of mass (1.4 solar masses) that exceeding it turns into either a neutron star or a black hole. If the mass of a star is high, then this means that it will be denser, and so dense stars become neutron stars or black holes.

Therefore, some stars during their long life cycle may reach a stage that may collapse on themselves due to the influence of their internal gravity and gradually to turn into a small star with a very high centrality, so the condensation and accumulation of its ionized atoms will increase over each other until its density reaches 10^{15} g/cm^3 so that every 1 cm^3 of its size weighs in the range of a billion tons, and then the star turns into a neutron star and so the greater the mass of the star is greater and higher the more it shrinks to a smaller and smaller size so that its density becomes very high and thus the process of decay and contraction continues until its density reaches billions of tons per a cubic centimeter then a collapse will occur then a complete collapse and decay of the star will occur, and this star will turn into a black star or black hole, a star that does not see but emits X-rays that originate in the gases surrounding this star.

And if the mass of the collapsed star is greater than the mass of the sun, then the gravitational forces will overcome it over all the other forces, then the star will turn into an invisible luminary, because in this case, even light at its high speed does not allow out of this great gravity of the star, so this star will rise therefore, this star will engulf all the substances that approach it and become completely invisible and dark. Hence, we find that if any object, whether a planet, another star, a spacecraft, or anything else within the boundaries of this star, which is astronomically called the event horizon of this black star (The Event Horizon), cannot be seen and cannot exit or escape from the grip of this black star.

In other words, we can imagine the black star and the boundaries of its horizon, which is in its continuous movement in the sky. It is completely similar to the aspirator of a cosmic vacuum that sucks out and grabs all the materials around it or approaches it, and it resembles a fathomless well, meaning that any object that falls in the depths of the black hole will be crushed and it will lose all its characteristics and its features remain nothing but what distinguishes it from the mass and its electrical charge, so the star or black hole that is a region in space (as in Figure 1).

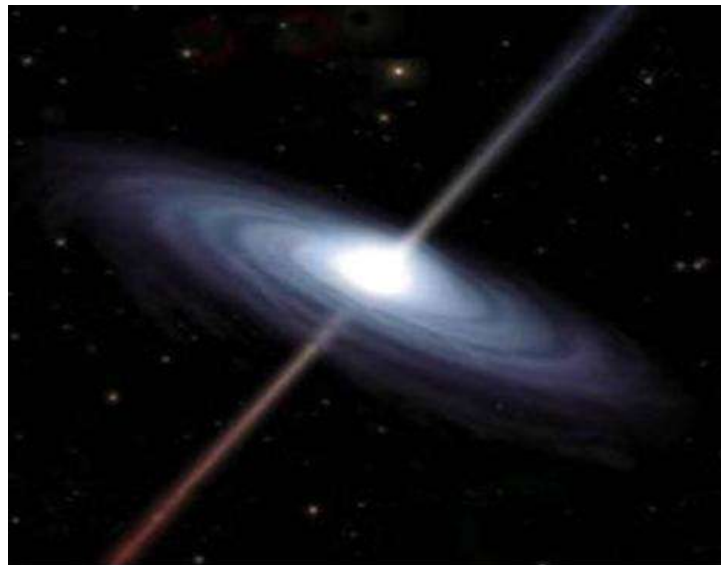


Figure 1

It represents a large mass in a small size called the critical size in relation to this mass where the material begins to compress under the influence of its own gravity and a special kind of collapse occurs, which is the collapse due to gravity and that results from the opposite force of the explosion, as this force presses the star and makes it very small and a strong attraction its miracle, and the mass concentration, the density of the body, increases (As a result of the interference of its particles and the lack of an interstitial space between the particles), and its gravitational force becomes so strong that no object passing through its proximity can escape from it whatever its speed and thus the amount of matter in the black hole increases, and according to Einstein's general theory of relativity, gravity curves the space that travels the light. It is straight in relation to the vacuum, which means that the light is deflected under the influence of gravity, and that is what has been observed in practice in cases of total solar eclipses.

That the black hole or star curves the space to the extent that the light passing by it is absorbed by the action of gravity, and it appears to those watching it from the outside as if it is a region of nothingness since no signal, information, wave, particle, or even light can escape from it, thus appear black. However, it was possible to know its existence by observing some of the X-ray radiation that is released from the materials when its particles are destroyed due to its approach to the gravitational field of the black hole and its fall to its abyss. This means that its material is compressed to make it without interstitial voids in its atoms and between the particles of the nuclei of its atoms, which makes them smaller than a table ball in size and its enormous weight remains the same.

This means that the laws of physics that we know do not work inside the black hole because they are idle like the big bang in which laws are disrupted, but when we are outside the black hole, we are not affected by this disruption), in other words, these laws are not broken, but they operate according to modern dimensions that include an environment black holes. Therefore, the horizon of the event is the boundaries of a region of time and space (space-time) from which nothing, even light, can escape from them and are surrounded by the center of the black hole as in Figure 2.

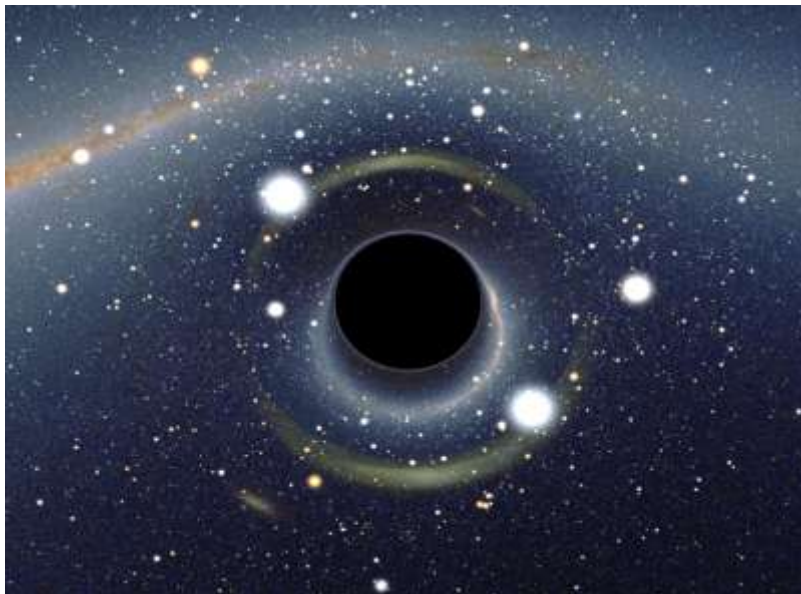


Figure 2

The gravitational field of the black star changes the paths of light rays in space-time and the light cones that indicate that the paths that follow the light in space-time are in the form of light flashes slightly curved inward, as it appears in the image above, and this was proven when the curvature of light was seen at the complete eclipse of the sun. As the star shrinks, the gravity increases on its surface, and the cones curve inward dramatically, making it difficult for light to escape gravity. According to the theory of relativity, no object can travel faster than light, so nothing can escape the gravitational field of black star. From here we find that we have a region of time and space from which we cannot escape and this region we call black holes and its borders are called the horizon of the event.

III. BLACK HOLE EVENT HORIZON

The event horizon is the boundaries of a region of time and space that nothing can escape from and operate in the form of a one-way membrane which is inside the hole and not outside it and represents the path of light that attempts to escape from the attractiveness of the black star. By this, we find that anything falls in this region will be attracted inward to reach at the speed of the region of the center of the black star, which is of high density, is crushed there and thus it reaches the end of time.

The surroundings of the hole or the black star which is known as the event horizon are the boundaries of a region of space and time that nothing, even the light of its high velocity, can escape from it. Furthermore, everything inside these boundaries is subject to an absolute submission to the dominance of gravity of this star, whereas outside the event horizon the material of stars or gaseous clouds can rotate in orbits around the black hole as it does around any dense object. Thus the event horizon becomes a border made by these light rays at the edge of the hole that are unable to escape from these frontiers, but maintains its position around the black hole due to high attractiveness. There are medium black holes with a mass of between 4 - 15 solar masses, and there are large mass holes with a mass between 100 - 10,000 solar masses. There are also huge holes as if they were a greedy and hungry beast with a mass of several billion solar masses.

Thus we find that when a spaceship passes through the event horizon, the traveler on that cosmic flight observes that it is moving in one direction towards the center of the black hole. The spaceship cannot change its direction because it is subject to the sweeping gravitational tornado that, inevitably, leads it to the cavity, the black hole, where the known laws of physics cannot be applied there. Therefore, a distinction must be made between the volume in which the material is accumulated and the event horizon of the black hole, at which nothing can escape the black hole. For example, if the sun turns into a black hole, its diameter at the event horizon will reach about three K.M., while the entire mass of the sun will accumulate at a point in the center of the black hole and the rest of the size to the event horizon will be a vacuum where all the material that crosses the event horizon will fall into the center of the hole, and from Here we find that the general theory of relativity defines the black hole as follows:

The black hole is a region of empty space with a point like singularity at the center and an event horizon at the outer edge.

That is, the black hole is a region of empty space that has at its center the singularity point and at its outer edge there is the event horizon, the point where the material is accumulated in the center of the black hole is known as the singularity point (as in Figure 3).



Figure 3

Therefore, the word hole is scientifically correct but not as some had thought because of the confusion between the event horizon of the black hole and its center. Many believe that the material of the collapsed star occupies all of the black hole until the event horizon. But as we mentioned, the material of star which is stacked in an extremely small size at the center of the hole will only affect its impact on the event horizon causing the space in which the hole is located. Here, it is difficult for the human mind encompass possibilities of the nature of the black hole and the truth of what lies in its hollow because here we are dealing with the strangest body in the universe as it is a hole in time and space. Initially, it was possible to identify black holes by observing some of the X-rays and gamma rays that emit from the materials when their particles are destroyed due to their approach to the gravitational field of the black hole and its fall in its gulf.

IV. THE DISCOVERY AND MONITORING OF THE BLACK HOLES

Recently, at the beginning of the twenty-first century, scientists were able to photograph the black hole in the M87 galaxy, which is 55 million light-years away from us, with a mass of 6.5 billion solar masses, which is about 1600 times the hole in our galaxy (Figure 4). This was announced on Wednesday corresponding to the tenth of April 2019 AD, which is the first experiment of its kind in direct observation of black holes, through the use of eight radio telescopes distributed in separate regions of the world and linked with each other (Figure 5), so this was the first success to photograph the black hole to know and study what it is.



Figure 4



Figure 5

Therefore, this event was of great importance in cosmology, astrophysics and black holes. The next step will be the depiction of the black hole expected in our galaxy in which we live the Milky Way, or the so-called Milky Way, which is 26 thousand light years away from us, and its mass is equal to 4 million solar masses. Thus opinions about the black hole were transformed into viewing facts via the radio astronomical monitor, which allows the monitors to view and study the universe more clearly.

The black hole discovered in the center of our galaxy does not pose any danger on the earth to our great distance from it because the direct impact of the black hole is subject to Newton's laws of gravity and since gravity weakens as the distance increases, it is true that the mass of the black hole is enormous and very large except that the vast distances make its effect almost absent.

V. BLACK HOLES AND THE SCIENTIFIC MIRACULOUSNESS OF THE HOLY QUR'AN:

Almighty Allah's immortal Book, Quran, has surrounded everything. Almighty Allah said: (He took everything in knowledge), and the universe is among the things that Almighty Allah has surrounded with its knowledge in detail, statement and clarification, and in it is an explicit call for meditation and thinking and "Indeed in the creation of heavens and the earth and the alternation of night and day are signs for those of understanding" {190} "Who remember Allah while standing or sitting or [lying] on their sides and give thought to the creation of the heavens and the earth, [saying], "Our Lord, You did not create this aimlessly; exalted are You [above such a thing]; then protect us from the punishment of the Fire) [Al-Imran: 190-191].

The Almighty Allah said: (When the sun is rolled up. When the stars are dimmed) [Al Takwir: 1-2]

The Holy Qur'an (the most perfect book of civilization) is considered a guide for humankind and not a book for astronomy or medicine, etc. There are verses about astronomy in the pleats of the noble context and these out of this world verses confirm - no doubt - the uniqueness of the astronomical miraculosness of this immortal book. This maybe an indication that the Holy Qur'an dealt with the general framework of astronomy in accordance with the Islamic perception of this science.

The scientific miraculosness of the noble Qur'an can be summed up with one word that modern science was able to make every mistake in interpreting the universe said by scientists a century ago, but it could not miss one verse of the book of Almighty Allah. (The Encyclopedia of the Scientific Miracle: 10).

In the following lines, we will present the interpretative perspective of a number of verses whose linguistic vocabularies contain an explicit reference to astronomy. In this interpretative context, it seems necessary to point out that some historians believe that when the dawn of Islam shone upon the universe, a fundamental shift occurred in the evolutionary path, the evolutionary science of astronomy, whether that is from a scientific (theoretical) or practical (applied) point of view, because the Islamic civilization, which is considered as the natural secretion of this immortal religion has been concerned from the first historical moments of its emergence from the womb of history in other sciences in general and astronomy in particular.

The word **astronomy** is mentioned in two places of the noble context: the first position in Surat Al-Anbiya, (The Prophets) where Almighty Allah says: (It is He who created the night and the day, and the sun and the moon;

each floating in an orbit) [Al-Anbiya: 33], and the second place in Surat Yasin (Another sign for them is the night: We strip the day out of it—and they are in darkness. And the sun runs towards its destination.

Such is the design of the Almighty, the All Knowing. And the moon: We have disposed it in phases, until it returns like the old twig. The sun is not to overtake the moon, nor is the night to outpace the day. Each floats in an orbit. [Yasin: 37-40].

In addition, important verses that refer to the world of astronomy and its various issues have been included in the noble Qur'an context, which emphasizes the originality of this noble book, which Almighty Allah commands man through his miraculous verses - to contemplate this vast universe of hope, consider, think, and extract from it the results from consideration and reflection.

This has already been pointed out that most of the Qur'anic verses find an explicit call for contemplation and reflection from the first people in this vast universe around us. The Holy Qur'an does not contradict the universe and it contains many accurate scientific references that must be inferred strictly according to the conditions stipulated by our scholars not to fall into the prohibited Sharia, which was mentioned in the place of inferring the greatness and power of Almighty Allah, and we are commanded to reflect on it and to understand these scientific references publicly. We can succeed in managing the wisdom of his creation, for a person from this angle can take the lesson and the sermon of the great creation of Allah. And now we will try to explain the noble verses that indicate what was recently discovered about what black stars or black holes are, relying on the books of interpretation that mention many important scientific facts, after reviewing the statements of the ex-linguists and interpretation.

We will try to explain these verses and their compatibility with modern scientific discoveries in the field of astronomy about these stars that the Holy Qur'an talked about more than 1400 years ago, which indicates explicitly the renewed astronomical scientific miraculosity in the Holy Quran.

VI. VERSES THAT REINFORCE THE SCIENTIFIC MIRACULOSNESS IN THE HOLY QURAN:

There are a set of verses that have explicitly talked about what black holes are mentioned in the Holy Qur'an, and before that it must be noted that talking about stars in the Noble Qur'anic verses is mentioned in fifteen verses, and we will address in these next pages a group of noble verses that talked about this phenomenon exclusively and the sayings of scholars of interpretation therein:

6.1 The Rolling up of the Sun and the Dimming of the Stars

Surat al- Taqweer depicted great cosmic scenes, and it began with two verses indicating the description of the state of the sun and the stars and describing this cosmic phenomenon mentioned by the Holy Qur'an hundreds of years ago.

First description: rolling up the sun and dimming the stars in the Almighty saying: "If the sun is rolled up, then the stars are dimmed"

In talking about the scientific Miraculousness of the Holy Qur'an in these two verses and referring to the fate of the stars after their extinction, which talks about the fate of the sun and the stars, when Almighty Allah wills that their life ends and their light is gone, the sun is one of the stars, what happens to the stars happens to the sun.

VII. THE LINGUISTIC SIGNIFICANCE OF FOLDING UP AND FALLING (LOSING THE LUSTER)

Folding up in the language is rewinding and plural. Ibn Faris said: "The kaf, Waw and Rae are a true origin that indicates a role and grouping, from that wall: the role, it is said: Kar is the ball, if it rotates, and the roll the turban: it is rolled, and the ball: the rubbing because it rotates villages, and he stabbed him and invigorated him, if he throws a community as if it was gathered together". (Ibn Faris: Lexicon of Language Standards: 5/146)

The meaning of Taqueer (folding up) is mentioned in the books of the interpreters:

Ibn Abbas said: "When the sun is folded up, it means darkened."

Mujahid said: "It is lost and gone."

Qutada said: "Its light is gone."

Saeed bin Jubair said: (Quaeret) means its folded up.

And Al-Rabee 'Bin Khatheim said: "(quaeret) means it is thrown."

Abu Salih said: "(quaeret) means it was thrown and turned over."

Sahib Al-Qashaaf said: "There are two sides in the pelleting: one of them is that it should be from the turban when its rolled if it is wrapped. That is, it wraps the sunlight into a roll, so its extensibility and diffusion will go to the horizons in the way that it removes it because as long as it remains constant its light will be extensive and not wrapped. The second: The wrapping of it should consist of lifting and covering it, because the garment, if it was to be lifted, it will be wrapped and folded.

Through the combination of these meanings, the meaning becomes clear in that which is the folding up which is a combination of something put together and so the meaning of his saying (quaeret), that is, they were combined into one another and then it was wrapped in and thrown and if this happened, the light went out.

We should keep in mind that recent calculations when applied to our sun, indicate that if it is extinguished it will shrink in size (folded up) due to the dominance of the forces of gravity until it settles into a specific size.

The Quranic context came in support of this after mentioning the sun is folded up and its fallen between the hands of almighty God and the state of the stars and their contraction, and that after referring to the extinction of all stars, including those with massive masses that will become black holes, the direct reference to the INQIDAR of these stars is stated which is a horrific event stated in many places of the Qur'an in many forms such as: the rending asunder and the cleaving asunder, without the need to mention a reason for that, the folding up of the sun may not be the only reason, because God is the creator of the causes and the mastermind the way He wills. But it is in the only verse that talks about the folding up of the sun.

As for (falling or losing the luster) of the stars there are two things about its interpretation:

Ibn Faris said in: "al- kaf, al- dal and al-rae are a source that indicates two origins: the disagreement of the purity, and the other indicating a movement. The first is the impurity which is the opposite of the purity: it is said the water is not pure : and it is said take the purified and leave the impurified." This is used as a metaphor like his living is not purified, because it is attributed to most of bad condition which is the chagrin, and this one is from the first

because there is a chagrin in that color.. As for the other origin, it is said: he is chagrined, if he speeds up." (Ibn Faris: Glossary of the language standards 5/164)

Ibn Mandhur said: The stars were INQADARAT: means they were scattered. (Ibn Mandur: Lisan Al-Arab: 5/135). Al-Khalil has made clear that Al-Inqidar has another meaning, and he said: It is said that people rush into them if they come and attack them quickly. He who contemplates the book of the Almighty God finds a nice and important reference to this shift in the fate of the stars and the Qur'anic use of this word did not differ from the linguistic meaning:

Qatadah said in the interpretation of falling: "It fell and fragmented." For Mujahid and Al-Rabee 'Bin Khathim: falling (losing their luster) means It was shattered in the sense of: it is scattered. (Tafseer Al-Tabari: 12/23), and ALENKIDAR is the scattering and falling of stars. The origin in the falling is the -----.

VIII. AS FOR THE SAYINGS OF THE INTERPRETERS IN ITS MEANING

Al-Kalbi said: "The sky will rain on that day, so there will be no star in the sky but falls on the face of the earth."

Atta said, "because these stars are in lamps that are suspended between the sky and the earth with chains of light and those chains are in the hands of the angels and if they die in the sky and the earth, those chains fall from the hands of the angels." (Al-Razi: Mafatih Al-Ghaib: 62/31).

Ibn Abbas also explained it by saying: "they have changed, so there is no light left for them because they have been removed from their places." The meaning is close. (Al-Qurtubi: Al-Jamia liahkam al- Qur'an: 19/228)

Al-Baqai interpreted it by saying: "That is, they have been finished, fallen, and scattered, as it was as if they had been done by themselves without an effective action in a very rapid manner, or they became dark, from KIDRAT OF the water, then they were fallen." (Al-Beqai: Nudum Al-Durar : 21/276).

Sahib Al-Dhilal said: "the fall of the stars could mean their scatterings from this system linking them, the extinguishing of their flame and the dimness of their light. God knows what are the stars that would be affected by this incident? Is it a group of close stars to our solar galaxy, for example, or our galaxy which has amounting to hundreds Millions of stars... or all the stars whose number and location are known only to God. Whatever we see from them in our observatories are galaxies and spaces which we do not know their numbers or infinities. There are stars which will be affected by falling as this sincere news has decided that is known by no one knows its truth except Allah. (Sayyid Qutb: Dihlal Al-Quraan: 4495).

In the Book of the almighty God there is another reference to the phenomenon of extinction in His saying at the beginning of the Surat and His talk about the sun and its description: (So the sun was rounded) [Al-Takwir: 1], so there is no breakdown of the sun but a slow extinction, and this is what the Qur'an expressed it with the word "rounded", because it is, as we mentioned that the meaning of the word "pivot", that is, entering in each other and this is what will happen to the sun as its substance overlaps in each other in order to consume its fuel and extinguish.

Via combining these interpretations we see that they did not much differ from the interpretation of the modern science and the discovery of this phenomenon. The sayings of the state of the sun and the stars can be summarized as follows:

The first: It has been scattered and fallen and there will be no single star but falls on the earth.

The second: its shape is reversed, its light is dimmed of luminosity and appearance towards darkness and blackness, i.e., and if the stars fall and vanished.

These interpretations as a whole revolve around a scientific issue that only the modern science could prove, which is the phenomenon of the stars' death and their extinguished light.

Here, one may ask who taught the Prophet Muhammad (peace be upon him) this scientific information that no one could realize its meanings during that period?

This thing shows the greatness of the Book of Almighty God that it touches on many dazzling cosmic truths.

In this verse, too, a reference to amazing facts in this magnificent universe, i.e. the sky is nothing but one of the miracles of God that appears to us by the influence of the sun's rays on the atmosphere surrounding the Earth, the face of the miracle is: the folding up of the sun may mean its coldness, the extinguishing of its flame, and the contraction of its flaming tongues Which extend from all its aspects now to a thousand miles around it in the space as it starts from the observatories at the time of the eclipse. Besides its impossibility from the 12000 degree of invasive gases by the influence of the extreme heat that reaches which converts all the materials from which the sun is formed into flammable rushed gases.... its impossibility from this state to a freezing state as a crust of earth, and TAQAUUR with no tongues and no extension!

What indicates the miraculousness of the Book of Almighty God is that He mentioned in it many universal scientific facts before hundreds of years. The interpreters were puzzled in interpreting this noble verse but they agreed that God swore by stars of high brightness and lightning and this is what their knowledge had reached in that age. We, in this modern age and before the great developments that have been witnessed by astronomy, the best scientific explanation for these verses is that they talk about the fate of these stars. Science may develop to reveal new things that we did not see today that the Qur'an remains the immortal miracle.

Hence we will count some aspects of the scientific miracle in these verses and summarize them in specific points:

1. Via the previous certain facts, we realize that the most important quality of stars is the falling (losing the luster) as stated by leading astronomers and this is what the Holy Qur'an summarized it for us with only one word: (fell).
2. The linguistic meaning of denaturation (falling) is extinction and fall, and therefore the use of the word "fell" is very appropriate from a scientific point of view to describe the stars and Almighty God knows best.
3. The word "fall and lost their luster" also means in the language "fragmented and vanished". Scientists have found that these stars are destined to disappear and this is what has been proven by modern science of the disappearance and the vanishing of these stars, God knows.

IX. THE STARS THAT RECEDE AND GO STRAIGHT AND HIDE

The Surat continues to describe the massive cosmic events and refer to the oath by the great cosmic scenes summarized by Almighty God in saying: (so verily I call to witness the planets that recede go straight and hide) to reveal to us more than the scientific facts that modern science has proven. After these great discoveries of the astronomers, especially the phenomenon of the black holes, which the Holy Qur'an described (go straight and hide) that runs and moves in space and sweeps everything in its path it creates a great gravity that sweeps everything it encounters through its movement and this appears clearly in these verses of Surat Al-Takwir.

Before starting in the sayings of the interpreters in these verses, it is necessary to know the meaning of these words in the dictionaries:

It is necessary here to start defining these words linguistically before they are taken up by the interpreters:

Al-Khans: Ibn Faris said: "Al-Kha'a, al-Nun and al-Seen are one origin that indicates hide and concealment. They said: Al- KUNAS is to go stealthily, it is said I have stealthily left him and I have stealthily forbidden him his right. AL.KHUNAS: The stars are sweeping in the setting and hiding is a feature of Satan because it hides as God say.." (Ibn Faris: Lexicon of Language Standards: 2/223).

Al-Khalil bin Ahmed Al-Farahidi said: "the planets that go straight and hide: is the contraction and the concealment as it may mean the mentioning of Satan whispers in the heart, so if God is mentioned it hides, that is: it is contracted. Al-Kunnas: is the five planets that run and be quiet in their course until the sunlight is hidden and their Kunusuha (hiding): their disappearance during the day." (Al-Khalil: Al-Ain: 4/199). Al-Khalil said: "The stars that continue in their streams, sweep them in their paces, that is: their absences and their falls." Al- Ain 5/312.

Al-Azhari said: "It is the stars, their going straight or hiding is that they set and as they sweep and get absent as the buck enters its place. He said: Khunas is the plural of Khanis, to hide as bucks sweep. Al-Farrae said: AL-kunnas: are the five stars _ sweep in its course and return and sweep like the bucks." (Al-Azhari: Tahtheeb Al-Lugha: 7/81)

Back the books of the interpreters, it becomes clear that what is meant by the Al-Kunnas is the planets that recede. Al-Hassan and Qatadah said in the interpretation of this verse: "They are the stars that hide during the day. Al-Zajjaj said: They are the plural of Khanis, Al-Jawwari is the plural of Jariya from what runs, and AL-Knnas is the plural form of khanis and kanisah. Al- kunnas is mostly interpreted as the stars because they hide that is to set. Maani Al-Quraan by Al-Zajjaj: 5/291.

Al-Harari interprets it as: " a plural of Jariyah which means moving and and" Alkunnas ": is the plural of kanis, which is the interior of the Alkannas (the hiding); that is: in the veil and the curtain covered byand the way the planets were described as they go straight or hide because they move in their orbits or by themselves as it happens in the phenomena of the sun and the moon. They return until they are hidden in the sunlight i.e. their receding is their return, while seeing the star at the end of the constellation, as it repeated back at the beginning. So its return from the end of the constellation to the beginning of it is the receding and its kunus is their hiding under its light. While the two moons... do not hide in this sense. (Al-Harari: Hadaeq Alrouh walrayhan: 31/167). Sayyid Qutub said: "They

are the planets that are receding and hiding and returned in their astronomical cycle, recede and disappear,... and they are running to hide in their Kanas (hiding) and return from another way. " (Sayyid Qutb: Dhilal Qur'an: 4499).

Al-Barrosari said: "When he explained the planets that hide, saying: (their hiding: is the disappearance under their light) as science did not know that the hole disappears behind the cover of light but in the late twentieth century. This drives me to a quick presentation of the interpretation of the verse of the oath (Alqunnas, Aljawar alkunnas). (Al-Barousari: Tanweer Alathhan: 4/551).

He also said: It means its disappearance under its light, as the energy flows around it through the event horizon and disappears permanently and the term "Alqunnas" is the best expression of the disappearance of energy, and then the black holes remain black even after they are discovered in the future in direct ways!

Via the contemplating on these meanings, it shows that the interpreters did not go too far in their interpretations of these vocabulary from the discoveries of the modern science.

It is necessary to point out to an important issue which is how did the swearing and the definition fit these stars?

It is known that God does not swear unless the matter is great, and through meditation and consideration of these interpretations of the noble Qur'anic verses and their comparison with the sayings of the linguists in the meaning of these verses we see the great and accurate convergence without any doubt between these interpretations as the Holy Qur'an described an accurately and expressed it in a consistent expression of the modern scientific discoveries, which the previous ones did not know. Via describing it as Alqunnas "very hidden" and not appearing. Then he described these stars " the plants that hide", meaning that they are running very quickly and sweeping what they encountered during their rapid movement. This corresponds completely to the discovery of the black holes discovered by the modern science, which are considered the cosmic graveyards that sweep and clean the universe because of their high gravity and these stars are mentioned by Surat Al Takwir. God knows best.

Here we observe more miraculousness because the Holy Qur'an told us about these scientific matters. We may ask everyone who claims that the Qur'an was written by Muhammad (peace be upon him): Where did this prophet (who is illiterate) bring this information from and formulate it in an accurate scientific manner and in conformity with the latest universal discoveries? Unless he is a messenger from Almighty God, then where did he get these scientific facts from and so all of this testifies that he is a messenger from the Greatest Creator.

Hence the Qur'anic swearing is a unique one whose value comes from the greatness of the power of He who swore, that is God, and the one who is sworn by must be great - there is nothing wrong with the multiplicity of understanding or interpretation of the one sworn by. What differs in the previous understanding of it becomes a subject for the diligence and interpretation of the tellers, that may God facilitate a new understanding that accommodates all previous interpretations. Science, here, could have an opinion that is added to the previous ones. Alqunnas is the stars that are receding and the reason behind their receding and sweeping is because they sweep and swallow everything they encounter in their path. Since the ancient times no one on the face of the earth has imagined that there is in the sky stars that recede, sweep and attract all that it encountered on its way. No one has ever expected the existence of such stars as they have never been seen, but the holy Qur'an, the book of the Lord of the

Worlds, tells us about these creatures with an amazing scientific accuracy. Therefore, we conclude that the Qur'an precedes scholars in talking about the universal truths and that these creatures are nothing but a miracle that attests to the ability of the Creator in His universe. Besides this indicates that the Qur'an is the book of the Almighty God and not of human being. God says about his glorious book: (Had it been from other than Allah, they would surely have found therein much discrepancy) {An.Nisa'a: 82}.

X. THE DIMMING OF THE STARS

Once again the Holy Qur'an returns in Surat Al-Mursalat to remind us of the status of the stars and their destiny, in His saying: "then when the stars become dim", [Surat Al-Mursalat: Verse 8] to describe to us another scene of this universe scenes including the scene of the stars dimming and to describe to us the state of these stars, after having begun with the swearing in the His saying: (by winds, sent forth one after another... (to man's profit)) in confirmation of the important matter that the Almighty Allah (God) will tell us about. Firstly, it is necessary to mention the literal meaning of the Almighty saying: (dimmed)

XI. THE LITERAL MEANING OF (TUMISET) (DIMMED)

Ibn Faris said: "(Tumis) al-ta'a, al-mim, and al-sein are an origin indicating something is annihilated and erased. It is said that the line is dimmed, the pace is dimmed. The thing is dimmed and it is dimmed by itself." (Ibn Faris: Lexicon of Language Standards: 3/424). Al-Khalil has explained it by saying: "the stars are dimmed: their light has gone, and so is the moon, a dimmed breaching and a dimmed mountain: There is neither a plant nor a path in it." (Al-Khalil: Al-Ain: 7/222). Al-Azhari said: "the dimming of the planets: their light is gone. It is said: the man dims: to dim: if it spaced out, and the dimmed: is the distant." (Al-Azhari: Tahtheeb Al-Lugha: 12/246). In Lisan Al-Arab Ibn Mandour said ": Dim: dimming : is the lessons and the removal and dimming the way; (Tamasa, yatmisu, tumusan is to study and fade and erase its trail."

Through the combination of these literal definitions, it is clear that the origin of the Tams (Dimming) is to eradicate the effect of something by erasing and removing trails, so it is said: (tamasa) to dim the trail, i.e. that is to obliterate and erase it and such is the Almighty saying: (Our Lord, destroy their wealth), i.e. destroying it and it is said his sight is dimmed such as (even if we want to obliterate them on their eyes) that is to blind them (Al-Kanuji: Fath Al-Bayan fimaqasid AL-Qur'an: 3/142).

Al-Asfahani's vocabulary has revealed the meaning of the altams (dimming): "Dimming is the elimination of trail by erasing." The Almighty God said: (So when the stars are dimmed) (If it had been our will, we could surely have blotted out their eyes...," That is, we removed their light and their picture as the trail is erased.

This is the literal interpretation of the meaning of Altams (the dimmind). Such literal meanings share a one meaning that is they have been erased and annihilated because dimming (altams) is the erasing the indicative trail referring to something corresponding to the His Almighty saying: (when the stars are scattered) i.e their light is off.

Returning to the books of the interpreters, we find that they share the same meaning and we will review the sayings of the interpreters in the noble verse:

Ibn Abbas said: "it is meant that their light is gone."

Mukatil said: "they were transformed from light into black."

Al-Mubarak said: "their light is erased or dimmed."

Mujahid said: Before we dim the faces, that is, away from the path of truth: we return them to their backs, that is, in error.

Al-Sada said: it means: we blind them from the truth and return them to be disbelievers. (Al-Tantawi: Al-Tafsir Al-waseet: 3/175).

Al-Tabari said: Obliteration means dimming and demolishing, and from it is said: "The signs of the road are dimmed, they are obliterated and dimmed and buried in earth." (Al-Tabary: Tafsir Al-Tabari 8/444). Al-Zamakhshari explained it in his saying: (They are scattered) and (faded), and corresponding to his saying (scattered) and dimmed) it is possible to conceal their light and then to be scattered with light. Al-Zamakhri 4/669.

Abu Hayyan Al-Andalusi has mentioned the meaning of the dimmed stars: Their light is gone to become stable with comet of the sky, or via including their entities in dimming, that is their scattering and dimming, or have been deprived of their light and then dispersed without light. (Al-Andalusi: Al-Bahr Al-Muheet: 10/375).

Al-Alusi believes that the stars were made without trails by removing their light or by exterminating themselves and ending them totally. Each of the two things will be and it is not impossible for anything and what the advanced philosophers believe in the matter of these bodies and the impossibility of decomposition and lack of them are weaker than the cobweb. What the contemporaries have claimed of them even if it is not fixed with us but the possibility of dimming is extremely apparent (Al-Alousi: Tafsir Al-Alousi: 15/191).

By reflecting on the sayings of the interpreters in the objective of the meaning of the dimming, we see that they agreed that the meaning is that their light is gone as if they were veiled, their light was erased as a blanket of the book and also the dimming of the wind, that is the dimming of the trails so the wind is dimming.

The Holy Qur'an mentioned many universal and scientific issues in an interesting and confusing way to the minds. It mentioned many scientific facts that the previous ones did not know at the time of the revelation of the Qur'an giving a wide space for the human mind to search in it, scrutiny and study. In order to know the mysteries of the universe which Almighty God made unchanging laws for them, ordered the human to search and realize them and deal with it within the limits of his energy and need. This is an honor for the human being as He commands him to contemplate and reflect on the matter of this universe. The most important objective behind this is to reach to the truth that, in turn, connects him to the greatest Creator. All of this is among the consequences of faith and its results as there is no sense of faith if it is not associated with work and follow-up efforts in order to discover what is missed from our current knowledge so that God will be pleased with us to be the messengers of the knowledge, the mind and the thinking, the love, peace and the delight.

It is crucial to note that the Holy Qur'an is not a book of scientific theories and it did not come to be a text for experimental science. But, rather, it is a method for whole life and a way to incite the mind to work and start up, an evaluation of the society without entering into purely scientific particles and details as identifying these details is left

to the mind after its evaluation and release it to consider and think. It is sufficient to refer to the universal issues because introducing people to the disciplines of the universal sciences is not one of the purposes of Sharia, but rather it aims to make them reach this knowledge with their own minds and their efforts. If they reached them and knew that Quran has known and incited to know them, they will realize that Quran is not a human words and thus opened the door for guidance and belief in Al-mighty God and in this immortal religion. There are many verses in the holy Qur'an that pointed to some universal issues, so modern science came to believe them and they humbled themselves before their miracles which the illiterate prophet told about them.

These signs mentioned in the Qur'anic words have been formulated in a miraculously tight manner understood each age what other ages did not understand of their meanings which are appropriate for this age. There is no other words but the Holy Qur'an that has this feature, because it is the word of the all -knowing and knowledgeable God. Such noble verses cannot be a source of scientific miracle by merely relying on language books without relying on the scientific facts that are available every time by the specialist people... God knows best.

XII. CONCLUSIONS

The noble Qur'anic verses have referred to this strange and complex characteristic of this final stage of the star's life in the Almighty saying: "If the sun is folded up and the stars are dimmed" [Al-Takwir: 1-2], and the Almighty saying: "Nay, verily I swear by the stars, the planets that recede " [Al-Takwir: 16 -17]. The Almighty God said: "When the stars are dimmed" [Al-Mursalat: 8] Indeed, the description of the verses of the sun with folding up and the stars with dimming is very accurate, because the star, even though it is the cause of this hole that extends to the event horizon, but that the star's material is still stacked in the center of the hole. The star itself did not become a hole, but, rather, the star is still present at the center of the hole and its substance, which is piled in this infinite tiny size, is what caused the existence of the hole. Therefore, scientifically, there is a hole and the reason for its formation is the hole maker (driller) and the hole maker is the star in its stacked state.

The Holy Qur'an also referred to the rest of the characteristics of black holes in other verses in Surat Al-Takwir (folding up) in the His Almighty saying: "So do not divide by the dwarfing of the neighborhood of the synagogue" (Al-Takwir: 15-16) (Due to this magnificent gravity that holds the light the black holes are dimmed or hidden as they recede in the sky and sweep everything that comes close to it because of its astounding gravity that nothing escapes from. This confirms to us why the swearing in the piercing star was indeed a great swearing that why God compared it to the sky for its importance at the beginning of Surat Al-Mursalat when the Almighty said: (when the stars are dimmed) Al-Mursalat: 8).

Among the main goals for studying the black holes, in addition to the face of astronomical scientific miracles for them, is that they confirm the validity of the theories explained by the stages that the universe and the stages of the stars' life starting from the great explosion or when heavens and the earth were joined together (as one unit of creation. Such studies are considered a powerful motive to contemplate on the signs of miracle of the great Creator in the universe because these verses are the word of God, the Creator who created this universe with strength, wisdom and knowledge. Besides the black holes are considered one of the most powerful sources of gravitational waves that humans could, in the future, be able to exploit the energy emanating from them, in addition to the tireless

search for knowledge plus the constant search for private knowledge. They are also the most mysterious celestial bodies in the universe and from their study, we can identify the danger points affecting this vast and sprawling universe.

Hence we can identify the scientific astronomical miraculousness in the Holy Qur'an, when the Holy Qur'an spoke about the stars or the black holes before more than 1400 years ago which were discovered scientifically at the present time. This indicates that the Qur'an is nothing but a heavenly book revealed by God to our Prophet Muhammad, peace be upon him; the Prophet Muhammad (nor does he speak from [his own] inclination), but rather is (a revelation revealed) that (no falsehood can approach it from before or behind it: It is sent down by One Full of Wisdom, Worthy of all Praise.)

The astronomical scientific facts that are discovered from time to time make us realize that the scientific miraculousness in the Holy Qur'an is renewed with the development of the science and the modern technology the thing that helps to increase the faith and attachment to the one and only God. This scientific astronomical miraculousness and other miraclosnesses confirm, without any doubt, that the religion of Islam is the heavenly religion of values and increases people's faith and their adherence to this religion. Hence, we find that the scientific miraclosness in the Holy Qur'an has a great affect in confirming the faith in Al-mighty God, and this affects both the believers' hearts and the disbelievers' hearts alike through his amazing majestic authority, since many of those who have been affected by these miraclosness did not find anything but to believe in it and submit to it. We also find that there are quite a few who were affected by the Qur'an, but due to the leadership and stubbornness that have blinded their insight and prevented them from believing in it, despite their testimonies to it as recorded in history. So we find that the influence of the Qur'an on the souls and hearts was not limited to the time of its revelation, even the balances of this influence force did not change despite the progress and prosperity of the sciences and technology.

Finally, we pray to God, the Exalted Almighty, that he would not take us into account if we forgot or mistook in our diligence and what our minds have reached in pursuit of contemplating on his kingdom - the Almighty - and as He, praise be to Him, commanded us.

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