

A COMPARATIVE ANALYSIS OF ISLAM AND ATHEISM IN THE CONTEXT OF BIG BANG THEORY

Hafsa Qadir Buzdar*, Abdul Waheed Tariq**

Abstract:

In this research article “God’s part in creation of the universe” is discussed. Though atheism existed in many shapes at minor level all over the world since ancient times but it spread widely in 16th century in western countries. Most important reason was Church’s falling credibility due to its illogical theories. As the science evolved and presented fact based and observatory theories which could not be rejected, it made the followers of the Church to disbelieve in religion. They started believing in science only; and believed that these were physics laws which created the universe. One step further atheists disliked every religion of the world and disbelieved. Islam portrays the exact sketch of creation of the universe. Modern science proved that the universe is not eternal; it came into existence about 13.7 billion years ago as a result of Big Bang. Before Big Bang it was a singularity. It also proved that the universe is expanding continuously. Including these facts there are so many minds blowing facts described in Holy Quran at such a time when there was no concept of telescopes or modern scientific instruments to tell the details of creation of the universe. Atheists accept these facts but strangely deny the existence of God. All this proves that the Holy Quran is revealed from Allah and each and every statement mentioned in Quran is true.

Keywords: Big Bang, existence of God, creation of the universe, atheism, physics laws, creator, master designer.

Introduction

We would discuss atheism with its brief introduction and its views about God’s part in Big Bang in details, its objections on the existence of God and then Islamic views about creation of the universe with satisfying answers. First of all we would define atheism; the word atheism is derived from ancient Greek word “atheos” which means “without god”^[1]. Basically, a person who does not believe in any god is called atheist. According to oxford dictionary:

“Either the lack of belief that there exists a god, or the belief that there exists none. Sometimes thought itself to be more dogmatic than mere agnosticism, although atheists retort that everyone is an atheist about most gods, so they m²erely advance one step further.”^[3]

* Lecturer Department of English, National University of Modern Languages, Multan Campus

** PHD Scholar in Islamic Studies. Gomal University, D.I. Khan.

Atheism is actually absence of belief in God. It rejects everything which asks to have a belief in God. There are several reasons to convert into atheists. Most important of them is the intense hate from religion. That evolves when religion fails satisfying one's preservations or attempts to ruins one's life by enforcing illogical and unethical limitations.

Everybody in this world believes in death but an increasing number of people, millions all over the world don't believe in life after death. One step further, they say, these are mere scientific laws which cause everything to happen in the universe even in the creation of the universe there were only physics laws which managed Big Bang and created this universe. In other words they don't believe in God rather. This approach is called atheism. Unfortunately the ratio of these non believers is increasing rapidly. Phil Zuckerman^[4] says:

“There's absolutely more atheists around today than ever before, both in sheer numbers and as a percentage of humanity”^[5].

Accurate number of people cannot be calculated who claim to be atheist due to different cultures and languages and also local and religious laws ^[6]. However in global studies it is observed that people without belief in God are from all over the world. And total number of people with no belief in God is increasing. People from China and Russia are leading in this regard ^[7].

According to a 2014 Gallup survey, it is stated that:

"More than four in 10 Americans continue to believe that God created humans in their present form 10,000 years ago, a view that has changed little over the past three decades. Half of Americans believe humans evolved, with the majority of these saying God guided the evolutionary process. However, the percentage who says God was not involved is rising."^[8]

Putting apart other atheistic theories in the corner, in this research article, we shall overlook the atheistic theories about the creation of the universe only in detail; their objections on the existence of God, God's part in creation of the universe and so on.

Significance of Study

This research article is subject to analyze the Islamic and atheistic theories regarding creation of the universe. Detailed discussion of both opinions is presented and analyzed. And true picture of reality is

portrayed on ground facts. In this study it is proved that Allah S.W.T is the originator, master designer and creator of the universe. This study would be beneficial for scholars, atheists and layman. Following is the list of goals which can be achieved by studying this article:

1. Non believers or atheist would find Islam as the real divine revealed religion.
2. They will have no choice to accept the facts that all necessary details about Big Bang were presented by Holy Prophet Muhammad ﷺ fourteen centuries ago.
3. Which definitely mean that Holy Prophet Muhammad ﷺ used to receive true revelation from Allah S.W.T.
4. Those people who hesitate either to believe in God or not would sufficient evidences to make firm believe in Allah S.W.T as the creator of the universe.
5. Muslims believe that Allah S.W.T created this universe but with the current scientific evidences presented in this research article, their belief would become more firm.

Big Bang an unassailable fact

Before 20th century, neither it could be scientifically proved that universe had a beginning nor it could be proved that it existed always. It was just based on different faiths. Then during 20th century after many discoveries it was proved that universe had a beginning. It wasn't always there. First of all Einstein presented his Theory of General Relativity in 1916, which suggested that the universe did not exist always.^[9] This theory was against all historical theories and could not be accepted; so Einstein added a cosmological constant to the equation to get the result of his own choice to prove that the universe existed always and it was eternal^[10]. Four years later in 1920 Georges Lematre^[11] and Edwin Hubble^[12] worked out on the Einstein's General Relativity Theory and proved that his cosmological constant was a mistake and the universe was expanding continuously hence had a beginning^[13]. This theory was unacceptable to majority of astrophysicists. And they felt that Lematre is trying to inject religion into science by saying that universe had a beginning. So they tried hard to defend the eternity of the universe by presenting many theories. But after the discovery of cosmic microwave background rays in 1964, universe with beginning cosmic model became preminent^[14]. Georges Lemaitre found the way to trace the expansion of universe and scientists built an idea of cosmic expansion, later different empirical

evidences were found which strongly favored the Big Bang theory, and then this model was accepted universally. And steady state theory was buried forever^[15]. And this discovery was accepted as a proof of Big Bang. The Big Bang theory has become the biggest fact about universe from earliest known periods.^[16] This model describes that universe came into existence as a result of an explosion about 13.7 billion years ago^[17]. And since then it is expanding at enormous speed in all directions^[18]. It offers a wide range of explanations about phenomena about universe. This cosmic model proved that this universe is not eternal and it came into existence at some specific time. It explains that there was some force which forced it to explode at unimaginable speed and to form the whole universe^[19].

Atheistic theories about Big Bang

At the time when Big Bang theory was accepted all over the world, the discussion turned into this question that who triggered the explosion. There were two major theories presented, one stated it was God who managed all this and the other opinion was presented by atheists that these were nature laws who created the universe and there is no slot of God in creation of the universe. Even physicists and astrophysicists adopted these two opinions. Atheists say that universe came into existence without any divine help. These were only physics laws which caused Big Bang and we should trust only these physics laws. As Alex Filippenko^[20] says:

"The Big Bang could've occurred as a result of just the laws of physics being there and with the laws of physics, you can get universes."^[21]

Another argument which atheists put against existence of God is quantum mechanics, which describes action on a subatomic scale on random fluctuations can produce matter and energy out of nothingness. And it would become a source creating very big things like universes even.

As panelist Seth Shostak^[22] says:

"Quantum mechanical fluctuations can produce the cosmos, if you would just, in this room, just twist time and space the right way, you might create an entirely new universe. It's not clear you could get into that universe, but you would create it. So it could be that this universe is

merely the science fair project of a kid in another universe"^[23]

However Filippenko stated that by saying or believing that the universe was created 13.7 billion years by physics laws nobody can attack on the existence of God. He said:

"I don't think you can use science to either prove or disprove the existence of God"^[24]

Once again, giving another argument against the existence of God, Filippenko says that if we try to find the ultimate origin of everything including the laws of physics which caused the Big Bang to happen and created the universe, cannot help us find the most initial origin. Somebody may say that divine or God created these physics laws, but still the question arises that what is the origin of God itself. So we cannot find the real origin again. In his words:

"The question, then, is, 'Why are there laws of physics? And you could say, 'Well, that required a divine creator, who created these laws of physics and the spark that led from the laws of physics to these universes, maybe more than one. But that answer just continues to kick the can down the road, because you still need to explain where the divine creator came from. The process leads to a never-ending chain that always leaves you short of the ultimate answer; the origin of the laws of physics remains a mystery for now, one that we may never be able to solve. The 'divine spark' was whatever produced the laws of physics, and I don't know what produced that divine spark. So let's just leave it at the laws of physics."^[25]

Most renowned astrophysicist of this century Stephen Hawking also denies God's part in creation of the universe by saying:

"Because there is a law such as gravity, the universe can and will create itself from nothing. Spontaneous creation is the reason there is something rather than nothing, why the universe exists, why we exist. It is not necessary to invoke God to light the blue touch paper and set the universe going"^[26]

Stephen Hawking does not deny the role of God in creating the universe in his early work. As he says:

"One can imagine that God created the universe at literally any time in the past. On the other hand, if the universe is

expanding, there may be physical reasons why there had to be a beginning. One could imagine that God created the universe at the instant of the Big Bang, or even afterwards in just such a way as to make it look as though there had been a Big Bang, but it would be meaningless to suppose that it was created before the Big Bang. An expanding universe does not preclude a creator, but it does place limits on when he might have carried out his job!" [27]

At another point he says:

"However, if we discover a complete theory, it should in time be understandable by everyone, not just by a few scientists. Then we shall all, philosophers, scientists and just ordinary people, be able to take part in the discussion of the question of why it is that we and the universe exist. If we find the answer to that, it would be the ultimate triumph of human reason -- for then we should know the mind of God." [28]

By observing and analyzing most of the atheistic theories about creation of the universe we can conclude that

1. Atheists deny the existence of God without any evidence.
2. Atheists claim that there is no evidence in favor of the existence of God. But strangely they don't observe any evidence against the existence of God as well.
3. They claim that universe was created as a result of Big Bang, while they did not observe it to happen by themselves.
4. They claim that these were physics laws which initiated Big Bang, while on other hand they admit that physics laws did not exist before the Big Bang.
5. They are still unable to find the purpose of creation of this universe and human beings as well.

In coming lines, after describing the theistic theories and Islamic cosmic model in detail, we shall try to find the answers of unanswered questions and explanations of contradictory astrophysicist's theories in the light of Islamic theories.

Logical answers by renowned astrophysicists to atheists

Apart from being religious, there are number of astrophysicists who believe that without divine help universe can't be created. The most important thing about Big Bang theory is that it states that it was not an

explosion in some empty part of space at so far moment in the past. Rather time, energy and space were also created at this Big Bang. There was no space at all before Big Bang^[29]. So, when there was nothing including time and space then where these physics laws came from? All this means that there was some supernatural power which triggered the Big Bang. There is no any scientific evidence in favor or against the happening of Big Bang but there are many scientific observations like cosmic microwave background rays and red shift or Doppler effect which only means that there was a Big Bang at specific time. As Dr. Robert Jastrow^[30] stated this fact in these words:

“For the scientist who has lived by his faith in the power of reason, the story ends like a bad dream. He has scaled the mountains of ignorance; he is about to conquer the highest peak; as he pulls himself over the final rock, he is greeted by a band of theologians who have been sitting there for centuries.”^[31]

At another place Dr. Robert Jastrow says:

“Astronomers now find they have painted themselves into a corner because they have proven, by their own methods, that the world began abruptly in an act of creation to which you can trace the seeds of every star, every planet, every living thing in this cosmos and on the earth. . . .That there are what I or anyone would call supernatural forces at work is now, I think, a scientifically proven fact”^[32]

Another renowned astrophysicist Gerald Schroeder^[33] explains this logic in these words:

“The Grand Design breaks the news, bitter to some, that ... to create a universe from absolute nothing God is not necessary. All that is needed are the laws of nature. ...There can have been a Big Bang creation without the help of God, provided the laws of nature pre-date the universe. Our concept of time begins with the creation of the universe. Therefore if the laws of nature created the universe, these laws must have existed prior to time; that is the laws of nature would be outside of time. What we have then is totally non-physical laws, outside of time, creating a universe. Now that description might sound somewhat familiar. Very much like the biblical concept of

God: not physical, outside of time, able to create a universe."^[34]

While Paul Davies^[35] emphasizing on the existence of God says:

"There is no compelling need for a supernatural being or prime mover to start the universe off. But when it comes to the laws that explain the Big Bang, we are in murkier waters."^[36]

By observing many of atheistic cosmic theories and logical arguments against these theories by non Muslim theistic astrophysicists; it can be concluded that:

1. Universe had a beginning.
2. It was created as a result of Big Bang.
3. God created the universe.
4. But the details about creation of the universe are not present in religious literature other than Islam complying with Big Bang theory.
5. So, other religions than Islam are unable to answer in detail the questions about the creation of the universe.

Islamic views on the creation of the universe:

As it is discussed in detail in earlier lines that the universe was created as a result of Big Bang, and this theory is considered to be the biggest truth of universe. Now in coming lines we shall discuss Islamic views about creation of the universe and its connection with Big Bang theory.

About creation of the universe it is mentioned in the Quran in these words:

بَدِيعُ السَّمٰوٰتِ وَالْاَرْضِ ۗ اَنْ يُّكُوْنَ لَهُ وَلَدٌ وَلَمْ تَكُنْ لَهٗ صَاحِبَةً ۗ وَخَلَقَ كُلَّ شَيْءٍ ۚ وَهُوَ بِكُلِّ شَيْءٍ عَلِيْمٌ ﴿٣٧﴾

"To Him is due the primal origin of the heavens and the earth: How can He have a son when He hath no consort? He created all things, and He hath full knowledge of all things."

At another place, it is mentioned in these words:

اَوَلَيْسَ الَّذِي خَلَقَ السَّمٰوٰتِ وَالْاَرْضَ بِقَدِيْرٍ عَلٰٓى اَنْ يَّخْلُقَ مِثْلَهُمْ ۗ بَلٰى ۚ وَهُوَ الْخَلْقُ الْعَلِيْمُ ﴿٣٨﴾

"Is not He Who created the heavens and the earth able to create the like thereof?" - Yea, indeed! for He is the Creator Supreme, of skill and knowledge (infinite)!"

Allah S.W.T does not need resources to produce or create anything. He simply says it to be and order is obeyed. As mentioned in Quran:

إِنَّمَا أَمْرُهُ إِذَا أَرَادَ شَيْئًا أَنْ يَقُولَ لَهُ كُنْ فَيَكُونُ ﴿٣٩﴾

“Verily, when He intends a thing, His Command is, "be", and it is!”

There is clear proof in above mentioned Quranic verses that the universe has a beginning. And Allah S.W.T is behind its creation. And all that Allah needs to do is just to order “Be” and it is instantly. This can clearly explain the question that what triggered the Big Bang explosion which created the whole universe.

And most important thing of Big Bang; as today’s astrophysics has accepted that all of the matter of the universe was a single entity, which exploded and in result of Big Bang universe was created, same information was delivered by Holy Prophet Muhammad ﷺ fourteen centuries ago, and it is mentioned in Quran in these words:

أَوَلَمْ يَرِ الَّذِينَ كَفَرُوا أَنَّ السَّمَوَاتِ وَالْأَرْضَ كَانَتَا رَتْقًا فَفَتَقْنَاهُمَا ۖ وَجَعَلْنَا مِنَ الْمَاءِ كُلَّ شَيْءٍ حَيٍّ ۖ أَفَلَا يُؤْمِنُونَ ﴿٤٠﴾

”Do not the Unbelievers see that the heavens and the earth were joined together (as one unit of creation), before we clove them asunder? We made from water every living thing. Will they not then believe?”

In this verse, two Arabic words, rataq and fataq explain the whole theory of Big Bang. The word, “rataq” is translated as “entity”, “something joined tightly” or “closed up”. When in context of Big Bang, we can clearly imagine that it was that specific singularity which was infinitely hot and dense. Allah S.W.T ordered it to “Be” and this entity exploded, for which Arabic word “fataq” is used in this verse. So every galaxy, stars, moons and planets came into existence. All these details were provided by the Holy Prophet Muhammad ﷺ at such a time when there was no concept of telescopes. This clearly explains that Muhammad ﷺ received divine revelation from Allah, the true and only Creator of this universe. It was the time when there were no such modern scientific techniques to get advanced information about universe. But astonishingly the Holy Prophet Muhammad ﷺ recited this verse to his companions to inform about expansion of the universe:

وَالسَّمَاءَ بَنَيْنَاهَا بِأَيْدٍ وَإِنَّا لَمُوسِعُونَ ﴿٤١﴾

“And the heaven We created with might, and indeed We are (its) expander.”

In this verse we can easily judge that universe is expanding, it is Allah who is expanding the universe, and informed the mankind that it is Allah who created everything in the universe. At the time of the revelation of the Quran, the word "space" meant, and people used the word "heaven" to refer to what exists above the Earth. In the above verse, the word "heaven" is referring to space and universe. The verse points out that the universe is expanding, just as Hubble's Law states.

Today's astrophysics claims about Big Bang only behalf of some very strong "signs", as evidence. Then why not these signs should be considered as evidences of existence of God? While it is mentioned in Quran as:

وَجَعَلْنَا السَّمَاءَ سَقْفًا مَحْفُوظًا ۗ وَهُمْ عَنْ آيَاتِهَا مُعْرِضُونَ ﴿٤٢﴾

"And We have made the heavens as a canopy well guarded: yet do they turn away from the Signs which these things (point to)!"

It is only Allah who created the universe with all of its contents, As Allah S.W.T says in Holy Quran:

وَهُوَ الَّذِي خَلَقَ اللَّيْلَ وَالنَّهَارَ وَالشَّمْسَ وَالْقَمَرَ ۗ كُلٌّ فِي فَلَكٍ يَسْبَحُونَ ﴿٤٣﴾

"It is He Who created the Night and the Day, and the sun and the moon: all (the celestial bodies) swim along, each in its rounded course."

Strangely, all these facts, such as the creation of the universe from a singularity, cleavage of that singularity with ascendance and expansion of the universe are mentioned in Holy Quran and today's science had no choice except to accept it. Alike these facts, there is another universal truth, and that is that Allah is the Creator of the universe. It should also be accepted.

In this research article we have proved that Allah is the Creator of the universe. He is the master designer of the universe. And Islam is the religion which is solely revealed from Allah S.W.T to Holy Prophet Muhammad ﷺ for the betterment of mankind. Islamic statements about creation of the universe are true and today's science is accepting and proving these facts. Atheism is some sort of abnormality which is spreading because of ignorance from true religion. Keeping these facts in mind, every Muslim should spare some time to study Islamic literature to explore the facts and gain the guidance from Quran, it's not enough to born in Muslim family. Islam is complete code of life; the need is to

understand it in the context of modern sciences, so Muslims should be equipped with modern scientific knowledge as well. Atheism is spreading mostly in those areas where religions can't answer its reservations; it is only Islam which can satisfy its reservations, so preaching of Islam should be practiced.

Conclusion:

Before 1900s most of the old age theories specially scientific and philosophical theories stated that this universe is eternal and it would last forever. With the passage of time as the discoveries about universe and inventions of new concepts to acquire more authentic sources about universe came into existence. Then these theories were rejected. And finally Big Bang theory made a clear picture of creation of universe. It was wide spread and universally accepted theory. Before Big Bang theory when atheism believed in steady state universe, religious theories except Islam though admitted that universe was created by God but the explanations about details of this creation were out of logic. It was Islam which depicted the true picture of everything including creation of the universe. In west church was all in all until seventeenth century. Nobody was permitted to talk against Church, even with proofs. Many scientists were hung over due to going in research on the issues which church already had decided over. Slowly the logical reasoning overcame that social issue and scientific theories started being believed even those which were against Church. When the true face of church came in front of common man, it caused a surge hate against religion in his mind and at that time majority of society got fed up from religion and believed in only science. It was the time when atheism was wide spread in west and religion was kept in a corner.

All the replacing scientific theories about creation of the universe including Big Bang were clear in their respective context. And amazingly all this was already described by Holy Prophet Muhammad ﷺ. The only need is to include latest scientific subjects in the syllabus of our religious institutions so that correct interpretation of Islamic theories be made and spread and preached everywhere. Atheism is spreading only because those people don't have correct and clear vision of Islam in their minds. While mostly in Islamic society the institutes which offer scientific knowledge lack Islamic knowledge and vice versa. Islam clearly describes

the details of creation of universe and mankind. Islam described these facts fourteen centuries ago and today science discovered these facts on its own observations. Hence it is proved that Islamic theories about creation of universe are truth based. In the light of facts we discussed above, we can conclude that:

1. All those theories which stated that universe is eternal are false.
2. The universe was created as a result of an explosion which is named as Big Bang.
3. Neither there is physical scientific evidence against Big Bang theory nor in favor of this theory.
4. There were some observations such as cosmic background microwave radiation which let the astrophysicists imagine and portray the Big Bang theory.
5. In the light of these scientific theories the universe has a beginning as well as an ending point.
6. Theories regarding creation of universe presented by other religions than Islam were rejected with solid reasons by science.
7. Islam presented the perfect cosmic model, where Allah is the only Creator of this universe.
8. Most of the aspects of Islamic cosmic model are proved true by scientific observations, like explosion from a singularity and expansion of the universe etc.
9. The rest of Islamic theories like recreation of the universe after Qayamat and life after this life and judgment day etc; which science until now is unable to verify are undeniable by scientific laws as well.
10. Although there are no scientific evidences which can prove the existence of God. But there are many observations which prove that there is a Master Designer, the Creator, Allah. So why not to accept Allah as the Creator?
11. So, logically, when science has proved many of Islamic theories to be true and none of them could be rejected on scientific reasons then it should accept the remaining Islamic theories also open heartedly.

References

[1] Drachmann, A. B. *Atheism in Pagan Antiquity*. Chicago: Ares Publishers. 1922 page 29

[2]

- [3] Simon Blackburn. *atheism. The Oxford Dictionary of Philosophy* (2008 edition.). Oxford University Press.
- [4] A professor of sociology and secular studies at Pitzer College in Claremont, California
- [5] Zuckerman, Phil, *Living the Secular Life: New Answers to Old Questions* Penguin Press, 2014; page:276
- [6] Zuckerman, Phil, "*Atheism: Contemporary Rates and Patterns*", *Cambridge Companion to Atheism*, 2007 pp. 47-66
- [7] http://www.adherents.com/Religions_By_Adherents.html#Nonreligious retrieved Mar 7, 2018.
- [8] Newport, Frank (June 2, 2014). "In U.S., 42% Believe Creationist View of Human Origins". *Gallup.Com*. Omaha, NE: Gallup, Inc. Retrieved Aug 2, 2014.
- [9] O'Connor, J.J. and Robertson, E.F. (1996), *General relativity. Mathematical Physics index*, School of Mathematics and Statistics, University of St. Andrews, Scotland. Retrieved 2015-02-04.
- [10] Pais, Abraham (1982), *'Subtle is the Lord ...' The Science and life of Albert Einstein*. Oxford University Press, page 73
- [11] Georges Lemaître, (1894-1966), Belgian cosmologist, Catholic priest, and father of the Big Bang theory.
- [12] Edwin Powell Hubble (1889 – 1953) was an American astronomer.
- [13] Hubble, Edwin (1929). "A relation between distance and radial velocity among extra-galactic nebulae" page 128
- [14] The Planck Collaboration, *Planck 2013 results. XXVII. Doppler boosting of the CMB*
- [15] Kragh, Helge (1996). *Cosmology and Controversy*. Princeton University Press. pp. 318, 319
- [16] Overbye, Dennis (20 February 2017). "Cosmos Controversy: The Universe Is Expanding, but How Fast?". *New York Times*. Retrieved 21 February 2017.
- [17] Silk, Joseph (2009). *Horizons of Cosmology*. Templeton Press. page. 208.
- [18] Singh, Simon (2005). *Big Bang: The Origin of the Universe*. Harper Perennial. page. 560.
- [19] PLANCK. ESA. "Planck reveals an almost perfect universe". Retrieved 2017-04-15.
- [20] An astrophysicist at University of California
- [21] Filippenko spoke on Saturday (June 23, 2017) at the SETICon 2 conference, during a panel discussion called "Did the Big Bang Require a Divine Spark?" <https://www.space.com/16281-big-bang-god-intervention-science.html>
- [22] senior astronomer at the non-profit Search for Extraterrestrial Intelligence (SETI) Institute
- [23] By Mike Wall, <https://www.space.com/16281-big-bang-god-intervention-science.html> Senior Writer | Jan 24, 2018
- [24] Ibid
- [25] Ibid

-
- [26] *Stephen Hawking and Leonard Mlodinow, The Grand Design*, Bantam Books, New York 2010, Page 176
- [27] *Stephen Hawking, A Brief History of Time*, Bantam books, New York 1988, pp. 8-9.
- [28] *A Brief History of Time* - page 193
- [29] *A Brief History of Time* - page 136
- [30] Robert Jastrow (September 7, 1925 – February 8, 2008) was an American astronomer and planetary physicist. He was a NASA scientist, populist author and futurist.
- [31] Dr. Robert Jastrow *God and the Astronomers* W.W. Norton, New York, 1978, page. 116
- [32] A Scientist Caught Between Two Faiths: Interview with Robert Jastrow,” *Christianity Today*, Aug 6, 1982, pp.15, 18
- [33] Gerald Lawrence Schroeder is an Orthodox Jewish physicist, author, lecturer and teacher at College of Jewish Studies AishHaTorah's Discovery Seminar, Essentials and Fellowships programs and Executive Learning Center, who focuses on what he perceives to be an inherent relationship between science and spirituality.
- [34] Gerald Schroeder. *"The Big Bang Creation: God or the Laws of Nature"*. Retrieved 2015-05-01.
- [35] Paul Charles William Davies, AM (born 22 April 1946) is an English physicist, writer and broadcaster, a professor at Arizona State University as well as the Director of BEYOND: Center for Fundamental Concepts in Science.
- [36] *Paul Davies (2010-09-04). "Stephen Hawking's big bang gaps". The Guardian. London. Retrieved on Feb 12, 2018*
- [37] Holy Quran (06:101)
- [38] Holy Quran (36:081)
- [39] Holy Quran (036:082)
- [40] Holy Quran (021:030)
- [41] Holy Quran (051:047)
- [42] Holy Quran (021:032)
- [43] Holy Quran (021:033)