

**COPTIC ORTHODOX PATRIARCHATE  
SAINT MARY'S COPTIC ORTHODOX CHURCH**

388 Ottawa St. S. Kitchener, ON Canada N2M 3P4

www.stmaryscopticorthodox.ca E-mail: athanas@sympatico.ca  
Father Athanasius Iskander (519) 740-7627 Fax (519) 621-1444

VOLUME XVII

MARCH 2007

NUMBER 1

## **SCIENCE, GENESIS AND CREATION**

Anyone working with Coptic youth will recognize that atheism is a major problem among many of them. It is a problem that they are reluctant to talk about to their father in confession. They may talk about it to a servant whom they feel comfortable talking to, or to a friend, who usually confides in the priest asking him: "What should I do?" But to know the extent of the problem, one has to visit their internet chat rooms, where the extent of the problem becomes clear.

There are many reasons for this, first among them is the secular educational system. Overzealous science teachers, confuse and even intimidate Christian students, frustrating them, because they cannot win an argument with them. Peers, who were brought up with no notion about God also dare them to "prove" that God exists.

The most single factor that leads to atheism or at least lingering doubts about the existence of God is the teaching of Darwin's theory of evolution. Unfortunately, those overzealous teachers present this unproven theory as a scientific fact, proven by scientific evidence, which is totally false.

The series of articles that starts with this issue is based on a series of PowerPoint presentations I gave two years ago.

*Father Athanasius Iskander*

# **SCIENCE, GENESIS AND CREATION**

## **(1) IN THE BEGINNING**

**In the beginning God created the heaven and the earth. (Gen 1:1)**

The Bible starts with these words, which for centuries were accepted by Christians without any doubt whatsoever. Eminent scientists, who became pillars of scientific knowledge believed in them as well as ordinary people as we shall see from the following examples:

**JOHANNES KEPLER** (December 27, 1571 – November 15, 1630)

Kepler was a German mathematician, astronomer and astrologer, and a key figure in the 17th century astronomical revolution. He is best known for his laws of planetary motion, based on his works *Astronomia Nova*, *Harmonice Mundi*, and *Epitome of Copernican Astronomy*.

Kepler incorporated religious arguments and reasoning into his work, motivated by the religious conviction that God had created the world according to an intelligible plan which was accessible through the natural light of reason.<sup>1</sup>

Deeply spiritual all his life, he said, “Let also my name perish if only the name of God the Father is elevated.” On November 15, 1630, as he lay dying, he was asked on what did he pin his hope of salvation. Confidently and resolutely, he testified: “Only and alone on the services of Jesus Christ. In Him is all refuge, all solace and welfare.”<sup>2</sup>

**BLAISE PASCAL** (June 19, 1623–August 19, 1662)

Pascal was a French mathematician, physicist, and religious philosopher. He was a mathematician of the first order. Pascal helped create two major new areas of research. He wrote a significant treatise on the subject of projective geometry at the age of sixteen and corresponded with Pierre de Fermat from 1654 and later on probability theory, strongly influencing the development of modern economics and social science.

In Canada, there is an annual math contest named in his honour.

---

<sup>1</sup>[http://en.wikipedia.org/wiki/Johannes\\_Kepler](http://en.wikipedia.org/wiki/Johannes_Kepler)

<sup>2</sup>[http://creationsafaris.com/wgcs\\_1.htm](http://creationsafaris.com/wgcs_1.htm)

The Pascal Contest is open to any student in Canada who is fourteen years or under and is in grade nine or lower.<sup>1</sup> Here are some quotes:

If God does not exist, one will lose nothing by believing in him, while if he does exist, one will lose everything by not believing.

In every man's heart there is an emptiness that only God can fill with his son Jesus Christ.

We understand nothing of the works of God unless we take it as a principle that He wishes to blind some and to enlighten others.

Go to confession and communion; you will find it a relief and a strengthening.<sup>2</sup>

**ROBERT BOYLE** (January 25, 1627 - December 30, 1691)

Boyle was the first prominent scientist to perform controlled experiments and to publish his work with elaborate details concerning procedure, apparatus and observations. He assembled what we would today call a "research group", developed a key piece of apparatus - the vacuum pump, was instrumental in founding the Royal Society, and deserves at least partial credit for the famous gas law which bears his name.

Boyle was elected president of the Royal Society, but declined the honour because the required oath violated his religious principles.<sup>3</sup>

Convinced that Christianity was the religion instituted by God, Boyle was concerned that the Bible should be widely promulgated and he devoted time and energy to having it translated into a variety of languages such as Irish, Turkish, and various native American languages.

Here is a quote attributed to him:

---

<sup>1</sup>[http://en.wikipedia.org/wiki/Blaise\\_Pascal](http://en.wikipedia.org/wiki/Blaise_Pascal)

<sup>2</sup>[http://en.wikiquote.org/wiki/Blaise\\_Pascal](http://en.wikiquote.org/wiki/Blaise_Pascal)

<sup>3</sup><http://www.woodrow.org/teachers/ci/1992/Boyle.html>

The Christian religion brings mankind diverse positive Benefits, such as a more clear and extensive knowledge of God, and divine things; the Remission of Sins; the Favour of God; several graces and virtues suitable to men's respective needs and conditions; and above all, a happy Immortality in the Life to come.<sup>1</sup>

**SIR ISAAC NEWTON** (4 January 1643 – 31 March 1727)

Undoubtedly, the father of Physics, the law of gravity became Sir Isaac Newton's best-known discovery. Newton warned against using it to view the universe as a mere machine, like a great clock. He said:

Gravity explains the motions of the planets, but it cannot explain who set the planets in motion. God governs all things and knows all that is or can be done.

This most beautiful system of the sun, planets, and comets, could only proceed from the counsel and dominion of an intelligent Being. ... This Being governs all things, not as the soul of the world, but as Lord over all; and on account of his dominion he is wont to be called Lord God "*Pantokratòr*", or "Universal Ruler". The Supreme God is a Being eternal, infinite, absolutely perfect.

Opposition to godliness is atheism in profession and idolatry in practice. Atheism is so senseless and odious to mankind that it never had many professors.

Though he is better known for his love of science, the Bible was Sir Isaac Newton's greatest passion. He devoted more time to the study of Scripture than to science, and said, "I have a fundamental belief in the Bible as the Word of God, written by those who were inspired. I study the Bible daily." He spent a great deal of time trying to discover hidden messages within the Bible.<sup>2</sup>

---

<sup>1</sup>STANFORD ENCYCLOPEDIA OF PHILOSOPHY  
<http://plato.stanford.edu/entries/boyle/>

<sup>2</sup>[http://en.wikipedia.org/wiki/Isaac\\_Newton's\\_religious\\_views](http://en.wikipedia.org/wiki/Isaac_Newton's_religious_views)

One of his books titled “The prophesies of Daniel and the Apocalypse” has been recently reprinted. It is available on Amazon.com for \$14.95. An electronic copy is also available online for free.

In a review of this book published in *Nature*, August 19, 2004, Geoff Brumfiel wrote:

In the past many thought that Newton pursued religion only in his spare time, or that the majority of his religious work, had been coming from others, ... but these writings show his theological work was carefully planned and often related to his work in mathematics and physics.

Newton’s religion and science may have been tied together by belief in absolute truth. Newton used testable hypotheses to find truth in nature, and believed that his religious writings revealed the truth about God.

Newton apparently spent 42 years researching this work. I read it, and my own review is this: It is too protestant!

### **MICHAEL FARADAY** (September 22, 1791 – August 25, 1867)

Called the Father of Electrical Engineering and the greatest scientist of his day, Michael Faraday came from a humble background and received little formal education. In his lifetime he achieved a great amount in many spheres of scientific discovery whilst also being a brilliant and charismatic lecturer. He is best known for formulating the laws of electromagnetic induction, and laying the foundations necessary to make electric motors, dynamos and transformers. On top of this he devised the laws of electrolysis, was the first to liquefy chlorine, to isolate benzene and he also discovered magneto-optical effects. Through all of this he was a deeply religious and humble man whose scientific knowledge and religious beliefs were in harmony.

He is famous for the immense number of discoveries he made and their importance yet he was also humble, taking his Christian faith very seriously. In doing this he donated a portion of his income to the church and also spent time visiting the sick.<sup>1</sup>

---

<sup>1</sup>[http://www.radio-electronics.com/info/radio\\_history/gtnames/faraday.php](http://www.radio-electronics.com/info/radio_history/gtnames/faraday.php)

All of these famous scientists not only believed in God as a Creator and Ruler of the universe, but also were good Christians who went to Church and performed good deeds.

**CHARLES DARWIN** (12 February 1809 – 19 April 1882)

Unfortunately, All of this changed when in 1859, Charles Darwin published his theory “On the Origin of Species”

Scientists embraced the new theory without really evaluating the evidence for its validity. This led to the divorce between science and religion.

According to Darwin’s theory, God did not create the world, it just came into being by chance and “survival of the fittest”.

**THE STEADY STATE THEORY:**

Since Darwin’s fantastic theory could not be statistically viable, that is to say, the odds of this happening were found to be one in a trillion to the power of trillion, “scientists” came up with another theory to support Darwin’s theory, which they called the “Steady State Theory”. According to this theory, the universe is eternal! And, since it is eternal, then statistical probabilities do not apply!

Summarizing the belief of the scientific community, the French philosopher George Politzer wrote:

The Universe was not a created object, if it were, then it would have to be created instantaneously by God and brought into existence from nothing. To admit creation, one has to admit, in the first place, the existence of a moment when the Universe did not exist and that something came out of nothingness. This is something to which science cannot accede.<sup>1</sup>

**1915: ALBERT EINSTEIN:** General Theory of Relativity

In 1915, Albert Einstein postulated his General Theory of Relativity. We are not here to discuss this theory, which has some truths but also has some problems, but let us zero in on a set of equations which are called “The Field Equations”. By using these equations, one could

---

<sup>1</sup>George Politzer, Principes Fondamentaux de Philosophie, Editions Sociales, Paris, 1954, p. 84

ultimately trace the origin of the universe back in time to some sort of beginning (ouch!) Of course no respectable scientist would admit to such preposterous thing, So what did Einstein do? Before publishing his cosmological inferences, Einstein introduced a cosmological constant, a “fudge factor,” to yield a static model for the universe. Einstein later considered this to be the greatest blunder of his scientific career.<sup>1</sup>

### **1919: SIR ARTHUR EDDINGTON:**

This British Scientist experimentally confirmed Einstein's general theory of relativity in 1919. This gave another boost to the Steady State Theory and to Darwin’s Theory of Evolution.

However, recent historical examinations of the case have shown that the raw data were inconclusive, and that Eddington was arbitrarily selective in choosing which results to use.<sup>2</sup>

You see, both with Einstein and Eddington nothing mattered but propping the theory of evolution up even at the expense of twisting scientific truth. Twelve years later Eddington justifies this by writing:

Philosophically, the notion of a beginning to the present order is repugnant to me, .... We must allow evolution an infinite amount of time to get started.

### **1922: ALEXANDER FRIEDMANN**

Einstein's fudged solution remained unchallenged until 1922 when the Russian mathematician Alexander Friedmann began producing compelling cosmological models based on Einstein's equations but without the extra quantity (the Fudge Factor)!<sup>3</sup> Friedman’s work was criticized by Einstein.

### **1927: GEORGES LEMAÎTRE: The “Big Bang”**

Father Georges-Henri Lemaître (July 17, 1894 – June 20, 1966) was a Belgian Roman Catholic priest, honorary prelate, professor of physics and astronomer. In an article published in 1927 in the *Annals of the*

---

<sup>1</sup><http://www.leaderu.com/real/ri9404/bigbang.html>

<sup>2</sup>[http://en.wikipedia.org/wiki/Arthur\\_St Stanley\\_Eddington](http://en.wikipedia.org/wiki/Arthur_St Stanley_Eddington)

<sup>3</sup><http://www.astronomycafe.net/anthol/fudge.html>

*Scientific Society of Brussels*, under the title “A homogeneous Universe of constant mass and growing radius accounting for the radial velocity of extragalactic nebulae.”, he presented the new idea of an expanding Universe. He proposed what became known as the Big Bang theory of the origin of the Universe, although he called it his “Hypothesis of the primeval atom”. He basically proposed that the universe began with the explosion of a primeval atom. He based his theory, first published in the pages of *Nature* in 1931, on the laws of relativity set forth by Einstein, among others, although at the time Einstein believed in an eternal universe and had previously expressed his skepticism about Lemaitre’s original 1927 paper.<sup>1</sup>

### **1929: EDWIN HUBBLE:**

Hubble was a brilliant American Astrologer, who used a giant 100 inch (2.5 metre) wide telescope to study the stars. He made a monumental discovery. He discovered that our galaxy which is called the milky way was not the only galaxy in the Universe but there were billions of other Galaxies. A new science was born called cosmology And Hubble became known as the Father of Cosmology.

But he also made an even more monumental observation: “The distant galaxies are moving away from us and from each other with increasing speed.” This observation validated Lemaître’s earlier theory of an expanding universe (the Big Bang Theory).

He consulted Einstein Who came to him and looked through the giant telescope and realized the mistake he made when he fudged his field equations. It became apparent that the motivation for introducing the cosmological constant seemed contrived. Einstein reasoned that “If the universe is rapidly expanding (like a balloon) then it must have had a definite beginning at some point in the distant past.” Admitting his blunder, Einstein retracted the “Fudge Factor” in 1932.<sup>2</sup>

Einstein ultimately gave grudging acceptance to what he called “the necessity for a beginning” and eventually to “the presence of a superior reasoning power.” But he never did accept the reality of a personal

---

<sup>1</sup>[http://en.wikipedia.org/wiki/Georges\\_Lema%C3%AEtre](http://en.wikipedia.org/wiki/Georges_Lema%C3%AEtre)

<sup>2</sup><http://www.astronomycafe.net/anthol/fudge.html>

God.<sup>1</sup>

Arthur Eddington, the scientist who verified Einstein's theory again by manipulating the results of his observations, later had this to say about Edwin Hubble's monumental discovery in 1929:

It will perhaps be said that the conclusion to be drawn from these arguments from modern science, is that religion first became possible for a reasonable scientific man about the year 1929.

### **1948: GEORGE GAMOW (March 4, 1904 – August 19, 1968)**

This Ukrainian scientist studied with Alexander Friedmann (see above). He did some work on George Lemaître's Big Bang Theory. He essentially believed that the Big bang was an intense concentration of pure energy. It was the source of all the matter that now exists in the universe. The theory predicts that all the galaxies in the universe should be rushing away from each other at high speeds as a result of that initial big bang.

A dictionary definition of the hot big bang theory is "the entire physical universe, all the matter and energy and even the four dimensions of time and space, burst forth from a state of infinite or near infinite density, temperature, and pressure."<sup>2</sup>

He published a paper in *Physical Review*, *April 1, 1948*, in which he made an estimate of the strength of residual cosmic microwave background radiation (CMB). He predicted that the afterglow of the Big Bang would have cooled down after billions of years, filling the universe with a radiation five degrees above absolute zero.

Astronomers and scientists did not make any effort to detect this background radiation at that time, due to both a lack of interest and the immaturity of microwave observation. Consequently, Gamow's prediction in support of the big bang was not substantiated until:<sup>3</sup>

### **1965: PENZIAS AND WILSON**

In 1965 Arno A. Penzias and Robert W. Wilson of Bell Laboratories

---

<sup>1</sup><http://www.leaderu.com/real/ri9404/bigbang.html>

<sup>2</sup><http://www.leaderu.com/real/ri9404/bigbang.html>

<sup>3</sup>[http://en.wikipedia.org/wiki/George\\_Gamow](http://en.wikipedia.org/wiki/George_Gamow)

were testing a sensitive horn antenna which was designed for detecting low levels of microwave radiation. They discovered a low level of microwave background “noise”, like the low level of electrical noise which might produce “snow” on a television screen. After unsuccessful attempts to eliminate it, they pointed their antenna to another part of the sky to check whether the “noise” was coming from space, and got the same kind of signal.

Finding no explanations for the origin of the noise, they finally concluded that it was indeed coming from space, but that it was the same from all directions.<sup>1</sup>

They later realized that they had accidentally confirmed George Gamow’s predictions made 17 years earlier. They discovered the “echo” of the Big Bang.

Penzias and Wilson were awarded the Nobel Prize in 1978 for their discovery. Later on, Penzias writes this about his discovery:

Astronomy leads us to a unique event, a Universe which was created out of nothing, one with the very delicate balance needed to provide exactly the conditions required to permit life, and one which has an underlying, one must say, supernatural plan.

Slowly but surely, scientific discoveries were chipping away at the so called “theory of evolution”.

### **1992: NASA’S COBE (Cosmic Background explorer)**

One of the predictions that were made if the Big Bang theory is to stand, is that the background radiation should be measurable as a temperature, and that there should be small variations of temperature on the order of one part in 10,000.

For years, NASA, tried several times to measure the temperature of this background radiation but, according to them: “None of our previous instruments were sensitive enough to measure this small variation.”

COPE (Cosmic Background explorer) was the first satellite built dedicated to cosmology. Its goals were to investigate the cosmic

---

<sup>1</sup><http://hyperphysics.phy-astr.gsu.edu/hbase/astro/penwil.html>

microwave background radiation (CMB) of the universe and provide measurements that would help shape our understanding of the cosmos.

This work helped cement the Big Bang theory of the universe. According to the Nobel Prize committee, "the COBE-project can also be regarded as the starting point for cosmology as a precision science". Two of COBE's principal investigators, George Smoot and John Mather, received the Nobel Prize in Physics in 2006.<sup>1</sup>

The COBE satellite found the expected variation in temperature and mapped it, providing a startling confirmation of the Big Bang model. These results have largely silenced critics of the Big Bang, who were hoping to get rid of the "problem" of an initial beginning to the universe.

George Smoot, the COBE project leader said this: "What we have found is evidence for the birth of the universe. It's like looking at God."

There was a story on the front page of virtually every newspaper in the world. What the London Times, New York Times, etc. seemed to pick up on the most was the statement by George Smoot, the team leader "It's like looking at God." Obviously, this captured the public's attention.<sup>2</sup> Here are some comments about this discovery:

Unbelievably important... They have found the Holy Grail of cosmology. Michael Turner (University of Chicago)

It is the discovery of the century, if not all time. Stephen Hawking (Cambridge University, UK)

These findings, now available, make the idea that God created the universe a more respectable hypothesis today than at any time in the last 100 years. Frederick Burnham, (science historian)

I find it difficult to understand a scientist that does not acknowledge the presence of a superior rationality behind the existence of the Universe as it is to comprehend a theologian who

---

<sup>1</sup><http://en.wikipedia.org/wiki/COBE>

<sup>2</sup><http://www.leaderu.com/real/ri9404/bigbang.html>

would deny the advances of science. Prof. Werner von Braun (who developed the NASA program)

This one is my absolute favourite:

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.” Dr. Robert Jastrow (Astronomer and Agnostic)

Because of these startling scientific revelations, there has been a steady defection of scientists back to believing in God.

An article by Prof. E. J. Larson and L. Witham in the April 3, 1997 issue of the prestigious science journal “Nature” reported on a fascinating survey of the beliefs of leading American scientists. The survey asked a thousand top scientists very specific questions about their religious beliefs regarding a personal God. The survey revealed that 40% of physicists, biologists and mathematicians acknowledged that they now believe in God. The questions revealed that their belief was not in someone up there, but in God as “A supreme being who is involved in our earthly affairs and hears our prayers.”

This remarkable survey suggests that “The extremely widespread atheism among scientists in last decades has given way to a growing number of top scientists who have encountered compelling evidence in their own field of research to convince them that there must be an intelligent Designer who created the Universe.”

One scientist made this comment: “The only effect of the Theory of evolution had, is that it made atheism respectable.” Then he adds: “After a century of paganism, the tide is turning.”

A recent survey conducted for the professional society Sigma Xi among 3300 scientists with PhD degrees found that 43% of them went to church regularly (same ratio as in general public). They concluded that “The myth that Scientists do not believe in God is greatly over-rated.”

The market is now flooded with books by top scientists that were atheists in past decades, who now believe in Creation. One of these is

Prof Frank Tipler, mathematician and Physicist, who wrote in his book “The Physics of Immortality”:

When I began my career as a cosmologist 20 years ago, I was a convinced atheist. I never in my wildest dreams imagined that one day I would be writing a book purporting to show that the central claims of Judo-Christian Theology are in fact true, that these claims are straightforward deductions of the laws of physics as we now understand them. I have been forced into these conclusions by the inexorable logic of my own special branch of physics.

I have Dr. Tipler’s book in my library.

Dr. Gary Parker, a biologist, was an enthusiastic evolutionist, who later became a creationist and wrote a book: “Creation, facts of life”, describes why he changed sides by saying: “The bulk of scientific evidence available supports the Bible, not evolution.” I also have this book in my library.

In an article in *Nature* magazine of 24 February, 2000, Jeffery Cantor wrote, under the title:

**Fighting the wrong battle:  
Scientists who scoff at religious belief miss the point  
and damage their cause**

When modern science began its rise in the seventh century, most of the key figures were convinced that it’s advance would greatly assist religion. For Bacon, Kepler, Boyle, Newton and many others, knowledge of the physical Universe illuminated God’s creation. Therefore, through the expansion of science—knowledge of God’s work— they expected humankind to come closer to God. It is ironic that their convictions now appear so misplaced. It has become fashionable among scientists with a high media profile to portray religion as the necessary foe of science. This is surely an unwise strategy, one that seems calculated to make scientists appear unreasonable and dogmatic.

Religion has often provided the motivation for pursuing science. Newton and Faraday were two of the many eminent scientists who turned to science to better understand God. They

saw no conflict between God's two books—Nature and Revelation.

Religion has also traditionally provided people with communities, with social values and with emotional warmth, aspects of human experience that science cannot offer. Our publicity-seeking scientists would appear to want to remove these supports and offer nothing in return.

Issues of science and religion are important to our civilization. People holding different beliefs and forms of expertise need to work together in an open, non confrontational environment accepting both science and religion as valid aspects of human experience.

On the other hand, many diehard atheists are fighting back against the Big Bang and it's implications on the issue of creation versus evolution. An example of this reaction to the Big Bang theory can be seen in an article written in 1989 by John Maddox, editor of *Nature*, one of the best-known materialist-scientific journals.

In that article, called "Down With the Big Bang," Maddox wrote that the Big Bang is "philosophically unacceptable," because "creationists and those of similar persuasions... have ample justification in the doctrine of the Big Bang." He also predicted that the Big Bang "is unlikely to survive the decade ahead."<sup>1</sup> Of course, scientific discoveries in the "decade ahead" proved him wrong.

Other scientists, reluctantly accepted defeat as is evident from these two examples:

Anthony Flew, an atheist professor of philosophy at the University of Reading and the author of *Atheistic Humanism*, makes this interesting confession:

Notoriously, confession is good for the soul. I will therefore begin by confessing that the Stratonician atheist has to be embarrassed by the contemporary cosmological consensus. For it seems that the cosmologists are providing a scientific proof of what St. Thomas contended could not be proved philosophically; namely,

---

<sup>1</sup>John Maddox, "Down with the Big Bang", *Nature*, vol. 340, 1989, p. 378

that the universe had a beginning. So long as the universe can be comfortably thought of as being not only without end but also without beginning, it remains easy to urge that its brute existence, and whatever are found to be its most fundamental features, should be accepted as the explanatory ultimates. Although I believe that it remains still correct, it certainly is neither easy nor comfortable to maintain this position in the face of the Big Bang story.<sup>1</sup>

the English materialist physicist, H.P. Lipson, unwillingly accepts the scientific fact of creation. He writes:

I think ...that we must...admit that the only acceptable explanation is creation. I know that this is anathema to physicists, as indeed it is to me, but we must not reject that we do not like if the experimental evidence supports it.<sup>2</sup>

### **WHY DO ATHEISTS HATE THE BIG BANG?**

The atheist's main quarrel with the Big Bang theory is that it leads to the fact that the universe had a beginning in time, which in turn leads us to the cosmological argument:

- (a) Everything that begins to exist must have a cause;
- (b) If the universe began to exist, then
- (c) the universe must have a cause.

You can see the direction in which this argument is flowing--a direction of discomfort to some physicists.<sup>3</sup>

### **THE IMPORTANCE OF THE BIG BANG THEORY:**

The Big bang theory is currently the only theory that can explain the existence of the universe. The expansion of the universe (one of the

---

<sup>1</sup>Henry Margenau, Roy Abraham Vargesse, *Cosmos, Bios, Theos*, La Salle IL: Open Court Publishing, 1992, p.241

<sup>2</sup>H. P. Lipson, "A Physicist Looks at Evolution", *Physics Bulletin*, vol. 138, 1980, p. 138

<sup>3</sup><http://www.leaderu.com/real/ri9404/bigbang.html>

mainstays of the theory) is necessary for its existence, because it counteracts the forces of gravity that would otherwise cause the galaxies to collide with each other. The force of gravity and the force of expansion are so finely tuned to allow the universe to continue to exist.

### **THE BIG BANG PREDICTIONS:**

According to Einstein's theory of relativity, as a body moves at very high speeds its mass will increase, until it approaches the speed of light, when it becomes so heavy that it cannot continue moving.

As the Universe expands at increasing speeds its mass will increase to such a point that there is not enough energy to sustain its expansion. The force of gravity will then cause it to contract "The Big Crunch". When its mass approaches Zero, another Big Bang will happen and another Universe will come into existence.

### **THE BIBLE AND THE BIG BANG:**

Q: Does the Bible support the idea of an expanding universe?

A: Yes. There are several verses that support this:

Isa 40:22 It is he that sitteth upon the circle of the earth, and the inhabitants thereof are as grasshoppers; that stretcheth out the heavens as a curtain, and spreadeth them out as a tent to dwell in.

The Bible here speaks of "The circle of the earth." That means the Bible tells us that the earth is circular 2500 years before Galileo! The Bible describes expansion in simpler terms, like stretching and spreading. The Bible even gives us a beautiful analogy, a curtain or a tent. Here are the other verses that speak about this:

Isa 42:5 Thus saith God the LORD, he that created the heavens, and stretched them out; he that spread forth the earth.

Isa 44:24 I am the LORD that maketh all things; that stretcheth forth the heavens alone; that spreadeth abroad the earth by myself.

Isa 45:12 I have made the earth, and created man upon it: I, even my hands, have stretched out the heavens.

Isa 51:13 And forgettest the LORD thy maker, that hath stretched forth the heavens, and laid the foundations of the earth.

Jer 10:12 He hath made the earth by his power, he hath established the world by his wisdom, and hath stretched out the heavens by his discretion.

Jer 51:15 He hath made the earth by his power, he hath established the world by his wisdom, and hath stretched out the heaven by his understanding.

Zec 12:1 The burden of the word of the LORD for Israel, saith the LORD, which stretcheth forth the heavens, and layeth the foundation of the earth.

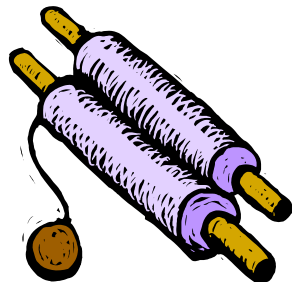
Q: Does the Bible support the prediction that in the end, the Universe will collapse?

A: Yes, again! Here are some verses that speak of this:

Isa 34:4 And all the host of heaven shall be dissolved, and the heavens shall be rolled together as a scroll.

Rev 6:14 And the heaven departed as a scroll when it is rolled together.

The Bible describes this collapse in simple understandable terms, giving us the example of a scroll that is rolled. This is what scientists describe as “the big crunch”.



Q: Does the Bible support the prediction that after the collapse of this present Universe, another Universe will begin?

A: Yes! Here are the verses that support this:

Isa 65:17 For, behold, I create new heavens and a new earth.

2 Pet 3:13 Nevertheless we, according to his promise, look for new heavens and a new earth.

Q: Does the Bible say anything about a big bang that happened at the moment of the creation?

A: Yes! A “Big Bang” means a very loud sound. Here is a verse about this:

Job 38:4-7 Where wast thou when I laid the foundations of the earth?.... When the morning stars sang together, and all the sons of God shouted for joy?

The Bible tells us that at the moment when God created the Universe, all the angels (who have been created before and who are described as the morning stars and the sons of God) all shouted together for joy. We know from the Bible that the angels number ten thousand times ten thousands, that means hundreds of millions. Can you imagine hundreds of millions of angels shouting for Joy! That would certainly create a big Bang!

Q: Does the Bible support the idea of an explosion of a primeval atom which led to the formation of all the matter in the Universe?

A: NO! Because that will lead to many questions:

- a. Who created that primeval atom?
- b. Who caused it to explode?
- c. How can an explosion create matter?

Q: Does the Bible support the dictionary definition of the Big Bang theory: “the entire physical universe, all the matter and energy and even the four dimensions of time and space, burst forth from a state of infinite or near infinite density, temperature, and pressure.”

A: No. We believe that at the moment of the creation, which according to Genesis is called “the beginning” God created time, space, matter and energy, and put into play all the laws of nature that the new Universe needs to gradually and orderly develop over the ages, to the Universe that we have now.

Stephen Hawking in his book “A Brief History of Time” confirms this. He even quotes the Fathers:

As we shall see, the concept of time has no meaning before the beginning of the universe. This was first pointed out by St. Augustine. When asked: “What did God do before he created the universe?” Augustine didn’t reply: “He was preparing Hell for people who asked such questions.” Instead, he said that time was a property of the universe that God created, and that time did not exist before the beginning of the universe.

He later on adds this:

One could still 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!

The famous astrophysicist Hugh Ross<sup>1</sup> tells us this:

Time is that dimension in which cause and effect phenomena take place. . . If time's beginning is concurrent with the beginning of the universe, as the space-time theorem says, then the cause of the universe must be some entity operating in a time dimension

---

<sup>1</sup>Hugh Ross has a wonderful website about the science and the creation: <http://www.reasons.org/> I recommend it for any one interested in more details about this topic

completely independent of and pre-existent to the time dimension of the cosmos. This conclusion is powerfully important to our understanding of who God is and who or what God isn't. It tells us that the creator is transcendent, operating beyond the dimensional limits of the universe. It tells us that God is not the universe itself, nor is God contained within the universe.

To conclude I want to share with you a personal reflection. I never fully understood Psalm 19, verse 1, which says, “The heavens declare the glory of God”, until I started preparing this lecture for you. I now realize that when in 1929 Edwin Hubble looked at heaven through his giant telescope, and saw as if it were the hand of God expanding the Universe as a man stretching a curtain, it was the heavens declaring the glory of God to him.

And when Penzias and Wilson directed their radio telescope towards heaven, and heard that background noise coming from the beginning. It was as if they were listening to the echo of the shouts of the angels when they first saw the miracle of creation. It was the heavens declaring to them the glory of God.

And when in 1992, those NASA scientists sent the COBE satellite toward heavens, and were shocked by what they learned. And when their team leader George Smoot declared in awe, “It’s like looking at God.”, it was the heavens that declared to him the glory of God. That glory that was His even before the Universe began, and will still be His even after the Universe meets its end and shall be His even forever and ever. Amen

*To be continued*

PAROUSIA is a publication of St. Mary’s Coptic Orthodox Church, Kitchener, Ontario, Canada. It is sent free of charge to over 750 readers all over the world, including Ethiopia, Mexico, Spain, Barbados, India and Taiwan.

If you know of someone who would be interested in receiving our publication, please contact us by mail, phone, fax or email

If you change your residence and wish to continue receiving our publication, please send us a change of address notice.

Please check our website [www.stmarycoptorthodox.org](http://www.stmarycoptorthodox.org)