Scientific and Common Sense Proof For The Existence Of…

A Route To Islam Publication

1ST DRAFT

All Prasie And Thanks Belongs To God (Allah)

INTRODUCTION

How did the endless universe we live in come into being? How did the equilibrium, harmony, and order of this universe develop? How is it that this Earth is such a fit and sheltering place for us to live in? Questions such as these have attracted attention since the dawn of the human race. The conclusion reached by scientists and philosophers searching for answers with their intellects and common sense is that the structure and order of this universe are one of the evidences of the existence of an Al-Mighty God (Allah), the supreme Creator, ruling over the whole universe.

Indeed, your Lord is Allah, who created the heavens and earth in six days and then established Himself above the Throne. He covers the night with the day, [another night] chasing it rapidly; and [He created] the sun, the moon, and the stars, subjected by His command. Surely, His is the Creation and Commandment. Blessed be Allah, the Lord of the worlds! [Quran 7; 54]

This plain truth declared by the Quran is also confirmed by a number of the important founders of the modern science of astronomy. Galileo, Kepler, and Newton all recognized that the structure of universe, the order in the solar system, the laws of physics and their states of equilibrium were all created by God and they arrived at that conclusion as a result of their own research and observations.

1 THE EVIDENCE OF COSMOLOGY

THE DEATH OF MATERIALISM

From ancient Greek materialism at the time of Plato and Aristotle up through 19th century, the prevailing view was that the universe is eternal, that the universe never began to exist nor will it end, that the universe as a whole as it where a static timeless entity.

The first person in the modern age to propose a materialist understanding of the universe was the renowned German philosopher Immanuel Kant—even though he has not a materialist in the philosophical sense of the word. Kant proposed that the universe was eternal and that every possibility could be realized only within this eternity. With the coming of the 19th century, it became widely accepted that the universe had no beginning, and that there was no moment of creation. Then, this idea, adopted passionately by dialectical materialists such as Karl Marx, Friedrich Engels, came into the 20th century.

Putting his trust in the alleged validity of the "infinite universe" model, Georges Politzer opposed the idea of Creation in his book **BASIC PRINCIPLES OF PHILOSOPHY** when he 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 ALLOW'** P84

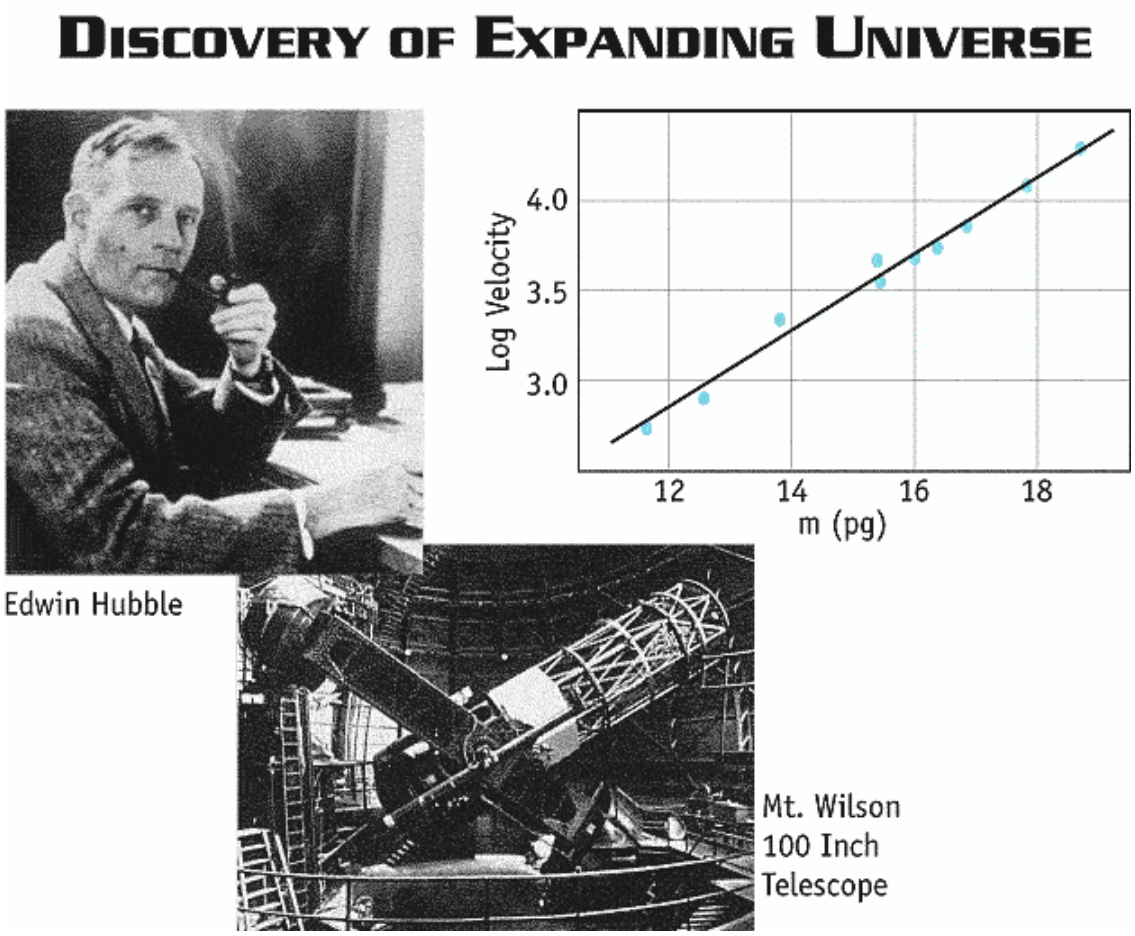
Politzer supposed that science was on his side in his defence of the idea of an infinite universe. In fact, science was to prove that the universe indeed had a beginning. And just as Politzer himself declared, if there is Creation then there must also be a creator.

2 THE TRIUMPH OF THE BIG-BANG

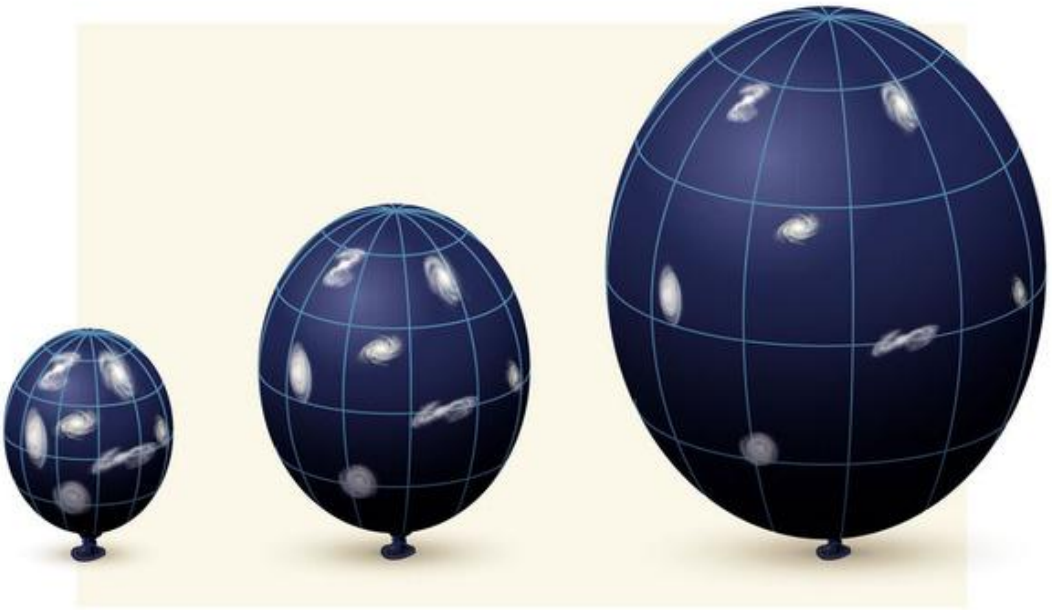
However science and technology that developed in the 20th century ultimately pulled down this primitive idea called materialism, it was found that the universe is not constant as the materialist supposed and just to the contrary it keeps expanding.

This belief, in an eternal unchanging universe for centuries, a pillar of western cosmology was unexpectedly challenged in 1915 by Albert Einstein general theory of relativity. Einstein equation implied a startling possibility; the cosmos was not static but instead, existed in a continual state of ether contraction or expansion.

In 1929 theoretical predictions where confirmed with **empirical** data. At the Mount Wilson observatory overlooking *Los Angeles* astronomer Edwin Hubble studied light form distant galaxies. Hubble determined that galaxies beyond our Milky Way where moving away from us at a speed proportional to their distance from the earth, the more distant the galaxies the faster it is reseeding. Edwin Hubble's land mark discovery led many astronomers and physicist including Albert Einstein to a similar conclusion that the universe is expanding.

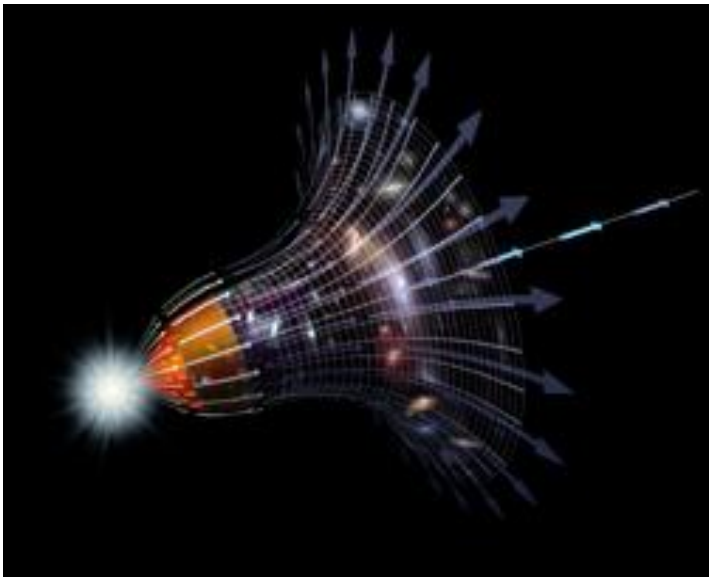


If the universe was getting bigger as time advanced, going back in time meant that it was getting smaller;



As you trace this expansion back in time, the universe grows denser and denser until finally the entire known universe is contracted down to a state of infinite density which marked the beginning of the universe, at this point which cosmologist call the singularity…

All matter and energy, physical space and time themselves came into being; this literally represents the origin of the universe from nothing.



Calculations show that this single point that harbored all the matter in the universe should have zero volume and infinite density. The universe had come about by the explosion of this single point with zero volume. This great explosion that marked the beginning of the universe was named 'The Big Bang.'

It has to be stated that zero volume is a theoretical expression used for descriptive purposes. To say that something has zero volume is tantamount to saying that it is 'nothing'. Thus the universe has come into being from nothingness, in other words it was created.

The renowned atheist and philosopher, Antony Flew comments on the issue

> **'NOTORIOUSLY, CONFESSION IS GOOD FOR THE SOUL. I THEREFORE BEGIN BY CONFESSING THAT THE ATHEIST HAS TO BE EMBARRASSED BY THE CONTEMPORARY COSMOLOGICAL CONSENSUS. FOR IT SEEMS THAT COSMOLOGISTS ARE PROVIDING SCIENTIFIC PROOF, THAT THE UNIVERSE HAD A BEGINNING.** COSMOS, BIOS, THEOS 1992, P241

John Gribbin, an Astrophysicist at Cambridge University, summarizes the importance of 'The Big Bang cosmology,

> **"...THE DISCOVERY OF THE CENTURY, IN COSMOLOGY AT LEAST, WAS WITHOUT DOUBT THE DRAMATIC DISCOVERY MADE BY HUBBLE, AND CONFIRMED BY EINSTEIN'S EQUATIONS, THAT THE UNIVERSE IS NOT ETERNAL, STATIC, AND UNCHANGING."** IN THE BEGINNING: THE BIRTH OF THE LIVING UNIVERSE. P 19

Thus the ‘Big Bang’ model describes our universe as having a beginning, a finite time ago. As Alex Vilenkin, one of the world’s leading theoretical cosmologists, writes,

> **“IT IS SAID THAT AN ARGUMENT IS WHAT CONVINCES REASONABLE MEN AND A PROOF IS WHAT IT TAKES TO CONVINCE EVEN AN UNREASONABLE MAN. WITH THE PROOF NOW IN PLACE, COSMOLOGISTS CAN NO LONGER HIDE BEHIND THE POSSIBILITY OF A PAST-ETERNAL UNIVERSE. THERE IS NO ESCAPE, THEY HAVE TO FACE THE PROBLEM OF A COSMIC BEGINNING.”** MANY WORLDS IN ONE: THE SEARCH FOR OTHER UNIVERSE. P 176.

3 WHO OR WHAT CAUSED THE BIG BANG?

So the startling implication of Hubble's discovery was the temporal finitude of the universe, that the universe had a beginning in the finite past. This evidence for a finite universe has reaffirmed the conclusion of an ancient philosophical deduction which is called 'The Kalam Cosmological Argument.'

The Kalam Cosmological Argument has 3 steps.

1. **Whatever begins to exist, has a cause** (Something cannot coming to being uncaused out of absolutely nothing).
2. **The universe began to exist** (We have scientific evidence for the proof of this premise that the universe began to exist) And from these two premises it follows logically
3. **The universe has a cause** (of its existence)

So What Was The Cause? Who Or What Created The Universe From Nothing?

There are 3 possibilities;

1) <u>Nothing</u>

We know the universe couldn't have been created by nothing, because out of nothing, nothing comes! This is an undeniable philosophical principle, as P. J. Zwart in his publication 'About Time' explains,

> **"IF THERE IS ANYTHING WE FIND INCONCEIVABLE IT IS THAT SOMETHING COULD ARISE FROM NOTHING."** ABOUT TIME, P 117-19

2) <u>Self-caused (i.e. self-created)</u>

Philosophically, the universe couldn't have created itself because that would imply a paradox. It would mean that something can exist and not exist at the same time. The logical ends of this explanation are tantamount to saying that your mother gave birth to herself! To assert that the universe created itself would be absurd and self-refuting, because in order for something to create itself it would need to exist before it existed!

3) <u>A Creator</u>

Or it points us to a reality beyond the universe, a transcendent reality, beyond space and time, which created the universe out of nothing and brought it into being. One who is ultimately All-Powerfully and All-Wise.

Other models have been proposed to try and explain away the obvious metaphysical questions that arise from a finite universe, for instance P.C.W. Davies questions,

> **"WHAT CAUSED THE BIG BANG? . . . ONE MIGHT CONSIDER SOME SUPERNATURAL FORCE, SOME AGENCY BEYOND SPACE AND TIME AS BEING RESPONSIBLE FOR THE BIG BANG, OR ONE MIGHT PREFER TO REGARD THE BIG BANG AS AN EVENT WITHOUT A CAUSE. IT SEEMS TO ME THAT WE DON'T HAVE TOO MUCH CHOICE. EITHER...SOMETHING OUTSIDE OF THE PHYSICAL WORLD...OR...AN EVENT WITHOUT A CAUSE." "THE BIRTH OF THE COSMOS,"** IN GOD, COSMOS, NATURE AND CREATIVITY P. P 8-9.

Many scientists, who do not blindly condition themselves to be atheist, have admitted the role of an All-Mighty Creator in the creation of the universe.

For instance, the American astrophysicist Hugh Ross proposes a Creator of the universe, who is above all physical dimensions as:

> **'IF TIMES BEGINNING IS CONCURRENT WITH THE BEGINNING OF THE UNIVERSE, AS THE SPACE-THEOREM SAYS, THEN THE CAUSE OF THE UNIVERSE MUST BE SOME ENTITY OPERATING IN A TIME DIMENSION COMPLETELY INDEPENDENT OF AND PRE-EXISTENT TO THE TIME DIMENSION OF THE COSMOS. THIS CONCLUSION TELLS US THAT GOD IS NOT THE UNIVERSE ITSELF, NOR IS GOD CONTAINED WITHIN THE UNIVERSE' CREATOR AND THE COSMOS 1993, P112**

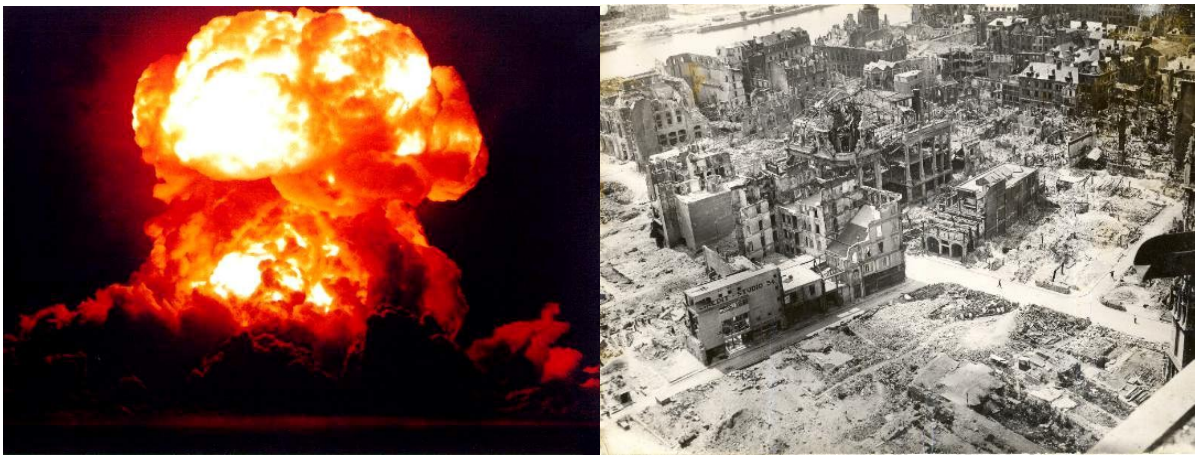
In conclusion, the truth disclosed by science is this: Matter and time have been brought into being by an independent possessor of immense power and knowledge.

4 THE EQUILIBRIUM AFTER THE BIG BANG

So far we have examined the universe's creation from nothingness as a result of a great explosion. Let us now consider some of the implications of this.

Scientists estimate that there are over 300 billion galaxies in the whole universe. These galaxies have a number of different forms (spiral, elliptical, etc) and each contains about as many stars as the universe contains galaxies. One of these stars, the Sun, has nine major planets rotating around in it in great harmony. All of us live on the third of those planets counting from the Sun.

Think about this: Does what you see appear to be a disordered jumble of matter, haphazardly scattered this way and that? Of course not. But how could matter have formed organized galaxies if it had been dispersed randomly? Why has matter accumulated at certain points and formed stars? How could the delicate balance of our solar system have emerged from a violent explosion? We know Explosions create chaos and disorder.



If the Big Bang was indeed a cataclysmic explosion, then it is reasonable to expect that matter should have been scattered everywhere at random, and yet it is not. Instead it is organized into planets, and stars, and galaxies, and clusters of galaxies, and super clusters of galaxies.

Fred Hoyle says;

> **'THE BIG BANG THEORY HOLDS THAT THE UNIVERSE BEGAN WITH A SINGLE EXPLOSION. YET AS CAN BE SEEN BELOW, AN EXPLOSION MERELY THROWS MATTER APART, WHILE THE BIG BANG HAS MYSTERIOUSLY PRODUCED THE OPPOSITE EFFECT WITH MATTER CLUMPING TOGETHER IN THE FORM OF GALAXIES'** THE INTELLIGENT UNIVERSE P. 184-185

That the matter produced by the Big Bang should have formed such tidy and organized shapes is indeed an extraordinary thing. The occurrence of such a harmony leads us to the realization that the universe was the result of its perfect creation by an Intelligence.

5 THE EVIDENCE OF PHYSICS

The Bing Bang not only proves the universe was created out of nothing but also that it was brought into being at a much planed, controlled and a systematic manor. The big bang took place with the explosion, of the point which contained all the matter and energy of the universe, out of this matter and energy there came about a great balance containing galaxies stars the sun the earth and all other heavenly bodies.

Moreover laws were formed called the laws of physics, which are uniform throughout the whole universe and do not change. The laws of physics that emerged together with the big bang did not change at all over a period of about 15 billion years. Furthermore these laws stand on calculations so scrupulous that even a millimeters variation from their current values could result in the destruction of the whole structure and configuration of the universe. All these indicate that a perfect order arose after the big bang.

Explosions however do not bring about order. All of the observable explosions tend to harm, disintegrate and destroy what is present. If we were to be introduced to a very detailed order after an explosion we might then conclude that there was an intelligence intervention behind this explosion and that all the pieces dispersed by the explosion had been made to move in a very controlled way.

No doubt if a great order arose with an explosion then it should be expected that the intervention of a Creator is involved at every moment of this explosion. Just by looking at these laws, offer compelling evidences for a Creator who conspired to make the universe habitable for human life. Laws such as Gravitational force, Electromagnetic force, strong nuclear force, Weak nuclear force, Speed of light, Proton mass, The Planck constant**,** electron mass, cosmological constant, Mass density of the universe, Carlson energy resonance etc.

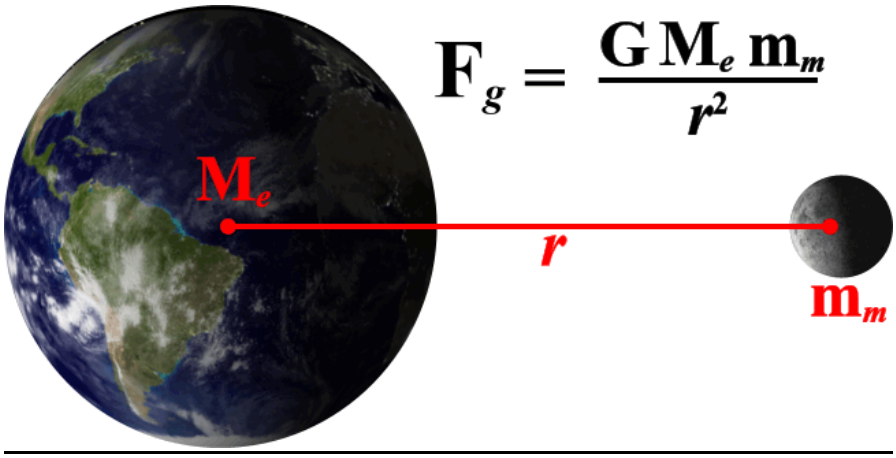
Robin Collins (philosopher) made this remark.

> **THE LAWS OF PHYSICS ARE BALANCED ON A RAZORS EDGE FOR LIFE TO OCCUR. FOR EXAMPLE IF YOU DIDN'T HAVE GRAVITY TO PULL MATTER TOGETHER YOU WOULD NEVER GET PLANETS NOR STARS, YOU WOULDN'T GET ANY COMPLEX ORGANISMS. IF YOU DIDN'T HAVE THE STRONG NUCLEAR FORCE THERE WOULD BE NOTHING TO HOLD PROTONS AND NEUTRONS TOGETHER IN THE NUCLEASE AND SO YOU WOULDN'T HAVE ANY ATOMS SO ANY CHEMISTRY. IF YOU DIDN'T HAVE THE ELECTROMAGNETIC FORCE YOU WOULD HAVE NO BONDING BETWEEN CHEMICALS AND YOU'D HAVE NO LIGHT AND THE LIST GOES ON, SO YOU NEED ALL THESE SORTS OF FUNDAMENTAL PRINCIPLES THAT HAVE TO BE IN PLACE IN ORDER FOR LIFE TO OCCUR, WIPE OUT JUST ONE OF THOSE PRINCIPLES JUST ONE LAW, NO LIFE.** THE CASE FOR A CREATOR

6 THE FINE TUNING OF THE COSMOS

Life also hinges on the precise strengths and relative values of many different physical Constance.

One example of this fine tuning is **The Force Of Gravity.**

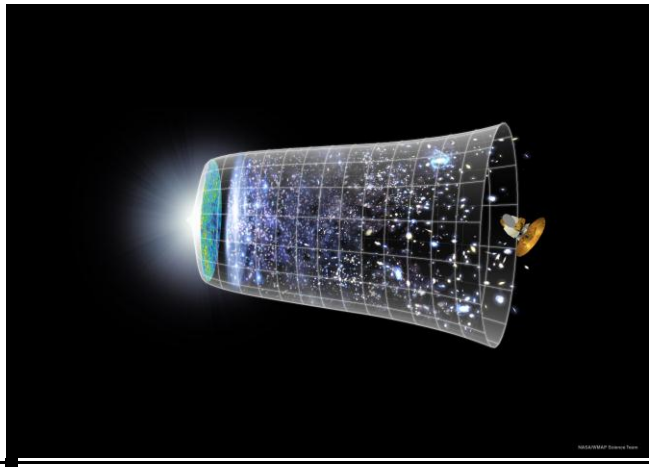


Imagine a ruler, the length of the entire universe (a distance of some 14 billion light years) divide it up into 1 inch increments. The ruler represents the possible rage for gravity, in other words the setting for the strength of gravity could have been anywhere along the ruler but it just happens to be situated in exactly the right place so that life is possible.

Now if we were change the force of gravity by moving the setting just one inch in any direction compared to the entire width of the universe the effect on life would be catastrophic. No large scale life form could exist, anything more than the size of a pea would be completely crushed.

The strength of gravity is just one of at least 30 separate parameters that must be finely tuned to produce a life sustain universe.

Another example is **The Cosmological Constant.**



Cosmological constant describes the expansion speed of space in the universe.

If space expands to quickly then the universe will spread out so quickly that material objects can't form, so you can't get stars and galaxies and planets etc.

Physicist have determined that the cosmological constant is fine-tuned to

1 part in 100 million, billion, billion, billion, billion, billion

1: 100, 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 (51 zeros)

Such precision has been compared to traveling hundreds of miles into space then throwing a dart at the earth and hitting a bull's eye measuring one trillionth of a trillionth of an inch in diameter, an area less than the width of a single atom.

Just consider these two parameters gravity and the cosmological constant.

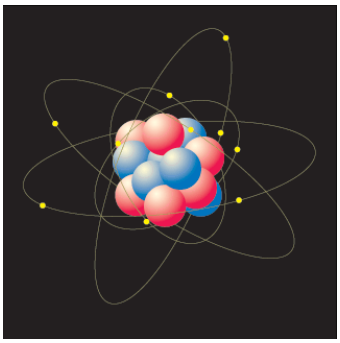
Their level of fine-tuning is to a precision of

1 part in a 100 million trillion, trillion, trillion, trillion, trillion, trillion

That's

1: 100, 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 (78 zeros)

This fine tuning is also evident at **The Atomic Level.**



The strong nuclear force binds atoms together, if the strength of the force was to decrease by one part in ten thousand billion, billion, billion, billion

1: 10, 000 000 000 000 000 000 000 000 000 000 (30 zeros)

The only element left in the universe would be hydrogen; again chemical life would not be possible.

The fine-tuning of the laws and forces of physics is so précises that few theorists are comfortable invoking chance as an explanation.

Paul Davies a renowned professor of theoretical physics stated at the end of the calculations he made on the expansion rate of the universe that this rate inconceivably delicate, He said:

> **'CARFUL MEASUREMENT PUTS THE RATE OF EXPANSION VERY CLOSE TO CRITICAL VALUE AT WHICH THE UNIVERSE WILL JUST ESCAPE ITS OWN GRAVITY AND EXPAND FOREVER. A LITTLE SLOWER AND THE COSMOS WOULD COLLAPSE, A LITTLE FASTER AND THE COSMIC MATERIAL WOULD HAVE LONG AGO COMPLETELY DISPERSED. THE BIG BANG WAS NOT, EVIDENTIALLY, ANY OLD BANG, BUT AN EXPLOSION OF EXQUISITELY ARRANGED MAGNITUDE'** SUPER FORCE 1984, P184

Stephen hawking (the famous physicist) admits this point, in his book 'A Brief History Of Time' that the universe is set on calculations and balances more finely tuned then we could conceive. He says with reference to the rate of expansion of the universe

> **'IF THE RATE OF EXPANSION ONE SECOND AFTER THE BIG BANG HAD BEEN SMALLER BY EVEN ONE PART IN A 100 THOUSAND MILLION, MILLION, THE UNIVERSE WOULD HAVE COLLAPSED BEFORE IT EVER REACHED ITS PRESENT SIZE'** A BRIEF HISTORY OF TIME P181

Paul Davies also explains the unavoidable consequence to be derived from these incredibly precise balances and calculations he says,

> **'IT IS HARD TO RESIST THE IMPRESSION THAT THE PRESENT STRUCTURE OF THE UNIVERSE, APPARENTLY SO SENSITIVE TO MINOR ALTERATIONS IN THE NUMBERS, HAS BEEN RATHER CAREFULLY THOUGHT OUT. THE SEEMINGLY MIRACULOUS CONCURRENCE OF NUMERICAL VALUES THAT NATURE HAS ASSIGNED TO HER FUNDAMENTAL CONSTANTS MUST REMAIN THE MOST COMPELLING EVIDENCE FOR AN ELEMENT OF COSMIC DESIGN'** GOD AND THE NEW PHYSICS. 1983, P189

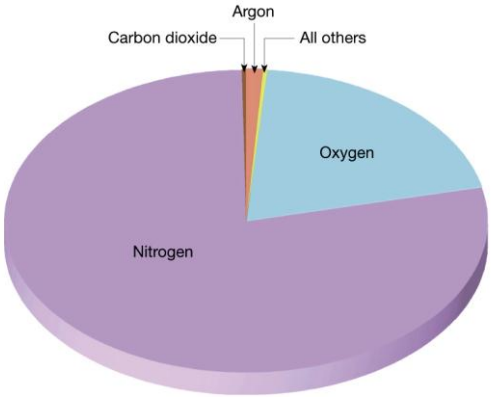
American professor of astronomy **George Greenstein** writes in his book the symbiotic universe

> **'AS WE SURVEY ALL THE EVIDENCE, THE THOUGHT INSISTENTLY ARISES THAT SOME SUPERNATURAL AGENCY MUST BE INVOLVED'** 1988, P 27

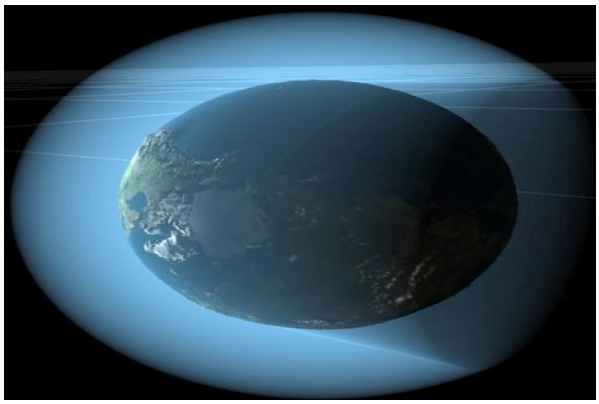
7 EARTH'S FINE TUNING

But there's more, the jewel of our solar system, the planet earth. Yet again another array of critically balanced conditions essential to human existence

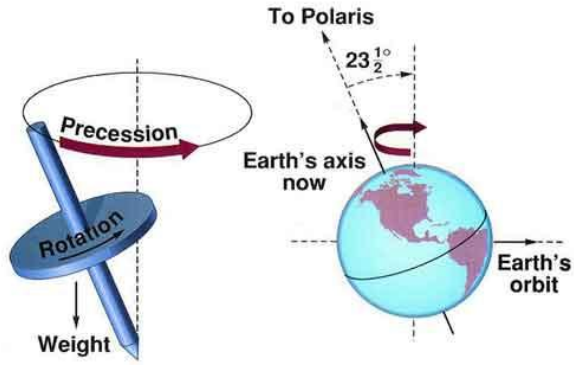
Guillermo Gonzalez (Astrobiologist) has the unique job of examining the conditions necessary for life and to look elsewhere in the universe to see if those conditions are met anywhere else. For more than a decade Guillermo Gonzalez has researched the characteristics of a planet required to support complex life. Estimates vary but a current list of these factors would number at least 20 and include



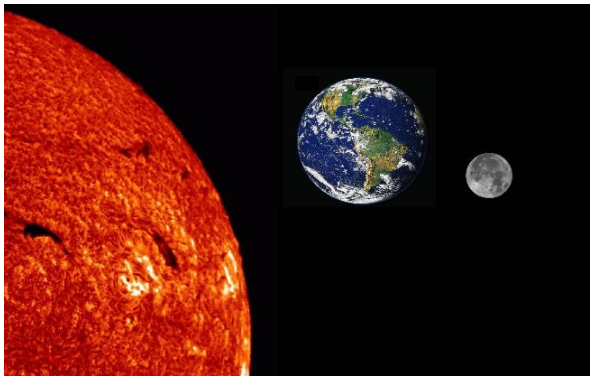
Air containing exactly 78% nitrogen and 21% oxygen



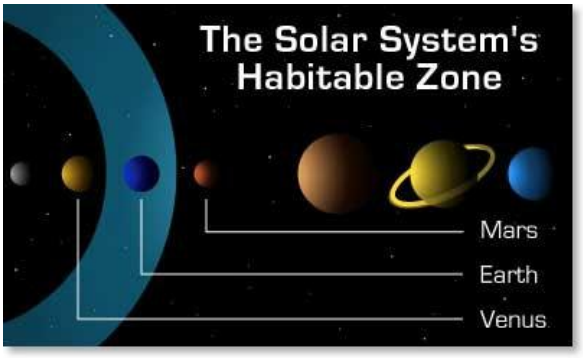
Oxygen rich atmosphere

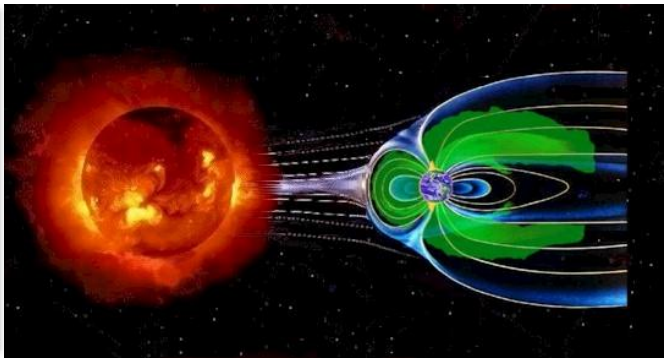


A moon large enough to stabilize the tilt of the earth's axes and the movement of its tides



A home star of the right temperature and mass





A position in the relatively narrow habitable region, of a spiral galaxy

A magnetic field strong enough to deflect the sun radiation

All these factors have to be met at one time and place in the galaxy if you're going to have a planet as habitable as the earth which you need for complex life.

Theorists have attempted to calculate the odds of all the necessary factors for life appearing at the same time on the same planet. A conservative estimate is 1 chance in a quadrillion

1,000,000,000,000,000 (15 zeros)

On those terms even when compared to the billions of suns and possible planets in our own Milky Way galaxy the probability of even a single habitable planet appears unlikely, so our planet and our existence is unique.

8 COMMON SENSE

If you look at a painting you know that there was a painter. If you look at a sculpture you know that there was a sculptor. When you look a building you know there was a builder. And if we find fine-tuning in the universe, there must be a... Fine-Tuner.

DESIGN INDICATES A DESIGNER

The variety and complexity of the intricate systems which constitute the fabric of both human beings and the world in which they exist indicate that there must have been a Supreme Being who created them.

An example of how it is impossible that this fine order could have come about through chance.

Take 10 coins, and write on them the numbers from one to ten, then put them in your pocket and mix them well, now try to take them out of your pocket in ascending numerical order (i.e., from one to ten), the chance of you taking out the coin on which is written the number one on your first attempt is one is ten. Then then chance of you taking out all ten coins in numerical order (1,2,3,4…) is one in 10 billion.

If you can't pull 10 coins out in order, then how did all this come in order?

This is a small example; if we now are to think about all the complex laws that govern the universe, take all the parameters that make life habitable for us here on earth, if we were to calculate that in the same manner, we would not be able to imagine or calculate the numbers, let alone comprehend them.

Let’s take another example: a mobile phone.

Your mobile phone is composed of a few basic elements. Plastic, glass, silicon for the chip, and some metals. Plastic comes from oil and glass and silicon from sand. So basically what you are holding in your hand is oil and sand. Now, what I told you that I was walking along in the desert of Arabia (lots of oil and sand) and picked up a mobile phone which I found lying there… a product of billions of years of random events? The wind blew, the sun shone, the rain fell, lightning struck, the oil bubbled, the camel trod and after a millions and millions of years the mobile phone formed itself.

Is there a chance that this could have randomly formed itself through natural processes?

However remotely possible, most of us would simply not accept this as a reasonable explanation. So how do we explain the universe with all its magnificent laws?

Imagine a bomb is dropped in a junk yard, do you think there's a chance, that just one time of the bomb exploding in the junk yard and a Lamborghini Gallardo pops out? Doors open keys in the ignition, engine revving raring to go?

Impossible, I hear you shout, write? But the universe that is billions and billions times more complicated than a Lamborghini Gallardo did just that?

So to even suggest that the entire universe was produced by the big bang without a designer or creator is totally illogical and absurd and against all common sense.

9 CONCLUSION

With all this in mind we say, isn't it reasonable to conclude that the universe and life are a result of wilful intelligent design?

If we follow the evidence, wherever it points, (**whether** we follow common sense or science, powerfully and pensively it points) in the direction of a Creator.

The conditions for the formation of a habitable planet are so many and so complex that it is impossible to think that this formation is coincidental.

Briefly when we examine the glorious system of the universe we see that the existence of the universe and its workings rest on extremely delicate balances and an order to complex to be explained away by coincidental causes. As is evident, it is by no means possible for this delicate balance of order to have been formed on its own by coincidence after a great explosion.

The formation of such an order following an explosion such as the big bang is a clear evidence of a supernatural creation. This matchless plan and order in the universe certainly proves the existence of a Creator, who has infinite knowledge, might and wisdom, who has created matter from nothing and who controls and manages it persistently.

This Creator is God (Allah) the Lord of the worlds.