Chapter 2 ———

THE BIG BANG AND STELLAR EVOLUTION

Why the Big Bang is a fizzle and stars cannot evolve out of gas

This chapter is based on pp. 1-47 of Origin of the Universe (Volume One of our three-volume Evolution Disproved Series). Not included in this chapter are at least 104 statements by scientists. You will find them, plus much more, on our website: evolutionfacts.org.

INTRODUCTION

Look about you. There are clouds, seas, and mountains, grass carpets, the plains; and birds sing in the trees. Farm animals graze in the meadows, and water brooks run through the fields. In city and country, people use their astounding minds to plan and produce intricate things. At night the stars come out, and overhead are billions of stars in our galaxy. Beyond them are 100 billion island universes, each with 100 billion stars.

Yet all of these things are made of matter and energy. Where did it all come from? How did everything begin—all the wonderful things of life and nature?

Evolutionary scientists tell us that it all came from nothing. Yes, nothing.

That is what is being taught to your friends, children, and loved ones. You need to know the facts.

In this chapter we shall briefly view what evolutionary scientists teach about the origin of matter, stars, galaxies, and planets;—and we will give you basic scientific reasons why their cosmological theories are incorrect. (*Cosmology* is the word used for theories about the origin of matter and stellar objects.)

1 - THE BIG BANG THEORY

The Big Bang theory has been accepted by a majority of scientists today. It theorizes that a large quantity of nothing decided to pack tightly together,—and then explode outward into hydrogen and helium. This gas is said to have flowed outward through frictionless space ("frictionless," so the outflowing gas cannot stop or slow down) to eventually form stars, galaxies, planets, and moons. It all sounds so simple, just as you would find in a science fiction novel. And that is all it is.

WHAT IT IS ALL ABOUT

The originators—*George Lemaitre, a Belgian, struck on the basic idea in 1927; and *George Gamow, *R.A. Alpher, and *R. Herman devised the basic Big Bang model in 1948. But it was *Gamow, a well-known scientist and science fiction writer, that gave it its present name and then popularized it (*Isaac Asimov, Asimov's New Guide to Science, 1984, p. 43). Campaigning for the idea enthusiastically, he was able to convince many other scientists. He used quaint little cartoons to emphasize the details. The cartoons really helped sell the theory.

The theory—According to this theory, in the beginning, there was no matter, just nothingness. Then this nothingness condensed by gravity into a single, tiny spot; and it decided to explode!

That explosion produced protons, neutrons, and electrons which flowed outward at incredible speed throughout empty space; for there was no other matter in the universe.

As these protons, neutrons, and electrons hurled themselves outward at supersonic speed, they are said to have formed themselves into typical atomic structures of mutually orbiting hydrogen and helium atoms.

Gradually, the outward-racing atoms are said to have begun circling one another, producing gas clouds which then pushed together into stars.

These first stars only contained lighter elements (hydrogen and helium). Then all of the stars repeatedly exploded. It took at least

two explosions of each star to produce our heavier elements. Gamow described it in scientific terms: In violation of physical law, emptiness fled from the vacuum of space—and rushed into a superdense core, that had a density of 10^{94} gm/cm² and a temperature in excess of 10^{39} degrees absolute. **That is a lot of density and heat for a gigantic pile of nothingness! (Especially when we realize that it is impossible for nothing to get hot.** Although air gets hot, air is matter, not an absence of it.)

Where did this "superdense core" come from? Gamow solemnly came up with a scientific answer for this; he said it came as a result of "the big squeeze," when the emptiness made up its mind to crowd together. Then, with true scientific aplomb, he named this solid core of nothing, "ylem" (pronounced "ee-lum"). With a name like that, many people thought this must be a great scientific truth of some kind. In addition, numbers were provided to add an additional scientific flair: This remarkable lack-of-anything was said by Gamow to have a density of 10 to the 145th power g/cc, or one hundred trillion times the density of water!

Then all that packed-in blankness went boom!

Let's take it point by point—That is the theory. It all sounds so simple, just as you would find in a science fiction novel. And that is all it is. The theory stands in clear violation of physical laws, celestial mechanics, and common sense. *Here are a number of scientific reasons why the Big Bang theory is unworkable and fallacious*.

THE BIG BANG EXPLOSION

1 - The Big Bang theory is based on theoretical extremes. It may look good in math calculations, but it can't actually happen. A tiny bit of nothing packed so tightly together that it blew up and produced all the matter in the universe. Seriously now, this is a fairy tale. It is a bunch of armchair calculations, and nothing else. It is easy to theorize on paper. The Big Bang is a theoretical extreme, just as is a black hole. It is easy to theorize that something is true, when it has never been seen and there is no definitive evidence that it exists or ever happened. But let us not mistake Disneyland theories for science. 2 - <u>Nothingness cannot pack together</u>. It would have no way to push itself into a pile.

3 - <u>A vacuum has no density</u>. It is said that the nothingness got very dense, and that is why it exploded. But a total vacuum is the opposite of total density.

4 - <u>There would be no ignition to explode nothingness</u>. No fire and no match. It could not be a chemical explosion, for no chemicals existed. It could not be a nuclear explosion, for there were no atoms!

5 - <u>There is no way to expand it</u>. How can you expand what isn't there? Even if that magical vacuum could somehow be pulled together by gravity, what would then cause the pile of emptiness to push outward? The "gravity" which brought it together would keep it from expanding.

6 - <u>Nothingness cannot produce heat</u>. The intense heat caused by the exploding nothingness is said to have changed the nothingness into protons, neutrons, and electrons. *First*, an empty vacuum in the extreme cold of outer space cannot get hot by itself. *Second*, an empty void cannot magically change itself into matter. *Third*, there can be no heat without an energy source.

7 – <u>The calculations are too exacting</u>. Too perfect an explosion would be required. On many points, the theoretical mathematical calculations needed to turn a Big Bang into stars and our planet cannot be worked out; in others they are too exacting. Knowledgeable scientists call them "too perfect." Mathematical limitations would have to be met which would be next to impossible to achieve. The limits for success are simply too narrow.

Most aspects of the theory are impossible, and some require parameters that would require miracles to fulfill. **One example of this is the expansion of the original fireball** from the Big Bang, which they place precisely within the narrowest of limits. An evolutionist astronomer, *R.H. Dicke, says it well:

"If the fireball had expanded only .1 percent faster, the present rate of expansion would have been 3×10^3 times as great. Had the initial expansion rate been 0.1 percent less, the Universe would have expanded to only 3×10^{-6} of its present radius before collapsing. At this maximum radius the density of ordinary matter would have been 10^{-12} grm/m³, over 10^{16} times as great as the present mass



"I just can't figure it out. There are stars out there, and they just don't fit the theory."



"The background radiation is still flowing from all directions. How many Big Bangs were there?"



"I'm trying to figure where the law of gravity came from. None of the Big Bang calculations can explain it."



"We're trying to get gas to start spinning by itself. It's just a matter of waiting long enough."



"We decided to prove that matter, shooting toward a single point, would stop and stick together."



"Yes, I know we've already spent \$50 million trying to find lumps in the radiation, but I think with another government grant for \$80 million, and flying time on the shuttle, we'll succeed."

density. No stars could have formed in such a Universe, for it would not have existed long enough to form stars."—**R.H. Dickey, Gravitation and the Universe (1969), p. 62.*

8 - Such an equation would have produced a hole, not a universe. *Roger L. St. Peter, in 1974, developed a complicated mathematical equation that showed that the theorized Big Bang could not have exploded outward into hydrogen and helium. In reality, St. Peter says the theoretical explosion (if one could possibly take place) would fall back on itself and make a theoretical black hole! This means that one imaginary object would swallow another one!

9 - There is not enough antimatter in the universe. This is a big problem for the theorists. The original Big Bang would have produced equal amounts of positive matter (matter) and negative matter (antimatter). But only small amounts of antimatter exist. There should be as much antimatter as matter—if the Big Bang was true.

"Since matter and antimatter are equivalent in all respects but that of electromagnetic charge oppositeness, any force [the Big Bang] that would create one should have to create the other, and the universe should be made of equal quantities of each. This is a dilemma. Theory tells us there should be antimatter out there, and observation refuses to back it up."—*Isaac Asimov, Asimov's New Guide to Science, p. 343.

"We are pretty sure from our observations that the universe today contains matter, but very little if any antimatter."—*Victor Weisskopf, "The Origin of the Universe," American Scientist, 71, p. 479.

10 - The antimatter from the Big Bang would have destroyed all the regular matter. This fact is well-known to physicists. As soon as the two are produced in the laboratory, they instantly come together and annihilate one another.

We have mentioned ten reasons why matter could not be made by a supposed Big Bang. But now we will discuss what would happen IF it actually had.

THE OUTWARD RUSHING PARTICLES

1 - <u>There is no way to unite the particles</u>. As the particles rush outward from the central explosion, they would keep getting

farther and farther apart from one another.

2 - Outer space is frictionless, and <u>there would be no way</u> to slow the particles. The Big Bang is postulated on a totally empty space, devoid of all matter, in which a single explosion fills it with outward-flowing matter. There would be no way those particles could ever slow.

3 - <u>The particles would maintain the same vector</u> (speed and direction) <u>forever</u>. Assuming the particles were moving outward through totally empty space, there is no way they could change direction. They could not get together and begin circling one another.

4 - <u>There is no way to slow the particles</u>. They are traveling at supersonic speed, and every kilometer would separate them farther from one other.

5 - <u>There is no way to change the direction of even one</u> particle. They would keep racing on forever, never slowing, never changing direction. There is no way to get the particles to form into atoms or cluster into gaseous clouds. *Angular momentum* [turning motion] would be needed, and the laws of physics could not produce it.

6 - <u>How could their atomic structures originate</u>? Atoms, even hydrogen and helium, have complex structures. There is no way that outward shooting particles, continually separating farther from each other as they travel, could arrange themselves into atomic structures.

We will now assume that, contrary to physical laws, (1) the particles magically DID manage to move toward one another and (2) the particles COULD slow down and change directions.

THE PARTICLES CHANGED DIRECTIONS AND FORMED GAS CLOUDS

The theory—Gradually, the outward-racing particles are said to have begun circling one another, forming atoms. These atoms then changed direction further (this time toward one another) and formed gas clouds which then pushed together into stars.

This aspect of the stellar evolution theory is as strange as that which preceded it.

1 - <u>Gas molecules in outer space are widely separated</u>. By "gas," we mean atoms of hydrogen and/or helium which are separated from one another. All gas in outer space has a density so rarified that it is far less than the emptiest atmospheric vacuum pressure bottle in any laboratory in the world! Gas in outer space is rarer (less dense; atoms more separated) than anything on earth.

2 - <u>Neither hydrogen nor helium in outer space would clump</u> <u>together</u>. In fact, there is no gas on earth that clumps together either. Gas pushes apart; it does not push together. Separated atoms of hydrogen and/or helium would be even less likely to clump together in outer space.

We will now ASSUME that the outward-moving, extremely fast, ever separating atoms (shot out by the Big Bang explosion) could slow, change direction, and form themselves into immense clouds.

GAS CLOUDS PUSH THEMSELVES INTO STARS

1 - Because gas in outer space does not clump, <u>the gas could</u> <u>not build enough mutual gravity to bring it together</u>. And if it cannot clump together, it cannot form itself into stars. The idea of gas pushing itself together in outer space to form stars is more scienceless fiction. Fog, whether on earth or in space, cannot push itself into balls. Once together, a star maintains its gravity quite well, but there is no way for nature to produce one. Getting it together in the first place is the problem. Gas floating in a vacuum cannot form itself into stars. Once a star exists, it will absorb gas into it by gravitational attraction. But before the star exists, gas will not push itself together and form a star—or a planet, or anything else. Since both hydrogen and helium are gases, they are good at spreading out, but not at clumping together.

2 - Careful analysis has revealed that <u>there is not enough</u> <u>matter in gas clouds to produce stars</u>.

3 - <u>There would not be enough time for the gas to reach the</u> <u>currently known expanse of the universe</u>, so it could form itself into stars. Evolutionists tell us that the Big Bang occurred 10

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to 15 billion years ago, and stars were formed 5 billion years later. They only allow about 2½ billion years for it to clump together into stars! Their dating problem has been caused by the discovery of supposedly faraway quasars (which we will discuss later), some of which are dated at 15 billion light-years, since they have a redshift of 400 percent. That would make them 15 billion years old, which is too old to accommodate the theory. It doesn't take a nuclear scientist to figure out the math in this paragraph. Simple arithmetic will tell you there is not enough time.

4 - <u>Gas clouds in outer space expand; they do not contract</u>. Yet they would have to contract to form anything. Any one of these points alone is enough to eliminate the stellar evolution theory.

5 - If the Big Bang theory were true, instead of a universe of stars, <u>there would only be an outer rim of fast-moving mat-</u><u>ter</u>. The outwardly flowing matter and/or gas clouds would keep moving outward without ever slowing. In frictionless space, with no matter ahead of it to collide with, the supposed matter from the initial explosion would keep moving outward forever. This fact is as solid as the ones mentioned earlier.

6 - In order for the gas to produce stars, it would have to move in several directions. *First*, it would have to stop flowing outward. *Then* it would have to begin moving in circles (stellar origin theories generally require rotating gas). *Then* the rotating gas would have to move closer together. But there would be nothing to induce these motions. The atoms from the supposed Big Bang should just keep rushing outward forever. *Linear motion* would have to mysteriously change to *angular momentum*.

7 - A quantity of <u>gas moving in the same direction in fric-</u> <u>tionless space is too stable to do anything but keep moving</u> <u>forward</u>.

8 - <u>Gas in outer space which was circling a common center</u> would fly apart, not condense together.

9 - <u>There is not enough mass in the universe</u> for the various theories of origin of matter and stars. The total *mean density* of matter in the universe is about 100 times less than the amount required by the Big Bang theory. The universe has a low mean density. To put it another way, there is not enough matter in the uni-

verse. This "*missing mass*" problem is a major hurdle, not only to the Big Bang enthusiasts but also to the expanding universe theorists (**P.V. Rizzo, "Review of Mysteries of the Universe," Sky and Telescope, August 1982, p. 150*). Astronomers are agreed on the existence of this problem. *Hoyle, for example, says that without enough mass in the universe, it would not have been possible for gas to change into stars.

"Attempts to explain both the expansion of the universe and the condensation of galaxies must be largely contradictory so long as gravitation is the only force field under consideration. For if the expansive kinetic energy of matter is adequate to give universal expansion against the gravitational field, it is adequate to prevent local condensation under gravity, and vice versa. That is why, essentially, the formation of galaxies is passed over with little comment in most systems of cosmology."—**F. Hoyle and *T. Gold, quoted in *D.B. Larson, Universe in Motion (1984), p. 8.*

10 - Hydrogen gas in outer space does not clump together. *Harwit's research disproves the possibility that hydrogen gas in outer space can clump together. This is a major breakthrough in disproving the Big Bang and related origin of matter and stars theories. The problem is twofold: (1) <u>The density of matter in inter-</u> stellar space is too low. (2) <u>There is nothing to attract the par-</u> ticles of matter in outer space to stick to one another. Think about it a minute; don't those facts make sense?

This point is so important (for it devastates the origin of stars theory) that *Harwit's research should be mentioned in more detail:

*Harwit's research dealt with the mathematical likelihood that hydrogen atoms could stick together and form tiny grains of several atoms, by the random sticking of interstellar atoms and molecules to a single nucleus as they passed by at a variable speed. Using the most favorable conditions and the maximum possible sticking ability for grains, Harwit determined that <u>the amount of</u> <u>time needed for gas or other particles to clump together into a</u> <u>size of just a hundred-thousandth of a centimeter in radius</u> <u>would take about 3 billion years</u>! Using more likely rates, 20 billion years would be required—to produce one tiny grain of matter stuck together out in space. As with nearly all scientists quoted in our 1,326-page *Evolution Disproved Series* (which this book is condensed from), *Harwit is not a Creationist (**M. Harwit, Astrophysical Concepts, 1973, p. 394*).

11 - *Novotny's research findings are also very important. *Novotny, in a book published by Oxford University, discusses the problem of <u>"gaseous dispersion." It is a physical law that gas in</u> a vacuum expands instead of contracts; therefore it cannot form itself into stars, planets, etc. That which cannot happen, cannot happen given any amount of time. Do you agree?

If you agree, you are being scientific (for you are agreeing with scientific facts); if you disagree, you are fooling yourself.

We will now ASSUME that the clouds formed themselves into what evolutionists call proto-stars, or first-generation stars.

STARS EXPLODE AND SUPERNOVAS PRODUCE HEAVY ELEMENTS

The problem—The Big Bang only produced hydrogen and helium. Somehow, the 90 heavier (post-helium) elements had to be made. The theorists had to figure out a way to account for their existence.

The theory—The first stars, which were formed, were so-called "first-generation stars" (also called "population III stars"). They contained only lighter elements (hydrogen and helium). Then all of these stars repeatedly exploded. Billions upon billions of stars kept exploding, for billions of years. Gradually, these explosions are said to have produced all our heavier elements.

This concept is as wild as those preceding it.

1 - Another imaginative necessity. Like all the other aspects of this theory, this one is included in order to somehow get the heavier (post-helium) elements into the universe. The evolutionists admit that the Big Bang would only have produced hydrogen and helium.

2 - The nuclear gaps at mass 5 and 8 make it impossible for hydrogen or helium to change itself into any of the heavier elements. This is an extremely important point, and is called the *"helium mass 4 gap"* (that is, there is a gap immediately after helium 4). Therefore exploding stars could not produce the heavier elements. (Some scientists speculate that a little might be produced, but even that would not be enough to supply all the heavier elements now in our universe.) Among nuclides that can actually be formed, gaps exists at mass 5 and 8. <u>Neither hydrogen nor helium can jump the gap at mass 5</u>. This first gap is caused by the fact that neither a proton nor a neutron can be attached to a helium nucleus of mass 4. Because of this gap, the only element that hydrogen can normally change into is helium. Even if it spanned this gap, it would be stopped again at mass 8. Hydrogen bomb explosions produce deuterum (hydrogen 2), which, in turn, forms helium 4. In theory, the hydrogen bomb chain reaction of nuclear changes could continue changing into ever heavier elements until it reached uranium;—but the process is stopped at the gap at mass 5. If it were not for that gap, our sun would be radiating uranium toward us!

"In the sequence of atomic weight numbers 5 and 8 are vacant. That is, there is no stable atom of mass 5 or mass 8.. The question then is: How can the buildup of elements by neutron capture get by these gaps? The process could not go beyond helium 4 and even if it spanned this gap it would be stopped again at mass 8. This basic objection to Gamow's theory is a great disappointment in view of the promise and philosophical attractiveness of the idea."—**William A. Fowler, California Institute of Technology, quoted in Creation Science, p. 90.*

Clarification: If you will look at any standard table of the elements, you will find that the *atomic weight* of hydrogen is 1.008. (Deuterum is a form of hydrogen with a weight of 2.016.) Next comes helium (4.003), followed by lithium (6.939), beryllium (9.012), boron (10.811), etc. Gaps in *atomic weight* exist at mass 5 and 8.

But cannot hydrogen explosions cross those gaps? No. Nuclear *fision* (a nuclear bomb or reactor) splits (unevenly halves) uranium into barium and technetium. Nuclear *fusion* (a hydrogen bomb) combines (doubles) hydrogen into deuterum (helium 2), which then doubles into helium 4—and stops there. **So a hydrogen explosion** (even in a star) does not go across the mass 5 gap.

We will now ASSUME that hydrogen and helium explosions could go across the gaps at mass 5 and 8:

3 - There has not been enough theoretical time to produce all the needed heavier elements that now exist. We know from spectrographs that heavier elements are found all over the universe. The first stars are said to have formed about 250 million years after the initial Big Bang explosion. (No one ever dates the Big Bang over 20 billion years ago, and the date has recently been lowered to 15 billions years ago.) At some lengthy time after the gas coalesced into "first-generation" stars, most of them are theorized to have exploded and then, 250 million years later, reformed into "secondgeneration" stars. These are said to have exploded into "thirdgeneration" stars. Our sun is supposed to be a second- or thirdgeneration star.

4 - <u>There are no population III stars (also called first-generation stars)</u> in the sky. According to the theory, there should be "*population III*" stars, containing only hydrogen and helium, many of which exploded and made "*population II*" (second-generation stars), but there are only population I and II stars (**Isaac Asimov, Asimov's New Guide to Science, 1984, pp. 35-36*).

5 - <u>Random explosions do not produce intricate orbits</u>. The theory requires that countless billions of stars exploded. How could haphazard explosions result in the marvelously intricate circlings that we find in the orbits of suns, stars, binary stars, galaxies, and star clusters? Within each galactic system, hundreds of billions of stars are involved in these interrelated orbits. Were these careful balancings not maintained, the planets would fall into the stars, and the stars would fall into their galactic centers—or they would fly apart! Over half of all the stars in the sky are in binary systems, with two or more stars circling one another. How could such astonishing patterns be the result of explosions? Because there are no "first generation" ("Population I") stars, the Big Bang theory requires that every star exploded at least one or two times. But random explosions never produce orbits.

6 - <u>There are not enough supernova explosions to produce</u> <u>the needed heavier elements</u>. There are 81 stable elements and 90 natural elements. Each one has unusual properties and intricate orbits. When a star explodes, it is called a *nova*. When a large star explodes, it becomes extremely bright for a few weeks or months and is called a *supernova*. It is said that only the explosions of supernovas could produce much of the needed heavier elements, yet there have been relatively few such explosions.

7 - Throughout all recorded history, <u>there have been al-most no supernova explosions</u>. If the explosions occurred in the past, they should be occurring now. Research astronomers tell us that one or two supernova explosions are seen every century, and only 16 have exploded in our galaxy in the past 2,000 years. Past civilizations carefully recorded each one. The Chinese observed one, in A.D. 185, and another in A.D. 1006. The one in 1054 produced the Crab nebula, and was visible in broad daylight for weeks. It was recorded both in Europe and the Far East. Johannes Kepler wrote a book about the next one, in 1604. The next bright one was 1918 in Aquila, and the latest in the Veil Nebula in the Large Magellanic Cloud on February 24, 1987.

"Supernovas are quite different . . and astronomers are eager to study their spectra in detail. The main difficulty is their rarity. About 1 per 650 years is the average for any one galaxy . . The 1885 supernova of Andromeda was the closest to us in the last 350 years."—*Isaac Asimov, New Guide to Science (1984), p. 48.

8 - Why did the stellar explosions mysteriously stop? The theory required that all the stars exploded, often. The observable facts are that, throughout recorded history, stars only rarely explode. In order to explain this, *evolutionists postulate that 5 billion years ago, the explosions suddenly stopped*. Very convenient. When the theory was formulated in the 1940s, through telescopes astronomers could see stars whose light left them 5 billion light-years ago. But today, we can see stars that are 15 billion light-years away. Why are we not seeing massive numbers of stellar explosions far out in space? The stars are doing just fine; it is the theory which is wrong.

9 - <u>The most distant stars</u>, which are said to date nearly to the time of the Big Bang explosion, <u>are not exploding</u>,—and yet they contain heavier elements. We can now see out in space to nearly the beginning of the Big Bang time. Because of the Hubble telescope, we can now see almost as far out in space as the beginning of the evolutionists' theoretical time. But, as with nearby stars,



"We've changed the speed of light to 15 miles per hour. Maybe that latest change will bring those quasars into line with the theory."



"For this NASA experiment, you astronauts will place half a dozen baseballs in outer space, and then carefully observe to see if they will begin orbiting one another. It will help us prove a theory."



"After listening to you explain how hydrogen pushed itself together to make stars, I thought I could blow hard into a bottle and at least make a flare."



"I've found a blue-shifted star! It sure is getting bright fast!"



"I know the theory says that supernovas should be exploding all over the place, but I just can't find them."



"I am happy to be able to tell you students that Charles Darwin's theory forbade the Second Law of Thermodynamics from occurring." the farthest ones have heavier elements (are "second-generation"), and they are not exploding any more frequently than are the nearby ones.

10 - Supernovas do not throw off enough matter to make additional stars. There are not many stellar explosions and most of them are small-star (nova) explosions. Yet novas cast off very little matter. A small-star explosion only loses a hundred-thousandth of its matter; a supernova explosion loses about 10 percent; yet even that amount is not sufficient to produce all the heavier elements found in the planets, interstellar gas, and stars. So supernovas—Gamow's fuel source for nearly all the elements in the universe—occur far too infrequently and produce far too small an amount of heavy elements—to produce the vast amount that exists in the universe.

11 - Only hydrogen and helium have been found in the outflowing gas from supernova explosions. The theory requires lots of supernova explosions in order to produce heavy elements. But there are not enough supernovas,—*and research indicates that they do not produce heavy elements!* All that was needed was to turn a spectroscope toward an exploded supernova and analyze the elements in the outflowing gas from the former star. *K. Davidson did that in 1982, and found that the Crab nebula (resulting from an A.D. 1054 supernova) only has hydrogen and helium. This means that, regardless of the temperature of the explosion, the helium mass 4 gap was never bridged. (It had been theorized that a supernova would generate temperatures high enough to bridge the gap. But the gap at mass 4 and 8 prevented it from occurring.)

12 - <u>An explosion of a star would not produce another star</u>. It has been theorized that supernova explosions would cause nearby gas to compress and form itself into new stars. But if a star exploded, it would only shoot outward and any gas encountered would be pushed along with it.

So we find that the evidence does not support the various aspects of the Big Bang and stellar evolution theories.

2 - MORE FACTS WHICH BURY THE THEORY

MORE PROBLEMS FOR STELLAR EVOLUTION

1 - According to the theory, older stars should have more heavy elements because they are continually making them. But <u>the socalled "older stars" have been found to have no more heavy</u> <u>elements than the so-called "younger stars</u>." All stars, from "young" to "old," have the same amount of heavy elements.

2 - The theory says that gas floating in interstellar space is leftover from the Big Bang, and can only consist of hydrogen and helium. But *Rubins has shown that this is not true. <u>Extra-galactic</u> gas has a variety of heavier elements in it.

3 - The theory says that the super-fast particles, hurled outward by the Big Bang, were evenly radiated. Yet, as scientists have noted, <u>a perfectly smooth cosmic explosion would only have produced</u> <u>perfectly smooth, increasingly rarified (ever farther apart)</u> <u>particles.</u> So the very existence of stars disproves the theorized original giant explosion.

4 - The theory requires a continual rush of particles outward leaving nothing inside this outer perimeter of outflowing matter. Yet <u>there are stars and galaxies all through space</u>, <u>not just at</u> <u>the outer edge</u>. Even if clumped gas could have formed any stars, everything would continue to be hurled to the thin, outer edges of space—with an expanding center containing nothing.

5 - According to the theory, the farther we look out into space, the farther back into past eons of time we are gazing. This means that <u>the farthest stars and galaxies ought to be the youngest.</u> <u>Yet research reveals the farthest stars are just like those nearby</u>.

6 - <u>Angular momentum</u> is another serious problem. Why do stars turn? Why do galaxies rotate? Why do planets orbit stars? Why do binary stars circle one another? <u>How could the super-fast</u> <u>linear (straight line) motion, started by the supposed Big Bang, have changed into rotation (spinning or revolving motion) and revolutions (orbiting motion)</u>? How could angular momentum exist—and in such perfectly balanced orbits throughout space? There is no possible way that floating gas could transform itself into rotating and orbiting objects, like stars, planets, and moons.

7 - Inward pushing gas would not change to a rotating star.

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According to the theory, stars were formed by the "inward gravitational collapse of hydrogen gas clouds." If so, why do the resultant stars rotate? Some stars rotate very fast. If ten people in a circle pushed marbles in toward a common center, the marbles would not begin rotating or circling after they reached it.

8 - <u>Matter-origin theories cannot explain why stars spin</u>. The theorists tell us that stars somehow started spinning; but, with age, they slow down. Yet some stars spin faster than either "younger" or "older" stars. Some spin once in less than an earth-day. The fastest, Hz 1883, has a spin period of only 6 hours.

9 - <u>Some stars orbit backward</u> to that of other stars. The theorists cannot explain this.

10 - <u>There are high-velocity stars that are traveling far too</u> <u>fast</u> to accommodate the evolutionary theories of matter and stellar origins.

11 - If the Big Bang theory were true, all stars would move in the same direction; but <u>stars, clusters, and galaxies are moving</u> <u>in various directions opposite to one another</u>. (More about the expanding universe theory later.)

12 - Evidence is accumulating that <u>the entire universe is</u> <u>rotating</u>! This is angular momentum on the most gigantic of proportions. Yet the Big Bang should only have produced linear movement outward from it.

13 - Theorists are deeply bothered by, what they call, <u>the</u> *"lumpy" problem*. The universe is "lumpy"; that is, it has stars, planets, etc. in it. Yet none should exist if the Big Bang theory were true. They argue fiercely over these problems in their professional journals, while assuring the public the theory is accepted by all astrophysicists. They consider this to be a major unsolved problem.

"As IBM's Philip E. Seiden, put it: 'The standard Big Bang model does not give rise to lumpiness. That model assumes the universe started out as a globally smooth, homogeneous expanding gas. If you apply the laws of physics to this model, you get a universe that is uniform, a cosmic vastness of evenly distributed atoms with no organization of any kind.' No galaxies, no stars, no planets, no nothing. Needless to say, the night sky, dazzling in its lumps, clumps, and clusters, says otherwise. How then did the lumps get there? No

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one can say."—*Ben Patrusky, "Why is the Cosmos 'Lumpy'?" Science 81, June 1981, p. 96.

14 - <u>The universe is full of stars, with relatively little gas.</u> <u>But it should be the other way around: full of gas and no stars.</u> The Big Bang should have produced a "homogenous" universe of smooth gas ever flowing outward with, at best, almost no "inhomogeneities," or "lumps" such as stars and island universes.

15 - <u>The universe is full of superclusters</u>. These are the biggest "lumps" of all. It has recently been discovered that the galaxies are grouped into galaxy clusters, and these into still larger superclusters. The "Big Bangers," as their colleagues call them, excuse the problem by saying that "gravity waves" produced the galaxies. But gravity, in any form, could not press floating hydrogen and helium into a star or planet out of gas, make a marvelously organized disk network of stars, or produce the precisely balanced spinning and orbiting of planets and stars.

"The main efforts of investigators have been in papering over holes in the Big Bang theory, to build up an idea that has become ever more complex and cumbersome . . I have little hesitation in saying that a sickly pall now hangs over the Big Bang theory. When a pattern of facts becomes set against a theory, experience shows that the theory rarely recovers."—*Sir Fred Hoyle, "The Big Bang Theory under Attack," Science Digest, May 1984, p. 84.

16 - Solar collapse, not nuclear fusion has been found to be the cause of solar energy. But that would undercut the entire theory of the Big Bang. We will briefly summarize the data here. You will find it discussed more fully (along with additional quotations) in the chapter, *Origin of the Stars*, in our 3-volume set on our website. It is also partially referred to in "6 - Solar Collapse" in the Age of the Earth chapter in this book.

There is evidence that <u>our sun "shines," not by hydrogen</u> <u>explosions, but by solar collapse. Yet stellar evolution is keyed</u> <u>to the fact that stars are fueled by (shine because of) hydrogen</u> <u>explosions (nuclear fusion)</u>. The amount of mass/energy our sun would have to lose daily amounts to 4 million tons [3.6 million mt] a second. The problem is the fusion process should produce lots of sub-atomic particles called *neutrinos*, and each square inch of earth's surface should be hit each second by a trillion



"I am trying to figure out a Grand Unified Theory that can explain away the missing neutrinos, missing matter, missing antimatter, and all those quasars that aren't supposed to be there."



"On behalf of the theory I will have to say, it would be easier if I could tell you that globular clusters, ellipticals, and spiral galaxies didn't exist."



"Oh, this is terrible! 97% of the universe is missing! What shall I ever do! How could the theory have mislaid that much of it!"



"I've got it! I've got it! Antimatter made black holes, and they ate all the missing neutrinos and missing matter! This breakthrough will make me famous like Gamow and Hoyle!"



"I have developed a new theory on how to get rid of foggy nights. Just push it together and make stars!"



"I am sorry to have to tell you, but planets and stars do not rotate after all. It just doesn't fit into the theory."

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neutrinos. Scientists have neutrino detectors in place and have searched for them since the mid-1970s, **but hardly any arrive from the sun.** This fact alone would appear to disprove the hydrogen theory of solar energy (*cf. *J.H. Bahcall, Astronomical Journal, 76:283, 1971*). *Corliss, the world leader in tracking down scientific anomalies, considers the "missing neutrinos" to be "one of the most significant anomalies in astronomy" (*W.R. Corliss, Stars, Galaxies, Cosmos, 1987, p. 40). It was not until the 1930s that the nuclear theory of starlight was developed by *Hans Bethe and *Carl von Weizsacker. Yet it remains a theory. In contrast, there is strong evidence pointing to solar collapse as the true cause of solar energy.

The scientific basis for solar collapse, as the source of solar energy, was developed over a century ago by two brilliant scientists: Hermann von Helmholtz and Lord Kelvin. If each star is slowly contracting, great amounts of energy would be constantly released. But evolutionists cannot accept this possibility, because it would mean the universe (and the earth) is much younger. Nuclear fusion would mean billions of years for a star's life; solar collapse only a few million. A change in the radius of our sun of about 80 feet [24.27 m] a year is all that would be necessary to produce our sun's actual energy release. This is a radius shrinkage of only .009 feet [.27 cm] per hour.

Some scientists have found evidence of solar collapse. One major study was done by *John A. Eddy and *Aram Boornazian (**New Scientist, March 3, 1983, p. 592*). The basis for this is an analysis of solar transit measurements, made at the Royal Greenwich Observatory since 1836 and the U.S. Naval Observatory since 1846. It was calculated that the sun is shrinking at the rate of 5 ft/hr in diameter (0.1% per century, 2 arc-sec/century). They also analyzed solar eclipses for the past four centuries. A separate report by *Ronald Gilliland confirmed the *Eddy and *Boornazian report (**op. cit., p. 593*).

"The sun has been contracting about 0.1% per century . . corresponding to a shrinkage rate of about 5 feet per hour [15.24 dm]."— *G.B. Lublihn, Physics Today, Vol. 32, No. 17, 1979.

The above findings would indicate that our sun's output of ra-

diant energy is generated by this shrinkage and not by hydrogen explosions (thermonuclear fusion) deep within it. As already mentioned, **if hydrogen was the solar fuel**, **we should be receiving a very large quantity of neutrinos; yet almost none are detected.**

Jupiter is also apparently contracting, because it is giving off more heat than it receives from the sun. A surface contraction of just one centimeter per year would account for the measured heat flow from Jupiter. A similar situation exists for Saturn.

"Jupiter . . radiates twice as much energy as it absorbs from the sun through a contraction and cooling process."—**Star Date radio broadcast, November 8, 1990.*

"Saturn emits 50% more heat than it absorbs from the sun."— *Science Frontiers, No. 73, January-February 1991.

These facts are known; but, **in order to defend evolutionary theory, the decision has been made to stick with solar fusion** (hydrogen explosions) as the cause of solar energy and sunshine.

"Astronomers were startled, and laymen amazed, when in 1979 Jack Eddy, of the High Altitude Observatory in Boulder, Colorado, claimed that the sun was shrinking at such a rate that, if the decline did not reverse, our local star would disappear within a hundred million years."—*John Gribbin, "The Curious Case of the Shrinking Sun," New Scientist, March 3, 1983.

"Geological evidence, however, indicates that the terrestrial crust [our earth's rock strata] has an age of several billion years, and it is surely to be expected that the sun is at least as old as the earth . . We must conclude that . . another source must be responsible for most of the energy output of a star."—**Eva Novotny, Introduction to Stellar Atmospheres and Interiors (1973), p. 248.*

<u>Summarizing solar collapse</u>: The evidence that hydrogen explosions (thermonuclear fusion) is the cause of solar energy (sunshine) would be a great abundance of neutrino radiation. But that evidence is missing. The evidence that solar collapse (gradual shrinkage) is the cause has been definitely found. Evolutionists reject solar collapse as the cause, (1) since it would mean our sun and the universe could not be more than a few million years old; (2) their cosmology theories would be wrong and (3) the Big Bang theory would be gutted.

Is there no evidence that supports the Big Bang theory? Evolutionists are able to point to only TWO. Here they are:

[1] BACKGROUND RADIATION NOT EVIDENCE OF THE BIG BANG

The fact—There is a faint amount of heat radiating throughout outer space. It is called background radiation. Since it comes uniformly from all directions, it is believed to exist throughout the universe. It is a very small amount of "heat": in fact, only 2.73°K. above absolute zero (0°K., which is -270°C. or -454° F.).

The theory—Background radiation (also called microwave radiation), first discovered in 1965, is said to be the single, best evidence that the Big Bang occurred. It is said to be the leftover remains, the last remnant, from the Big Bang explosion.

Scientists said that background radiation would prove the theory in four ways: (1) It would come from only one direction—the Big Bang source. (2) It would have the right radiational strength to match the Big Bang mathematical theory. (3) It would emit the proper spectrum. (4) It would not be a smooth radiation.

But we find that, if this is the best evidence that the theorists can produce for their speculation, it surely is weak.

1 - It is omnidirectional. <u>Background radiation comes from</u> <u>every direction instead of one</u>. The Big Bang theory requires that it come from only one direction—from where the Big Bang occurred. Since its discovery, scientists have been unable to match its directional radiation (its *isotropy*) with the Big Bang predictions. Its omnidirectionality tells where the background radiation is coming from: <u>"Background radiation" is actually a slight</u> <u>amount of heat given off by stars throughout the universe</u>. Would they not be expected to emit a very faint amount of heat into outer space?

2 - <u>The radiation does not fit the theory, for it is too weak</u>. It should be far more powerful than it is. *Fred Hoyle, a leading 20th-century astrophysicist, said it should have been much stronger.

3 - Background radiation lacks the proper spectrum. It does not have the ideal "black body" (total light absorption) capacity which would agree with the *Max Planck calculation. This radiation does not fit the theoretical 2.7K black body spectrum required

for the Big Bang theory.

4 - <u>The spectrum should be far hotter than it is</u>. The heat emitted by the radiation should have a far higher temperature. *The radiation should emit a 100°K black body radiation* spectrum, which is far greater than the 2.73° K spectrum it now has.

5 - <u>Background radiation is too smooth</u>. The theory requires that it be much more irregular and "lumpy" (with "density fluctuations") in order for it to explain how stars could be formed from the Big Bang explosion. In recent years, some slight variations in smoothness have been detected, but this is still not enough to fit the theory.

"It seems difficult to believe that, whereas visible matter is conspicuously clumpy and clustered on all scales, the invisible intergalactic gas is uniform and homogeneous."—**G. de Vaucouleurs,* "*The Case for a Hierarchical Cosmology,*" *Science 167, p. 1203.*

"The problem was to reconcile the apparent evenness of the early expansion, as indicated by the steady background radiation, with the observed large-scale structures [stars, planets, etc.]. A perfectly smooth cosmic explosion would have produced only an increasingly rarified [ever thinner] gas cloud."—**Peter Pocock and *Pat Daniels, Galaxies (1988), p. 117.*

6 - <u>All of the above points (omnidirectionality, very slight</u> <u>amount of heat, general smoothness, with radiative fluctua-</u> <u>tions in strength) is what we would expect from radiational</u> <u>heat from the multiplied billions of stars throughout the uni-</u> <u>verse</u>. It would be understandable for all those stars to emit a slight amount of uniform, omnidirectional radiative heat. And we would expect the radiational heat emitted by the stars should, at great distances, show very slight fluctuations. Does not each one send forth both heat and occasional gigantic solar flares into space? If you do not believe stars emit heat into space, then you do not believe the sun keeps you warm.

[2] THE REDSHIFT NOT EVIDENCE OF THE BIG BANG OR AN EXPANDING UNIVERSE

The fact—Relatively white light can be split by a triangular *prism* of glass into all the colors of the rainbow. Using a *spectrometer*, this can be done to starlight. Dark, vertical bands mark the *spectrum* at various points. Analyzing these dark bands, the type of

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"I sure am thankful for the theory of black holes. Maybe we can use it to explain away parallel galaxies, disk-shaped galaxies, spiral arms, globular clusters, and other things that don't fit the theory."



"Grumble, grumble, grumble. Our theory would have been better off if we had never gone to the moon."



"Isn't there some way we can rearrange the solar system, so it will agree with the theory?"



"Why are you laughing? I said 'swirling pools of gas clouds made our planet.' "



"Isn't there some way we can slow the planets down, so we can make them agree with the theory." "Prof, I have an idea: All we need do is speed up the sun!"



"If we could just invent something to glue gas together, the theory would have it made."

elements in each star can be ascertained. *Spectral type* is a star's classification—based on its spectrum, surface temperature, and mass. A *spectrogram* is a photograph of a star's spectrum. *Spectroscopy* is the study of *spectra*.

Ultraviolet is on one end of a spectrum and has a higher frequency and shorter wavelength than visible blue light. *Infrared* is the other end of the visible spectrum (astronomers call it "*red*").

Every star is *redshifted* to some extent (that is, the entire spectrum of that star is moved toward the red end). The farther a star or galaxy is from us, the more its light is shifted. This displacement is called the redshift.

The theory—The "Big Bangers" (as scientists call them) theorize that this redshift shows that the universe is expanding outward from the source of the Big Bang explosion. They base this on the hypothesis that the "speed theory" of the redshift is the only cause of the redshift. This means that if light is traveling toward us, the wavelength is slightly compressed or shortened. This would cause the light to be "blueshifted" (shifted toward the ultraviolet). If it is moving away from us, the wavelength is stretched out, which causes a redshift (shifted toward the infrared).

"This redshift, observed in the spectral lines of distant galaxies and interpreted as a Doppler [speed] effect, is the key to cosmology."—**Carl Sagan, Cosmos, p. 252.*

<u>What causes the redshift? It is quite obvious that the dis-</u> tance of the star from us has something to do with the redshift. <u>Here are FOUR scientific explanations for the redshift</u>, each of which are accepted by various scientists:

• <u>The Speed redshift</u> (also called the *Doppler theory of red-shift*): <u>This would occur if the star were moving away from us.</u> Evolutionists say all the stars are moving away from us, and that there is no other cause for the recorded redshifts. But there are three other possibilities:

• <u>Gravitational redshifts</u>: <u>The pull of gravity on light rays</u> would cause a loss of energy in the beam of moving light. In 1915, *Albert Einstein predicted that gravity could bend light and that it would cause a redshift. This was later proved to be true.

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As light travels toward us from distant stars, it passes other stars, which slightly slows the beam, causing its spectrum to shift toward the red.

"Einstein's views of gravity led to the prediction that light emitted by a source possessing a very strong gravitational field should be displaced toward the red (the Einstein shift)."—*Isaac Asimov, Asimov's New Guide to Science, 1984, p. 50.

Yet, in order to bolster their Big Bang and expanding universe theories, evolutionists ignore gravitational, second-order Doppler, and energy-loss shifts.

• <u>Second-order Doppler shift</u>: <u>A light source moving at right</u> <u>angles to an observer will always be redshifted</u>. This would occur if the universe were moving slowly in a vast circle around a

> THE REDSHIFT—Shown here are five spectra, taken by spectrometer photographs of distant objects in the universe. The figures are in accordance with the speed theory of red shift.

> The top one is from a stellar object which, according to the speed theory, is 78 million miles distant and is moving away from us at a speed of 1,200 kilometers per second.

> The second one is thought to be 1 billion light-years distant and rushing away at 15,000 kps.

The third is listed at 1.4 billion-light years and 23,000 kps.

The fourth is estimated at 2.5 billion lightyears and 39,000 kilometers per second.

The bottom spectrum is thought to be located at a distance 3.96 billion light-years from us and rushing away at a speed of 61,000 kilomoters per second. common center. We know that every body in the universe is orbiting and, at the same time, moving in some direction with its orbital body. Much of that movement is at right angles to us.

• <u>Energy-loss shift</u>: Light waves could themselves directly lose energy as they travel across long distances. This would nicely explain why the farthest stars from us have the most dramatic redshifts. This is also called the *tired-light redshift*.

Big Bang theorists maintain that the speed redshift is the ONLY cause of the redshift,—because they can then say that the universe is expanding outward as a result of the Big Bang.

But <u>the evidence reveals that the speed redshift theory—as</u> <u>the ONLY cause of the redshift—is wrong</u>:

1 - Nearly all the stars and galaxies are redshifted. This fact agrees with the gravitational-loss, second-order Doppler, and energy-loss redshifts. But, if only the speed theory is accepted as the cause of this,—nearly all the universe is moving away from *us—our planet*! A true expanding universe theory would mean that everything was moving outward from a common center somewhere else, not from our planet. If the Big Bang really occurred, the universe would be rushing outward from where the explo-in outer space, hurling shrapnel in every direction. Some pieces would be flying in our direction while others traveled in other directions. This differential could be measured. Some pieces would be flying toward us, others sideways, and others away from us. If there was a Big Bang, we could locate its origin by measuring redshifts. But, instead, we only find evidence that everything in space is redshifted; that is, everything is supposedly moving away from us. This point disproves both the Big Bang and the expanding universe theory.

2 - <u>The closest stars and galaxies are the least redshifted</u>, and some of the closest stars are actually moving toward us yet still seem redshifted. <u>The farther that starlight has to travel</u> <u>before reaching us</u>, the more those two types of shifts would <u>slow it</u>.

3 - There is evidence that photons (light particles) do slow

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down. This would be nicely explained by gravitational and energy-loss redshifts.

4 - Quasars strongly disprove the speed theory of redshift. They are unknown objects which show drastically shifted spectrums toward the red. Yet, if the speed theory is accepted as the cause of those shifts, they would be at impossibly great distances from us. Some have redshifts of 200 and 300 percent! This would equal distances up to 12 billion light-years and recession (moving away from us) speeds exceeding 90 percent of the speed of light! Many astronomers renounced the speed theory when they learned this. But then came the discovery of quasars with even higher redshifts: 300-400 percent! Ultimately, they found three quasars which, according to the speed theory, are moving faster than the speed of light! One of these is eight times faster than the speed of light! In a desperate attempt to save their theory, the evolutionists recalculated the "Hubble constant," which is the formula for the speed of light. But they are unable to change it. Now they really have a quandary on their hands! As *Vincent A. Ettari wrote, "An increase of 100 percent in the Hubble constant would decrease the computed age of the universe by 50 percent."—And the evolutionists cannot accept that!

5 - Light has weight. Some suggest that light and gravity could not affect one another. But *Einstein was right: Light can be pulled by gravity because it has weight. Because light has weight, it can be pulled by matter and push it! <u>Because light has weight, stars it</u> passes pull on it, slightly redshifting it.

"If a set of fine scales is arranged so that one scale is kept dark, and light is allowed to fall on the other, the lighted scale will sink slowly. Light has 'weight.' The pressure of light on the Earth's surface is calculated as two pounds per square mile [90 kg per 2.6 km²]."—**Isaac Asimov, Asimov's Book of Facts (1979), p. 330.*

6 - No one has ever seen a blue-shifted stellar light spectrum. This nicely agrees with the alternate redshift theories (gravitational, second-order Doppler, and energy-loss) of redshift. Even nearby stars, which we think are moving toward us, are very slightly redshifted. But, if the speed theory is the only cause of redshifts, every star in the universe is actually moving away from us! Why should we be the center of this expanding uni-

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verse?

On pages 67-68 of his book, *Asimov's New Guide to Science*, *Isaac Asimov, a confirmed evolutionist, lists 10 reasons why quasars do not agree with the speed theory of light. (*We quote that lengthy section on our website.*)

3 - OTHER ORIGIN OF THE UNIVERSE THEORIES

There are several other origin of matter theories which are but variants of the Big Bang. Essentially the same problems apply to them:

• *The Steady State Universe Theory.* Originated by *Fred Hoyle in 1948, this theory says that, in the space between galaxies, new matter is quietly but continually appearing out of nothing. In 1965, Hoyle publicly abandoned the theory as ridiculous. (*On our website, we list his reasons for that decision.*)

• *The Oscillating Universe Theory.* This is another idea by *George Gamow. It says that when the universe finally runs down, another Big Bang will start it going again. The main difference is that, while the first Bang occurred when nothing exploded into all the matter in the universe, the later ones would be the result of all the matter packing into a tiny point and then exploding again.

1 - *Robert Jastrow, founder and director of NASA's Goddard Institute for Space Studies disproved this theory with the fact that, when all the hydrogen is used up, there will be nothing to replace it.

2 - <u>Why would matter, that is ever expanding outward to-</u> ward infinity, suddenly stop and reverse its direction?

3 - If all matter had finally moved into the outer perimeter of the universe, that is where the center of gravity would be. Why would matter want to reverse and move back away from the gravitational field?

4 - <u>The universe could not collapse inward unless there were</u> ten times as much matter in the universe as there now is. <u>This</u> is the <u>"missing mass"</u> problem. Evolutionists try to solve it by theorizing that 97% of the mass in the universe is "dark matter"

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which cannot be located, seen, or identified with any scientific instruments.

5 - All the matter, shooting back inward, is supposed to collide in one miniature point. **In reality, inertia would carry everything past that central stopping point.** Why would everything go to one little dot and stop there? More fairy tales. Remember, it was *Gamow who also invented the Big Bang theory.

• The Inflationary Universe Theory. This one, partly invented by *Allan Guth and *Paul Steinhardt in 1984, says that the universe (including all space and time) began as a single infinitesimal particle. No one has figured out where that particle came from and how everything got jammed into it. First, it was in its "cold big whoosh" stage. When it reached five inches, it suddenly got hot (the "hot big bang" stage)—and blew up. Those two men now speculate that the particle initially swelled out of nothingness into its "whoosh" pinpoint stage.

All of these theories are cheap science fiction. Along with the Big Bang theory, <u>these other theories violate natural laws</u>______ <u>including the First and Second Laws of Thermodynamics</u> (which we will discuss in chapter 18 of this book). Even *Stephen W. Hawking of Cambridge University, one of the most influential theoretical physicists in the world, has rejected the Big Bang theory (*National Geographic, December 1988, p. 762).

4 - ADDITIONAL FACTS WHICH DISPROVE STELLAR EVOLUTION

How did the stars get there? Not from evolution. *Here are more reasons why the stellar evolution theories do not agree with the facts:*

1 - Galaxies never exist alone. They are always found in pairs or in larger collections of galaxies. Yet <u>cloud condensation would</u> <u>not favor formation of nearby pairs and groups of stars</u>.

2 - As a rule, <u>the amount of matter within each galaxy is not</u> <u>enough to explain why its stars clumped together as they did.</u> <u>The space-to-mass ratio</u> within the galaxy is too great to bind <u>them together</u>. **3** - The usual shape of the galaxies is that of a saucer with a central sphere. This shape defies explanation by the laws of physics. **Island universes should not have their highly coordinated, inter-orbiting structure arrangement.** The stars should all fly apart. Each galaxy is a carefully organized city in the sky. **In an attempt to explain this pattern, theorists declare that there must be "dark matter" pressing the galaxies together!** But there is no evidence that such fanciful stuff exists. It takes a lot of imagination to hold evolutionary theory together. The theorists declare that "97% of the universe is missing." They are speaking of the dark matter ("exotic matter") which they cannot find (**Marcia Bartusiak, "Missing: 97% of the Universe, "Science Digest, 91:51, December 1983).*

4 - Why are disk galaxies shaped like a disk? Astronomers say <u>there is no explanation for what could place stars into that</u> <u>galactic structural pattern</u>. It surely is beautiful, with the globular clusters outside the disk, hanging in space like chandeliers, but how could random motions produce such balanced, artistic harmony?

5 - Each galaxy, with all its stars, is moving together in a certain direction; but <u>the corporate velocities within a galaxy should</u> gravitationally unbind the stars within it, yet this does not happen.

6 - All <u>the evidence indicates that these galaxies were formed</u> in their present shape, and are held together by a power unexplainable by natural forces as we know them.

7 - More than one half of all the stars that we can individually examine through our telescopes are *binary* or multiple star systems. The other word for evolution is "randomness." <u>How could</u> <u>random accidents and gaseous contractions produce two, three,</u> <u>or four stars circling one another</u>? They should crash into one another or fly apart. Try placing two magnets close to one another; will they orbit one another or smash together?

8 - Differential binaries. <u>Most stars circling one another</u> <u>are different in composition</u>. Spectrums reveal different physical properties for each one. Most binaries are composed of different types of stars. Evolution cannot explain this. **9** - <u>Globular clusters are massive clusters of stars. There is</u> no possible way they could be formed by evolutionary means or even exist. Yet there they are. Each one contains from 20,000 to 1 million stars! In our Milky Way Galaxy alone it is estimated that there are 200 of these giant clusters. Other galaxies have comparable numbers of them.

10 - <u>There are no binaries or multiple systems in globular</u> <u>clusters</u>. This fact is unexplainable by stellar origin theories.

11 - Globular clusters are extremely stable; yet they ought to be the most unstable objects in the universe. <u>The stars within</u> <u>globular clusters ought to all be crashing into one another</u>. The organization of stars within clusters is fabulous. Any nonthinking force capable of bringing these tens of thousands of stars into the globular cluster—would have crashed them all together!

12 - It cannot be said that evolutionary forces gradually "built them up"; for <u>globular clusters always have a minimum</u> <u>size</u> below which they do not occur.

13 - <u>Globular clusters rotate separately, and even pass</u> <u>through the galactic plane—without colliding with any stars</u>! Evolution cannot explain this! These clusters are fantastic balls of stars, each one scattered above and below the galactic plane of an island universe.

14 - Elliptical galaxies are truly huge! Far larger than the globular clusters scattered about island universes, ellipticals are super-gigantic balls of stars. There is absolutely no way that the random, evolutionary movements and explosions could produce ellipticals. How could all those stars get into that cluster, with absolutely nothing outside the cluster extending out for many light-years? How could they all be there, without crashing into one another or flying out from the cluster? They could never come together by random chance. Think, reader, think. What are we confronted with here?

15 - Why are galaxies not equally spaced all through the universe instead of being clumped into superclusters, composed of millions of galaxies? Even superclusters have a definite order and arrangement. One or two giant elliptical galaxies are usually in the center of each cluster.

16 - Stars never get closer than a certain distance from one

another (3.5 light-years apart). This highly organized arrangement could never be caused by evolutionary forces.

17 - Evidence disproves the evolutionary stellar size theory. The evolutionary theory is that stars gradually get larger until they become red giants; then they collapse into very small stars. This so-called "evolution of stars" is charted in accordance with the theorized Hertzspring-Russell diagram. But it has recently been discovered that a physical barrier exists between the red giants and the white dwarfs they are said to evolve into. "Mass-shedding" is theoretically supposed to occur, as the star shrinks down, but it is now known that this does not happen. Instead, the star's immense gravitational field quickly reabsorbs whatever is thrown off.

18 - <u>The First Law of Thermodynamics</u> (the law of conservation of mass/energy) maintains that the universe and our world began in perfect completeness and quality. **It says matter could not have started itself.** It forbids the self-origin of matter or life.

19 - <u>The Second Law of Thermodynamics</u> (the law of entropy) says that all systems will eventually become totally random and disorganized. **It repudiates the possibility that either matter or life could evolve into greater complexity.** Everything runs down and wears out. *Albert Einstein declared that, of all the laws of physics, the two laws of thermodynamics would never be negated or replaced. (See chapter 18, *The Laws of Nature*, for much more on this powerful evidence against evolution.)

20 - <u>Stellar evolution is non-observable science</u>. Many evolutionists have admitted that <u>no evidence exists that evolution</u> <u>has ever occurred anywhere in the universe</u>. Stars are not now evolving in outer space, and animals and plants are not evolving in our world.

5 - WHAT ARE BLACK HOLES?

(For additional information, see *#3/10 What about Black Holes?*) (See p. 9 for explanation of this paragraph.)

<u>Black holes are a theoretical extreme</u>. If an object could become large enough, it could, in theory, collapse into a cavernous something that could absorb nearby matter. Do such horrible things actually exist? <u>The whole thing is a theory, for which there is no</u>

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substantial evidence.

Evolutionary theorists point to locations in the universe, where large amounts of radiational activity (X-rays) are occurring, and declare that they are black holes. The cause of that stronger radiation is not known; it is only speculative to say it comes from a black hole.

Yet, if black holes absorb everything, there should be no X-rays in their area. <u>Even the theorists admit they could not</u> see a black hole if they were close to one.

Since the entire universe is so orderly and all the stars never exceed a certain size, why should we expect that star-eating black holes would exist, destroying great quantities of stars?

It is of interest that <u>some of these suspected black holes are</u> <u>located rather close to stars,—yet they have not gobbled them</u> <u>up</u>.

Black holes are just another non-existent theory.

Like the Big Bang, the theorized early non-oxygen environment; the origin of life from non-living materials; the chance production of protein molecules; and evolution of life forms from one phylum, class, order, or family into other ones, black holes look good on paper but do not exist in reality.

This is the evolutionists' reasoning: "We know that black holes ('singularities') exist, because some sources emit a lot of X-rays. If a lot of X-rays are coming from a single source, it must be a black hole." Based on this, they have invented accretion disks, capturing and evaporating black holes and mini-black holes. **The only evidence for black holes is X-rays from outer space.** Remember that.

6 - THE ORIGIN OF THE SOLAR SYSTEM

(For additional information, see *#1/4 History of Cosmological Theories [extensive data] / #2/2 A Final Look at Matter and the Solar System: What Happens When a New Moon Arrives, Three Men Who Gave Us Our Modern Stellar Theories. How Unscientific Can We Become?*)

DISPROVING THE SEVEN THEORIES

There are seven theories about the origin of the Solar Sys-

tem (*Nebular Hypothesis, Fision Theory, Capture Theory, Accretion Theory, Planetary Collision Theory, Stellar Collision Theory, and Gas Cloud Theory*) which, on pp. 79-84 of our 3-volume book set (and on our website), we discuss in some detail. Here are several key points:

1 - The Nebular Hypothesis (also called the Planetesimal Theory) says that, as the gas swirled around, eddies of gas caused the sun and planets. All seven theories require circling gas which contracts into the sun. We have already disproved the basics underlying this concept. Many say that material from the sun made the planets and moons. But <u>the elemental composition of each of the</u> planets is different from the sun and from one another. One could not come from the other. In addition, <u>the sun would have to</u> rotate extremely fast to hurl off planets and moons, yet it rotates very slowly. More on this later.

2 - *The Fision Theory* says that **our sun burst and sent out** the planets and moons. But <u>they would fly outward forever</u>; they would not stop and begin circling the sun or one another.

3 - The Capture Theory says our planets and moons were wandering around and were captured by our sun. But they would then crash into the sun; they would not circle it or one another. We never see planets or moons flying by us today; yet we now know of at least 60 moons in our solar system.

4 - The Accretion Theory says that small chunks of material gradually got together and formed our planet. Then more chunks formed our moon, which began circling us. This idea is pretty far out also. The planets, moons, and asteroids are all in carefully arranged orbits. The meteors fly fast in linear motion. No chunks are just floating around, and those chunks would not stick together anyway.

5 - The Planetary Collision Theory says our world collided with a small planet, producing our moon. But <u>such an impact</u> would totally destroy our planet. How could such an impact produce a circling moon? This would have had to be repeated for all 60 moons in our solar system. The theory would require thousands of planets passing through our solar system, for enough direct hits to produce all our moons. Why are not such flybys oc-

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curring today?

6 - *The Stellar Collision Theory* says that **two stars collided**, and produced our planets and moons. <u>But they would not then</u> <u>pause and circle one of the suns</u> which was waiting placidly to receive them. They would either be hurled away from the sun or crash back into it.

7 - The Gas Cloud Theory says gas clouds were pulled in from outer space by our sun's gravity; then they paused, formed themselves into planets and moons, and began circling one another. But gas does not clump, and linear motion toward the sun would not change into circular motion around it.

These solar system theories do not explain where stars, planets, and moons originated or how they arrived at their present, intricate pattern. Such precision could not come about by chance.

Every moon is located at the precise distance to keep it from flying into or away from its planet. How could all this originate from a single explosion or collision? None of these theories fit into the laws of physics, as we know them.

On pp. 97-101 of his book, *Asimov's New Guide to Science*, the leading evolutionist science writer of the 20th century describes and tears to pieces each of the stellar/solar system theories. (*It is quoted on our website.*)

FACTS ABOUT PLANETS AND MOONS

Here are a very few of many facts about our solar system which disprove the possibility of its being the result of evolutionary origins:

1 - <u>There is no known mechanical process that can accom-</u> plish a transfer of <u>angular</u> (turning, spinning, orbiting) <u>mo-</u> <u>mentum</u> from the sun to its planets.

<u>A full 99.5 percent of all the angular (rotational) momen-</u> <u>tum in the solar system is concentrated in the planets,—yet a</u> <u>staggering 99.8 percent of all the mass is located in our sun!</u> To an astrophysicist, this is both astounding and unexplainable. (Their theory is that the sun was rotating so fast, it hurled out the planets.)

Our sun is rotating rather slowly, but the planets are rotat-



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ing far too fast in comparison with the sun. In addition, they are *orbiting* the sun far faster than the sun is itself turning. But if the planets did not orbit so fast, they would hurtle into the sun; and if the sun did not rotate slowly, it would fling its mass outward into space.

According to *David Layzer of Harvard, in order for the sun to originally have been part of the same mass as the planets and moons, it would have to rotate ten-million times faster. *Layzer adds, if the sun lost so much of its momentum, why did the planets not lose theirs?

2 - <u>The orbits of Mercury, Pluto, asteroids, and comets each</u> <u>have an extreme inclination</u> from the plane of the sun's ecliptic. The solar origin theories cannot explain this.

3 - Both Uranus and Venus rotate backward, compared to all the other planets. The other seven rotate forward, in relation to their orbit around the sun. Uranus rotates at a 98° angle from its orbital plane. It is literally rolling along!

4 - <u>One-third of the 60 primary moons have retrograde</u> (backward) motion, opposite (!) to the rotational direction of their planets. The official evolutionists' theory for how these backward-rotating moons formed is this: The planet hurled them out, then drew them back, and they began orbiting it. Evolutionists try to explain everything in our world and the universe as a bunch of fortunate accidents. (According Jet Propulsion Lab, as of February 2006, the major planets in our solar system now have over 150 moons, with more than 50% discovered in the past 6 years. How could they all get into position around their respective planets, and keep orbiting without falling into those planets?)

5 - <u>The continued existence of these moons is unexplain-</u> <u>able</u>. For example, Triton, the inner of Neptune's moons, with a diameter of 3000 miles [4827 km], is nearly twice the mass of our moon, yet revolves backward every six days, has a nearly circular orbit,—and is only 220,000 miles [353,980 km] from its planet! It should fall into its planet any day now, but it does not do so.

6 - <u>There are such striking differences between the various</u> planets and moons, that they could not have originated from the same source.

"The solar system used to be a simple place, before any space-

CHART OF THE PLANETS—The following chart will provide you with a glimpse of the complexity of the nine planets. Each one is supposed to have hardened, under similar conditions, from the same floating gas,—yet each one is widely different from the others. For example, compare pictures you have seen of Venus, Earth, and Mars from outer space. There is not the least resemblance between them.

Planetary Data	MERCURY	VENUS	EARTH	MARS	JUPITER	SATURN	URANUS	NEPTUNE	PLUTO
Diameter (equatorial) (thousands of miles)	3,031	7,521	7,926	4,217	88,730	74,566	31,566	30,199	11,420
Mass (Earth = 1)	0.055	0.814	1.000	0.107	317.8	95.16	14.55	17.23	0.0026(?)
Density (water = 1)	5.43	5.24	5.52	3.93	1.33	0.71	1.31	1.77	1.1
Volume (Earth = 1)	0.06	0.86	1.00	0.15	1,323	752	64	54	0.01
Revolution around Sun	88.0 days	224.7 days	365.26 days	687.0 days	11.86 years	29.46 years	84.01 years	164.8 years	247.7 years
Rotation Period (days)	58.65	243.0	0.9973	1.0260	0.410	0.427	0.45	0.67	6.3867
Equatorial Radius (miles)	1,516	3,759	3,963	2,112	44,679	37,284	16,247	15,380	752
Mass (Trillion Trillion Pounds)	0.729	10.738	13.177	1.416	4,187.0	1,253.8	190.95	227.1	0.026
Mean Density (Earth = 1)	0.98	0.95	1.0	0.71	0.24	0.125	0.216	0.30	0.36
Gravity (Earth = 1)	0.39	0.88	1.0	0.38	2.34	0.93	0.79	1.13	0.0637
Period of Rotation (Hours)	1,407.6	5,832.2	23.9	24.6	9.8	10.2	17.2	17.7	6.4
Escape Velocity (Miles per Hour)	9,619	23,042	25,055	11,185	133,104	79,639	47,470	52,794	2,640
Major Atmospheric Gas	Oxygen	Carbon Dioxide	Nitrogen	Carbon Dioxide	Hydrogen	Hydrogen	Hydrogen	Hydrogen	Methane
Inclination of Equator (Degrees)	0.0	2.6	23.5	25.2	3.1	26.7	82.1	29.0	62.0
Known Moons	0	0	1	2	16	17	15	8	1
Eccentricity of Orbit	0.206	0.007	0.017	0.093	0.048	0.056	0.047	0.009	0.246
Mean Orbital Velocity (Miles per Hour)	107,132	78,364	66,641	53,980	29,216	21,565	15,234	12,147	10,604
Minimum distance from Sun (Millions of Miles)	28.6	66.8	91.4	128.4	460.3	837.6	1,699.0	2,771.0	2,756.0
Maximum Distance from Sun (Millions of Miles)	43.4	67.7	94.5	154.9	507.2	936.2	1,868.0	2,819.0	4,555.0
Mean Distance from Sun (Millions of Miles)	36.0	67.2	93.0	141.6	483.4	886.7	1,784.0	2,794.4	3,656
Period of Revolution (Earth Years)	0.24	0.62	1	1.88	11.86	29.46	84.01	164.79	247.70
Inclination of Orbit to Plane of Ecliptic (Degrees)	7.00	3.39	_	1.85	1.31	2.49	0.77	1.77	17.15

craft ventured forth from the Earth . . But 30 years of planetary exploration have replaced the simple picture with a far more complex image. 'The most striking outcome of planetary exploration is the diversity of the planets,' says planetary physicist David Stevenson of the California Institute of Technology. Ross Taylor of the Australian National University agrees: 'If you look at all the planets and the 60 or so satellites [moons], it's very hard to find two that are the same.' "—*Richard A. Kerr, "The Solar System's New Diversity," Science 265, September 2, 1994, p. 1360.

7 - Many say that material from the sun made the planets and moons. But <u>the ratio of elements in the sun is far different</u> <u>than that found in the planets and moons</u>. One could not come from the other. How then could the earth and other planets be torn out of the sun (*planetesimal theory*) or come from the same gas cloud that produced the sun (*nebular hypothesis*)

"We see that material torn from the sun would not be at all suitable for the formation of the planets as we know them. Its composition would be hopelessly wrong."—**Fred Hoyle*, "Where the Earth Came from," Harper's, March 1951, p. 65.

8 - <u>How could the delicate rings of Saturn have been formed</u> <u>from gas, collisions, or some other chance occurrence</u>? (Those rings include ammonia, which should rather quickly vaporize off into space.)

9 - Saturn has 17 major moons; yet none of them ever collide with rings. The farthest one out is **Phoebe**, which revolves in a motion opposite to Saturn and its rings. How could that happen?

10 - <u>Nearly all of Saturn's moons are different from one</u> another in the extreme. *Titan*, alone, has a thick atmosphere (thicker than ours). *Enceladus* has an extremely smooth surface; whereas the other moons are generally much rougher. *Hyperion* is the least spherical and shaped like a potato. The surface of *Iapedus* is five times darker on one side than on the other. One moon is only 48,000 miles [77,232 km] above Saturn's cloud cover! There are three co-orbital moon sets; that is, **each set shares the same orbit** and chases its one or two companions around Saturn endlessly. Some of Saturn's moons travel clockwise, and others counterclockwise. How could all those moons originate by chance?

11 - As noted earlier, <u>the chemical makeup of our moon is</u> <u>distinctly different than that of earth</u>. The theorists cannot explain this. "To the surprise of scientists [after the Apollo moon landings], the chemical makeup of the moon rocks is distinctly different from that of rocks on Earth. This difference implies that the moon formed under different conditions. Prof [A.G.W.] Cameron explains, and means that any theory on the origin of the planets now will have to create the moon and the earth in different ways."—*J.E. Bishop, "New Theories of Creation," Science Digest 72, October 1972, p. 42.

12 - Our moon is larger in relation to the planet it orbits than is any other moon in our solar system. Go out at night a look at it. To have such a huge body circling so close to us without falling into the earth—is simply astounding. Scientists cannot keep their satellites orbiting the earth without occasional adjustments. Lacking such adjustments, the orbits decay and the satellites eventually fall and crash. Yet, century after century, our moon maintains an exquisitely perfect orbit around the earth.

"The moon is always falling. It has a sideways motion of its own that balances its falling motion. It therefore stays in a closed orbit about the Earth, never falling altogether and never escaping altogether."—*Isaac Asimov's Book of Facts (1979), p. 400.

"Now the moon's elliptical motion around the earth can be split into horizontal and vertical components. The vertical component is such that, in the space of a second, the moon falls a trifle more than 1/20 inch [.127 cm] toward the earth. In that time, it also moves about 3300 feet [1001 m] in the horizontal direction, just far enough to compensate for the fall and carry it around the earth's curvature."—*Isaac Asimov, Asimov's New Guide to Science (1984), pp. 873-874.

7 - THE ELEMENTAL FORCES OF THE UNIVERSE

• *Gravity*. Gravity is the weakest force in the universe; yet it is in perfect balance. <u>If gravity were any stronger, the smaller stars</u> <u>could not form; any weaker, the bigger stars could not form</u> <u>and no heavy elements could exist</u>. Only red dwarf stars would exist, and these would radiate too feebly to support life on a planet.

• *Proton to Neutron ratio*. A proton is a subatomic particle found in the nucleus of all atoms. It has a positive electric charge that is equal to the negative charge of the electron. A neutron is a

subatomic particle that has no electric charge. The mass of the neutron must exceed that of the proton in order for the stable elements to exist. But <u>the neutron can only exceed the mass of the proton</u> <u>by an extremely small amount—an amount that is exactly twice</u> <u>the mass of the electron. That critical point of balance is only</u> <u>one part in a thousand.</u>

If the ratio of the mass of the proton to neutron were to vary outside of that limit—chaos would result. **If it were any less or more, atoms would fly apart or crush together—and everything would be destroyed.** If the mass of the proton were only slightly larger, the added weight would cause it to quickly become unstable and decay into a neutron, positron, and neutrino. This would destroy hydrogen, the dominant element in the universe. A Master Designer planned that the proton's mass would be slightly smaller than that of the neutron. Otherwise the universe would collapse.

• *Photon to baryon ratio*. A photon is the basic quantum, or unit, of light or other electro-magnetic radiant energy, when considered as a discrete particle. The baryon is a subatomic particle whose weight is equal to or greater than that of a proton. This photon-to-baryon ratio is crucial. If the ratio were much higher than it is, stars and galaxies could not hold together through gravitational attraction.

• *Nuclear force*. It is the nuclear force that holds the atoms together. If it were larger, there would be no hydrogen, only helium and the heavy elements. If it were smaller, there would only be hydrogen and no heavy elements. Without hydrogen and the heavy elements there could be no life. Without hydrogen, there could be no stable stars.

If the nuclear force were only one part in a hundred stronger or weaker than it now is, carbon could not exist, and carbon is the basic element in every living thing. <u>A two-percent increase</u> would eliminate protons.

• Electromagnetic force. If it were just a very small amount smaller or larger, no chemical bonds could form. A reduction in strength by a factor of only 1.6 would result in the rapid decay of protons into leptons. A threefold increase in the charge of the electron would render it impossible for any element, other than hydrogen, to exist. A threefold decrease would bring the destruction of all neutral atoms by even the lowest heat—such as is found in outer space.

• It would be impossible for evolution to produce the delicate balances of these forces. They were planned. In spite of the delicate internal ratio balance within each of the four forces (gravitation, electromagnetism, and the weak and strong forces), those basic forces have strengths which differ so greatly from one another that the strongest is ten thousand billion billion billion billion times more powerful than the weakest of them. Yet the complicated math required for the Big Bang theory requires that all basic forces had to be *the same* in strength—during and just after that explosion occurred!

Evolutionists cannot claim that these delicate balances occurred as a result of "natural selection" or "mutations,"—for we are here dealing with the basic properties of matter; there is no room here for gradual "evolving." The proton-neutron mass ratio, for example, is what it has always been—what it was since the Beginning! It has not changed; it will not change. It began just right; there was no second chance! The same applies to all the other factors and balances in elemental matter and the physical principles governing them.

8 - ADDITIONAL DATA

SIX FUNDAMENTAL REQUIREMENTS OF STELLAR EVOLUTION THEORIES

It is difficult to even think about outer space. You and I have never lived there. So we shall consider six primary aspects of matter and stellar evolutionary theories as occurring right here on earth. In doing so, we can see the utter foolishness of each of these requirements for outer-space evolutionary theory.

1. When nothing makes itself into something. *Experiment One:* Go into an empty room and clean it out well. Remove all the furniture and even the dust. Seal up the windows and lock the doors and leave. Come back periodically and check to see what happens. The air inside the room should change itself into different types of matter, such as birds, chemicals, grass, etc. Or take a vacuum bottle

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and extract as much air and gaseous material as possible. Seal it. The contents should change into something else. Conclusion: *Nothing never makes itself into anything*.

2. When gas begins twirling. *Experiment Two:* With all the doors and windows shut, and everything inside and outside the house evenly cold, the air in the house should begin rotating and then push itself into a solid. Conclusion: *Gas left alone in a cold place will not do anything*.

3. When gas gravitates into a solid. *Experiment Three:* Gas is supposed to push itself into solids. We will help it along, by starting with the high-pressure propane tank in your backyard. Fill it as full as possible, thus helping to push the gas together. Wait and check it periodically. The contents should change themselves into a solid. Then open the valve to see how the situation is proceeding: All the contents will rush out. Conclusion: "*Nature may abhor a vacuum,*" but gas abhors being pushed together!

4. When hydrogen changes itself into the heavier atoms. *Experiment Four:* As a rule, hydrogen in stars only changes into helium. But when a large-enough star explodes, sizeable amounts of the hydrogen are said to change into heavier elements (elements above helium). Admittedly, we cannot equal this experiment on earth, since the explosion of a large star is required. But we have evidence from outer space on this point. The A.D. 1054 explosion of a star produced the Crab nebula. Analysis of the gas from that nebula revealed few, very few heavier elements. Conclusion: *Supernova explosions, which are infrequent, could not have produced the present amounts of heavier elements*.

5. When stars get together. *Experiment Five:* There are hundreds of millions of multiple star systems, in which several stars are close to one another and mutually orbit each other. Simulate this by taking three or four circular magnets (you will find one on the back of every TV set in the junkyard). Place them close together and, by hand, have them orbit one another. They are never to come together, but only to circle one another. Scientists know that the gravitational ("magnetic-like") attraction of an average star is about 5 light-years. They also know that multiple stars are far closer to each other than 5 light-years! So, like magnets, they

ought to rush together if not properly kept apart by exacting orbits. Conclusion: You cannot put magnets close together without them coming together, no matter how carefully you try to keep them from doing so. It is impossible for stars to randomly arrange themselves into short- or long-term orbits with anything. Try dropping one magnet past another repeatedly, and see if it will accidentally go into orbit!

6. When randomness organizes itself. *Experiment Six:* Go to your local junkyard and ask that it be locked up and closed off for a year. Return from time to time and watch how it cleans itself up and then arranges itself into an orderly collection of materials. Conclusion: *Randomness never organizes itself. Incoherent matter in outer space could never arrange itself into orbiting stars, galaxies, and planetary systems.*

THE AGE OF THE UNIVERSE

What is the age of the universe, as calculated by some of the most prominent theories being considered in our time? Here they are:

*Gamow: **3-5** *billion years*. *Peebles and *Wilkinson: **7** *billion years*. *Ashford: **10-15** *billion years*. *Shklovski: **70** *billion years*. *Alfven: *trillions of years*. *Hoyle: *infinite time*.

By the late 1980s, evolutionary scientists were pretty much in agreement that the universe was 15-20 billion years old. But new data surfaced in the early 1990s, which required them to lower the age to 15 billion years or less. The problem is the Big Bang theory leans heavily on the speed theory of the redshift;—and there are now quasars which, according to the speed theory, are older than 15 billion years. So the evolutionists are being squeezed on both ends of their grand time continuum.

THE NICE SYMPOSIUM

By the early 1970s, so much scientific data had poured in repudiating the basic aspects of the various cosmologies, that something had to be done. In the past, the elusive hope had always offered itself that, even though all the past theories of matter and stellar origins might be in shambles, there was always the possibility that some brilliant mind might yet come up with a solution.

In April 1972, the top minds in stellar physics, chemistry, and astronomy gathered at the Nice Symposium. A declaratory statement of purpose included this comment:

"The Symposium has also served in delineating the areas of our ignorance, in particular in relation with the hydrodynamics of the nebula [motions of gas clouds], and with the physicochemistry of

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the 'sticking process' [getting gas together into stars and planets]."— *Symposium Statement, quoted in R.E. Kofahi and K.L. Segraves, The Creation Explanation, p. 141.

Many insurmountable problems were discussed, but it seemed that all the participants could do was list the problems. No one seemed to have any answers.

"[1] Yet to be discussed adequately is the detailed fragmentation of the massive cloud in which *protostars* are born. [2] Also in question are the hydrodynamics and stability considerations of the *protosun nebula*. [3] Most important, there remain to be specified the crucial experimental tests that can distinguish between the available viable theories. [4] It is particularly disappointing that we have almost no useful information on the specific solid state processes at work in the accretion phase."—**Review of Nice Symposium, quoted in op. cit., p. 143.*

Here, in simple language, is a restatement of the above questions, for which scientists have no answers: (1) How did the first cloud break apart and change into stars? (2) How did the gas clouds whirl themselves toward production of stellar objects, in such a way as to solve the angular momentum problem? (3) Boys, we ought to be able to experimentally prove at least one of these theories! (4) How did the gas push itself into solids?

*H. Reeves, the editor of the final *Symposium Report*, listed seven fundamental problems. The above reviewer quotes them:

"Do the sun and planets originate in the same interstellar cloud? If so, how was the planetary matter separated from the solar gas? How massive was the nebula? How did the collapsing cloud cross the thermal, magnetic, and angular momentum barriers? What were the physical conditions in the nebula? What was the mechanism of condensation and accretion [of gas into stars, planets, etc.]? How did the planets, with their present properties and solar distances, form?"—**Ibid*.

If you open a typical science book on astronomy, you will find theories about the origin of the universe and stars stated with great certainty, and you will be bombarded with paintings of gas clouds and protostars.

If you attend a closed-door conference, such as the Nice Symposium, you will find worried men, desperate theories, scientific facts which condemn those theories, a lack of alternative explanations, an atmosphere of hopeless despair in the face of unproven and unprovable ideas, and no solutions or scientific experiments able to alleviate the situation.

SCIENTISTS SPEAK ABOUT ASTRONOMY

We will conclude with a few quotations. You will find far more on our website. The first one, by an evolutionist, describes the evolutionary, or sorry state, universe:

"Our Universe had its physical origin as a quantum fluctuation of some preexisting true vacuum, or state of nothingness."—**Ed*ward P. Tryon, "What Made the World?" in New Scientist, March 8, 1984, p. 16.

Another scientist, a leading astronomer who spent his time studying the stars instead of speculative writings, said this:

"A scientific study of the universe has suggested a conclusion which may be summed up in the statement that the universe appears to have been designed by a pure mathematician."—**Sir James Jeans, The Mysterious Universe, p. 140.*

Another astronomer, writing more recently, put it this way:

"It seems to be one of the fundamental features of nature that fundamental physical laws are described in terms of a mathematical theory of great beauty and power, needing quite a high standard of mathematics for one to understand it . . One could perhaps describe the situation by saying that God is a mathematician of a very high order, and He used very advanced mathematics in constructing the universe."—**Scientific American, May 1963, p. 53.*

The problem is that, although the evolutionists do not want the public to know it, the scientists cannot figure out how galaxies, stars, and planets originated. Although there are billions of stars out there, the experts do not have the slightest idea of how even one was produced.

"A handful of sand contains about 10,000 grains, more than the number of stars we can see on a clear night. But the number of stars we can see is only a fraction of the number of stars that are [there]. The cosmos is rich beyond measure: the total number of stars in the universe is greater than all the grains of sand on all the beaches on the planet earth."—**Carl Sagan, Cosmos, 1980.*

"The universe we see when we look out to its farthest horizons contains a hundred billion galaxies. Each of these galaxies contains another hundred billion stars. That's 10²² stars all told. The silent embarrassment of modern astrophysics is that we do not know how even a single one of these stars managed to form."—*Martin Harwit, "Book Reviews," Science, March 1986, pp. 1201-1202.

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"The problem of explaining the existence of the galaxies has proved to be one of the thorniest in cosmology. By all rights, they just shouldn't be there, yet there they sit. It's hard to convey the depth of frustration that this simple fact induces among scientists."—*James Trefil, Dark Side of the Universe (1988), p. 55.

"If stars did not exist, it would be easy to prove that this is what we expect."—*G.R. Burbidge, quoted by *R.L. Sears and *Robert R. Brownlee (eds: *L.H. Aller and *D. McLaughlin) Stellar Structures (1963), p. 577.

"But if we had a reliable theory of the origin of planets, if we knew of some mechanism consistent with the laws of physics so that we understood how planets form, then clearly we could make use of it to estimate the probability that other stars have attendant planets. However no such theory exists yet, despite the large number of hypotheses suggested."—*R.A. Lyttleton, Mysteries of the Solar System (1968), p. 4.

"I suspect that the sun is 4.5 billion years old. However, given some new and unexpected results to the contrary, and some time for frantic recalculation and theoretical readjustment, I suspect that we could live with Bishop Ussher's value for the age of the Earth and Sun [4004 B.C.]. I don't think we have much in the way of observational evidence in astronomy to conflict with that."—*John Eddy, Geotimes (1978).

It is for such reasons as the above, that many scientists are turning to the only other cause of stars, galaxies, and planets.

"Like most scientists, Einstein included, I have an almost religious belief in a basic underlying order—a belief that natural forces are just manifestations of some deeper thing."—*William Kaufmann, "Luminous Reputations," in Science Digest, Vol. 89, No. 1 (1981), p. 8.

"The details differ, but the essential elements in the astronomical and biblical accounts of Genesis are the same: the chain of events leading to man commenced suddenly and sharply at a definite moment in time, in a flash of light and energy . . 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 mountain 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."—*Robert Jastrow, God and the Astronomers (1978) [one of the best-known astronomers of the 20th century].

"Everything points with overwhelming force to a definite event or events of creation at some time or times not infinitely remote."—**Sir James Jeans, Eos or The Wider Aspects of Cosmogeny, p. 35.*

Sir Isaac Newton is considered one of the two greatest scientists of the last 500 years. He clearly saw the implications of celestial mechanics and the intricately designed wonders in the sky.

"One day, as Newton sat reading in his study with his mechanism on a large table near him, a friend, who saw things differently than he did, stepped in. Scientist that he was, he recognized at a glance what was before him. Stepping up to it, he slowly turned the crank, and with undisguised admiration watched the heavenly bodies all move in their relative speed in their orbits.

"Standing off a few feet he exclaimed, 'My! What an exquisite thing this is! Who made it?' Without looking up from his book, Newton answered, 'Nobody.'

"Quickly turning to Newton, his friend said, 'Evidently you did not understand my question. I asked who made this?' Looking up now, Newton solemnly assured him that nobody made it, but that the apparatus had just happened to assume the form it was in.

"The astonished man replied with some heat, 'You must think I am a fool! Of course somebody made it, and he is a genius, and I'd like to know who he is!'

"Laying his book aside, Newton arose and said, 'This thing is but a puny imitation of a much grander system, whose laws you know,—and here I am not able to convince you that this mere toy before you is without a designer and maker!

" 'Yet you profess to believe that the great original from which the design is taken, with its more massive and complicated orbital motions, has come into being without either designer or maker! Now tell me by what sort of reasoning do you reach such a conclusion?" "—*The Minnesota Technolog, October 1957.*

"I know of no reason [for the motion of the planets] but because the Author of the system thought it convenient."—*Isaac Newton, Four Letters to Richard Bentley, in *Milton K. Munitz (ed.), Theories of the Universe (1957), p. 212.*

EVOLUTION COULD NOT DO THIS

Try as they might, scientists cannot figure out how to make light without 94.5% of the energy being used as heat. But the firefly, *Photinus*, makes light with 90% of the energy for that purpose. The glow of a firefly contains only 1/80,000 of the heat that would be produced by a candle flame of equal size. One scientist spent his lifetime studying the *luciferin* in fireflies, without success. Many other researchers have tackled the problem, and have also failed.

The diving spider is a regular spider which breathes air but spends most of its time under water. Diving under water with a bubble, and fastening it to vegetation, the spider uses it for air and a nest. The living and nesting habits of this spider are complex and amazing. As soon as the babies are born, they do their part in diving and helping the family. Why would any spider in his right mind want to live underwater, when he cannot breathe there?

CHAPTER 2 - STUDY AND REVIEW QUESTIONS THE BIG BANG AND STELLAR EVOLUTION

GRADES 5 TO 12 ON A GRADUATED SCALE

1 - Draw a simple sketch of our solar system, with the sun, planets, and some of the moons. Then draw a second sketch of what our part of the sky would look like if an outward moving explosion of gas [from a "Big Bang"] were to pass through it. Would it produce our sun, with planets circling it, and moons circling the planets?

2 - Draw a sketch of the supposed Big Bang in the center of a sheet of paper. All around it jot down brief-sentence reasons why that theory would be impossible.

3 - Draw a picture of electrons circling a nucleus. Find a *Periodic Table of Elements*. Do you believe those very complicated elements, with their whirling electrons, could have made themselves out of nothing?

4 - *Fred Hoyle developed an incorrect theory, known as the steady-state theory. Later he repudiated it publicly. What do you think of Dr. Hoyle for doing that? Do you think it is common for most evolutionists to later reject a theory they have held for many years?

5 - Write a paper disproving one of the following: Big Bang theory, background radiation theory, redshift theory, expanding universe theory.

6 - Could outward-flowing gas and random action of molecules really have produced stars, planets, and life on our world? Tell why you do or do not think so.

7 - Explain the difference between "*Kelvin*," "*Celsius*," and "*absolute zero*." How is "*Celsius*" different than "*Fahrenheit*"?

8 - Explain the difference between the four types of redshift explanations: (1) first-order Doppler effect (speed theory), (2) gravitational shift, (3) second-order Doppler effect, and (4) energy-loss, tired-light shift.

9 - Research the meaning of the following terms and explain each in a brief statement: laws of nature, angular momentum, helium mass 4 gap, periodic table of elements, supernova, inversesquare law, Hubble constant, second law of thermodynamics.