

VOLUME 22

NUMBER 140

**THE  
BIBLICAL  
ASTRONOMER**

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**SPRING 2013**



## PRODUCT LIST

(Continued from back cover.)

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**Front Cover:** A single snowflake has about as much mass as a single grain of the firmament. See: "Snowflakes, the Flood, and the Firmament" on page 49. (Courtesy, Caltech).

# THE BIBLICAL ASTRONOMER

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## EDITORIAL

First, an update on the progress of the new *Geocentricity* book. The manuscript was submitted to the publisher two months ago. The publisher assigned it to a reader to evaluate the contents of the book. The reader has not finished his reading. Now in all fairness, the publisher's readers are mostly pastors and many of those have jobs in addition to their pastoral duties.

However, publishers usually do not print the books they publish. That means that the book can be printed even though the publisher has not reviewed it. The publisher need not accept the book, of course, but that is the risk we take. We could, after all, attempt to publish it ourselves. In any case, Frank Wolff, Ph.D. is helping me evaluate the printers. One thing is very clear and that is that no print-on-demand printer can handle more than 400 to 700 pages. They are satisfied with the 6" by 9" format, but our manuscript runs 780 pages without the index. We've explored using India paper—also known as Bible paper—which is a thin, strong; opaque, hemp-based paper stacking 1,000 pages per inch. Print-on-demand technology's paper-feeders cannot handle such thin paper; so that was a dead end. Work will proceed shortly to split the book into two volumes.

### **Evidence for Geocentricity Increases**

In this issue we feature several articles and news stories reporting on the evidence arising in favor of geocentricity. One article, "Standing-wave Universe" explores what happens if we consider the universe to be a single wave. The standing wave arises by treating the universe as a single wave with a wavelength equal to the diameter of the visible universe. This is called the "Compton wavelength." The mass of a particle, called the effective mass, with that long of a wavelength is infinitesimally light. This interpretation allows the universe to react to forces imposed on its center of mass as if the mass of the universe were non-existent.

The last paper in this issue builds on the scale dimension we introduced in the last issue. We noted that things that were of smaller scale can move through the space of things of larger scales e.g., as molecules can travel between the stars but stars cannot travel between the atoms of a molecule. Scripture associates water with the firmament; both above it and below. We can envision the unusual interpretation of three heavens nested in 3-D space experiencing time, but now we introduce the fifth dimension, namely the scale dimension. (Since the scale dimension also experiences time, it is technically more correct to call the scale dimension the fourth dimension and to count time as the fifth dimension.)

## **Extraterrestrials: Real or Fiction?**

In this issue's "Panorama" we consider the speculation that there is life on other planets. The recent spate of new planet discoveries has spawned articles taking another look as to the statistics of life "out there." Some articles are optimistic but the statistics make it hard to believe that even one inhabitable planet could accidentally form in the universe, let alone billions. We hope to broaden that into a review article, that is, an article that reviews other articles and first-person reports by expert authorities.

## **Two Deaths of Interest**

Also in the "Panorama" of this issue we report on the death of Dr. Duane Gish. Dr. Gish was open to geocentricity and that connection is reported in "Panorama."

The second death is that of Dr. Marshall Hall (August 9, 1930—March 8, 2013). His wife, Bonnie, posted this on his website:

"It is with heavy heart that I inform you that on March 8, my beloved husband, Marshall Hall, passed away after fighting a courageous battle with cancer. For more than 40 years of study and writing, it would be hard to find a more dedicated servant of the Lord and God's word. Marshall's tireless pursuit of hard evidence exposing the false science and false religion, working to destroy the Bible's credibility from Creation to Jesus and beyond to Heaven, continued until his last days here on Earth. Being familiar with Marshall's work, you know that the Lord has blessed his quest for factual truth in these two areas which affect us all.

"Thankfully, Marshall and I had some time to consider the future of the Fair Education Foundation, which includes both the website and sale of books. We decided, I will maintain FEF with the help of our daughters, Debbie and Nokie. It will continue to be a family effort to glorify God and his Word. This website, with the hundreds of pages of documented evidence, will remain available online; with monthly bulletins, written by Marshall, still being posted through July.

"Throughout this entire last year, Marshall never stopped reminding us that there is greater life awaiting us as his words tell us that 'even among the most fortunate [there is] sadness, disappointment, health problems, and the lifelong awareness that life is brief and death is inescapable, and any prolonged joy one might experience is tempered by bummers of one sort or another awaiting their turn to get that smile...' (Marshall Hall, March, 2013)."

## SCIENCE AND HUMILITY

Ron Nelson<sup>1</sup>

The premier characteristic of an honest scientist is the humility to freely acknowledge the breadth of what he does not yet know; what scrupulous methods either have yet to reveal or are presently unsuited to address about a matter of interest. Such a person stands as an exemplar of real integrity of inquiry, while controlling all of those ego imperatives that would prompt false pretensions. And thus his further exploration is uncluttered by premature notions of a more complete understanding that would veil what remains to be apprehended, some of which may not yet be accessible to a proper testing and hence is not the subject of a genuinely scientific hypothesis.

The honest scientist will readily acknowledge that his methodical approach is founded upon the assumption that the world is most fortunately so ordered that findings gained in an orderly fashion can generally be expected to endure a further passage of time as long as the original conditions pertain. And yet he will also concede that time and again over the history of his discipline seeming assurances of full comprehension have been overturned by subsequent observations, and on numerous occasions fresh insights have come as quite unexpected revelations of truth that did not follow the course of an investigator's anticipated path of discovery. So true science is by its nature a tentative exercise in understanding as it awaits further refinements.

For a notable example, consider the simple, materialistic model that had until recently portrayed the entire universe as being composed of the same type of matter; the atomic matter with which we are familiar. But that model can no longer account for the gravitational behavior we observe. Dark matter was postulated to explain the new data. But even that was not enough. There appears to be an unknown antigravitational effect made up of a third type of matter of an entirely unrecognizable form. All told, the dark matter and dark energy constitute 95% of the mass of the universe whereas our familiar atomic matter makes up less than 5%. That 5% was formerly claimed to make up all matter in the universe.

This must give any honest person great pause about that we think we know about our habitation on both the grandest and smallest scales. Combine that with the newly-calculated unlikelihood that a multitude of precise physical conditions arose by chance to produce the delicately balanced universe we observe, as well as the truly extraordinary plane-

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<sup>1</sup> Ron Nelson was for many years a high school science teacher at Heritage Christian School in Cleveland Ohio. He retired in 2010 after a heart attack. Ron has contributed to the *B.A.* before. His testimony appeared in issue 125 and his analysis of bias in science textbooks will be found in issue no. 135.

tary conditions necessary to sustain our own very curious lives, and we would be well advised to maintain a proper scientific humility about matters that so plainly surpass us.

Certainly it should be clear to all that science has proven itself to be no dependable refuge from the times and fashions, as it has often been misleadingly portrayed. Indeed science's enduring strength has rested in its eventual willingness to acknowledge information that changes everything it formerly held as fact. And the real hazards of subjection to a scientific tyranny of thought are greatly ameliorated by an appreciation of just what its methods are suited for in the whole scope of life and those questions that it ultimately cannot answer. As physicist Erwin Schrödinger was candid enough to state, "The scientific picture of the real world around me ... is ghastly silent about all ... that is really near our heart, that really matters to us."

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### **EVER WONDER...**

Why is lemon juice made with artificial flavor, and dishwashing liquid made with real lemons?

Why is the time of day with the slowest traffic called rush hour?

Why don't sheep shrink when it rains?

Why are they called apartments when they are all stuck together?

If con is the opposite of pro, is Congress the opposite of progress?

### **CHILDREN ARE QUICK**

Teacher: Maria, go to the map and find North America.

Maria: Here it is.

Teacher: Now, class, who discovered America?

Class: Maria.

Teacher: John, why are you doing your math multiplication on the floor?

John: You told me to do it without using tables.

Teacher: Glenn, how do you spell "crocodile"?

Glenn: K-R-O-K-O-D-I-A-L.

Teacher: No, that's wrong.

Glenn: Maybe it's wrong, but you asked me how I spell it.



## PANORAMA

### Duane Tolbert Gish, Ph.D. (1921–2013)

Leading creationist, Dr. Duane Tolbert Gish died on 5 March of this year. Dr. Gish's expertise in the field of biochemistry led him to become the most strident defender of the creationist movement. Gish was a former vice-president of the Institute for Creation Research (ICR) and the author of numerous books and papers exposing the errors in "scientific evolutionism."

Gish, who was a twin, was born 17 February 1921 in White City, Kansas, the youngest of nine children. In 1949 he was awarded a B.Sc. degree from UCLA and in 1953 he earned his Ph.D. in biochemistry from the University of California, Berkeley. From there he worked as an Assistant Research Associate at Berkeley, and next became an Assistant Professor at Cornell University Medical College where Gish did biomedical and biochemical research for eighteen years, joining the Upjohn Company as a Research Associate in 1960.

After reading *Evolution: Science Falsely So-Called* in the late 1950s, Gish saw clearly that humanistic scientists falsified evidence in favor of the biological evolutionary hypotheses, and that various fields of science offered evidence in support of Scripture's creation account. Dr. Gish joined the American Scientific Affiliation (ASA), an association of liberal Christian scientists, mistakenly assuming the group to be aligned with Scripture. It was there that Gish met the creationist geneticist, William J. Tinkle. In 1961 Tinkle invited Gish to join his newly-formed anti-evolution group within the ASA.

In 1971 Gish joined the faculty of the newly-established San Diego Christian College. The College was founded by Tim LaHaye in 1970. While there, Dr. Gish worked in its research division. LaHaye was the pastor of San Diego's Scott Memorial Baptist Church and is best known as co-author of the *Left Behind* series of books and videos.

Later, Gish joined the Institute for Creation Research, which became independent of the church and college in 1981. Gish wrote several books and articles exposing evolution's pipe dream. His most important book is *Evolution: The Fossils Say No!*, which was published in 1978. It is widely recognized as a key reference for creationist concepts.

Beginning in the 1970s, Gish became a talented debater for creationism. He was so effective that most campuses forbade their faculty to debate him. On one occasion he had a radio debate with the atheist Madalyn Murray O'Hair on "The Talk of Houston."<sup>1</sup>

For the last several years of his life, Gish held the position of

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<sup>1</sup> A CD of the broadcast is available to readers from the *Biblical Astronomer* for \$12.

Senior Vice-President Emeritus at ICR. Gish died on March 5, 2013; he was 92 years old.

In the mid-1970s I struck up a correspondence with Dr. Gish. For several years I sent him critiques of articles that appeared in journals such as *Science* and *Nature*. Occasionally he would send me a letter that someone had sent to him requesting information on or critique of some astrophysical subject.

We met on several occasions and would talk candidly about creationism and geocentricity. He was supportive of geocentricity and thought it would be wonderful if creationists would use geocentricity to corner the evolutionists. However, he was committed to the advancement of creationism and would not publicly embrace geocentricity unless ICR's physicist, Harold Slusher, would do so. Our paths diverged in the early '90s as we each focused on different priorities; yet I fondly remember his calm demeanor and friendship.

### **The Solar System Is Different From the Space Just Outside It**

At a press conference on 31 January 2012, researchers announced the finding that the material between stars differs from the material in the solar system. The result is based on data from NASA's IBEX spacecraft, which is able to sample material flowing into the solar system from interstellar space. "We've detected alien matter that came into our solar system from other parts of the galaxy—and, chemically speaking, it's not exactly like what we find here at home," says David McComas, the principal investigator for IBEX at the Southwest Research Institute in San Antonio, Texas.

A magnetic bubble that separates us from the rest of the Milky Way surrounds the solar system. The bubble is called the *heliosphere*. Outside the heliosphere lies the realm of the stars or "interstellar space"; inside lies the earth, the sun and all the planets. The solar wind, which is hot gas that is explosively blown out of the sun, inflates the magnetic bubble which is the sun's own magnetic field. The heliosphere protects us from highly energetic cosmic rays, which are nuclear particles (atomic radiation) that would otherwise penetrate the solar system and threaten life on earth.

Launched in 2008, the IBEX spacecraft orbits earth, scanning the entire sky. IBEX can detect neutral atoms that slip through the heliosphere's magnetic defenses. That way IBEX is able to sample the galaxy outside the heliosphere without traveling 10 or 12 billion miles from the sun. The first two years of counting these interloping atoms have led to some interesting conclusions:

"We've directly measured four separate types of atoms from interstellar space and the composition just doesn't match up with

what we see in the solar system,” says Eric Christian, mission scientist for IBEX at NASA’s Goddard Space Flight Center in Greenbelt, Md.

Among the four types of atoms detected—hydrogen, helium, oxygen and neon—the last one, neon, has special significance. Neon is a noble gas, and noble gases don’t react with any other molecules and atoms. Neon is, however, “relatively abundant, so we can measure it with good statistics,” explains McComas.

Using data from IBEX, the researchers compared the neon-to-oxygen ratio inside vs. outside the heliosphere. In a series of six papers appearing in the *Astrophysical Journal*, the team reported that for every 20 neon atoms in the galactic wind, there are 74 oxygen atoms. In our own solar system, however, for every 20 neon atoms, there are 111 oxygen atoms. That translates to more oxygen in any given slice of the solar system than in local interstellar space. Where did the extra oxygen come from?

“There are at least two possibilities,” said McComas. “Either the solar system evolved in a separate, more oxygen-rich part of the galaxy than where we currently reside or a great deal of critical, life-giving oxygen lies trapped in interstellar dust grains or ices, unable to move freely throughout space—and thus undetectable by IBEX.”

“It’s a real puzzle,” he says. Translation: the facts do not mesh with any current evolutionary scenario. Nothing unusual there.

While IBEX samples alien atoms from earth orbit, NASA’s Voyager spacecrafts have been traveling to the edge of the heliosphere for nearly 40 years, and they could soon find themselves on the outside looking in. Researchers expect Voyager 1 to exit the solar system within the next few years. Evolutionists anticipate that they should then be able to discover why the solar system is comparatively rich in life-giving oxygen. To an evolutionist, proof positive of evolution always seems right around the corner, but somehow it never arrives.

## **The Flesh on Those Dinosaur Fossils Just Will Not Rot**

From time to time we present an unusually strong support for a recent creation. Reports of incompletely decayed dinosaur bone and flesh is such a case. On 22 March of this year I received the following email:

Just got the results for C-14 (carbon) dating a Stegosaurus and a Diplodocus from an alleged 70 and 150 Ma BP timeline respectively. They were [dated] through a third party which is the second confirmation source for our data. The dates are 21,830 and 25,890 and the bone fragments were obtained from a famous

secular museum in 1990 and identified by the museum paleo guy at that time; I was there!

These bone fragments from the fossils of a stegosaurus and a diplodocus were dated by labs that knew nothing of the source of the fragments. Apparently from the email, the bones were carbon-dated three times by three different labs. Evolutionists date the stegosaurus fossil at 70 million years old and the diplodocus at 150 million years. Carbon-14 dates are deemed unreliable much beyond 50,000 years, so with a half-life of about 5400 years, there should be no C-14 left to date. This, beside the fact that within thousands of years all the calcium in the bones should have been replaced by minerals from the rock, thus fossilizing the bone.

Now standard C-14 dating techniques in the lab do little to correct for the decay of the earth's magnetic field. When the earth's field was stronger in the past, less C-14 was created to be absorbed into living bones. That means that a fossil dated as 21,830 years, for instance, is much younger than 21,830 years because it already "looked" old when the creature died. Back in the mid-nineties I wrote a program that corrects for the old-age bias introduced by the stronger magnetic field in the past.<sup>2</sup> When I ran the dates through the correction program, the ages of the bone fragments became 4,311 and 4,325 years old respectively. These dates correspond to 2312 and 2326 B.C.; several decades after the flood. The uncertainty in the dating callibrations by the lab and in my program allows that the dinosaurs may have died during the continental split associated with Peleg's birth. Don't be surprised if the forensic evidence "disappears."

### **The Uniqueness of Life Is A Problem for Evolution<sup>3</sup>**

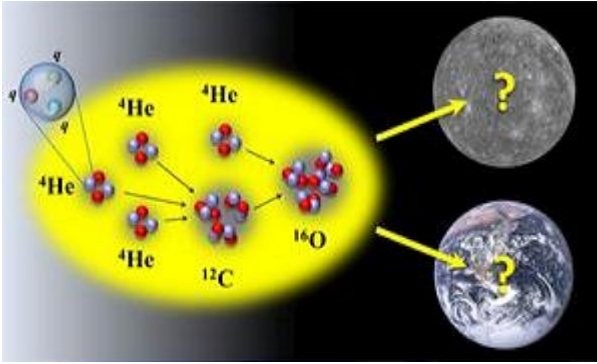
Life is based upon the elements of carbon and oxygen. Recently, a team of physicists, including one from North Carolina State University, is looking at the conditions necessary for the formation of those two elements in the universe. The team found that when it comes to supporting life, God leaves very little margin for error.

Both carbon and oxygen are theoretically produced when helium burns inside giant red stars. Carbon-12 (C-12), an essential element for life, can only form when three alpha particles, that is to say, three normal helium nuclei, combine in a very specific way. The key to the alpha-combinations is an excited state of carbon-12 known as the Hoyle state. It has a very specific energy—measured at 379 keV (or

<sup>2</sup> Bouw, G. D., 1994. "Converting Published C-14 Ages to the Biblical Time Scale," *The Biblical Astronomer*, 4(67):22.

<sup>3</sup> Lee, Dean, Evgeny Epelbaum, Hermann Krebs, Timo Laehde and Ulf-G, 2013. In the March 13 issue of *Physical Review Letters*.

379,000 electron volts) above the energy of three helium nuclei. Oxygen is produced by the addition of a fourth alpha particle to a carbon nucleus.



**Figure 1:** Light quark mass determines carbon and oxygen production and the viability of carbon-based life. Image credit: Dean Lee. Earth and Mercury images from NASA.

North Carolina State University physicist Dean Lee and German colleagues Evgeny Epelbaum, Hermann Krebs, Timo Laehde and Ulf-G. Meissner had previously confirmed the existence and structure of the Hoyle state with a numerical lattice that allowed the researchers to simulate how protons and neutrons interact. These protons and neutrons are believed to be made up of elementary particles called quarks. The light quark mass is one of the fundamental parameters of nature, and this mass affects particles' energies.

In the new lattice calculations done at the Juelich Supercomputer Center the physicists found that just a slight variation in the light quark mass will change the energy of the Hoyle state, and this in turn would affect the production of carbon and oxygen in such a way that life as we know it wouldn't exist.

"The Hoyle state of carbon is key," Lee says. "If the Hoyle state energy was at 479 keV or more above the three alpha particles, then the amount of carbon produced would be too low for carbon-based life.

"The same holds true for oxygen," he adds. "If the Hoyle state energy were instead within 279 keV of the three alphas, then there would be plenty of carbon. But the stars would burn their helium into carbon much earlier in their life cycle. "As a consequence, the stars would not be hot enough to produce sufficient oxygen for life. In our lattice simulations, we find that more than a 2 or 3 percent change in the light quark mass would lead to problems with the abundance of either carbon or oxygen in the universe." **That is, the universe was designed to support life.**

## LIVING IN A HOT HOUSE

### Marvin Olasky<sup>1</sup>

“Blacklisting.” A senior in the journalism history course I teach at the University of Texas did not know who U.S. Grant was, but she knew all about the dreaded “McCarthy era,” that time in those dismal 1950s when sweet, kind Hollywood screenwriters on the left had trouble getting jobs.

That’s typical. Many of the students graduating in a few days will have a distorted view of the past. Many will have sat through lectures emphasizing minor episodes designed to teach students about the nastiness of the right or the virtues of the left. Many will have no understanding of little things like the role of Christianity in American history.

Even when it comes to “blacklisting,” few students will learn about Hollywood’s discrimination against Christians and conservatives during the 1960s, 1970s, 1980s, and 1990s. They also won’t know of the Hollywood Stalinist tyranny of the mid-1940s, even though Screen Actors Guild president Ronald Reagan got his political start standing up against it.

One reason few students learn what actually happened is because of the academic blacklisting of Christians and conservatives that occurs today. I was reminded of this recently by a telephone call from David Snodgrass, chairman of the Mass Communication Dept. at Florida Southern University. He was calling because I had supervised the doctoral dissertation of a candidate for a faculty position there, and he wanted my opinion of that gentleman’s capabilities.

And then, hesitantly, Prof. Snodgrass asked for something more: “There’s, uh, one question that arose concerning [the candidate’s] background.... just a hunch, something that came out of my going through his vita.... 1977-79, assistant managing editor, *Good News Magazine*.”

When I asked what the hunch was about a job from two decades before, Prof. Snodgrass whispered the horrible possibility: Is the candidate a “fundamentalist”? The concern, he hastened to say, was not with religious belief as such, but “We would not want a person who held beliefs that would interfere with his ability to do mainstream scholarship.... We are so very, very eager to have someone doing mainstream research and publication. We want someone who will be nationally recognized, who will have stature in the field.”

Prof. Snodgrass’ caution is logical. Given the bigotry of leading academics and their journals, a fundamentalist (unless he stays in the closet) will be frozen out, and a university’s national reputation will not

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<sup>1</sup> Marvin Olasky is a journalism professor at the University of Texas.

grow. But is such discrimination right? How many universities have informal blacklists against Bible-believing Christians or political conservatives?

I have some personal experience with academic bigotry. When I entered graduate school as an atheist and a communist, professors at the University of Michigan called me a genius; they were wrong. When I left as a Christian and a conservative, one professor believed I had become a moron; he also was wrong, but he tried to keep me from receiving a Ph.D., and probably would have succeeded but for the intervention of the one outspokenly conservative professor on campus.

Ever since then I have been very sensitive to ideological bias in grading: I have been teaching at the University of Texas since 1983, and in all that time no student, to my knowledge, has ever accused me of such unfairness. But, from what students have told me and shown me concerning other courses, it does appear that such bias occurs elsewhere. This is not to say that I'm a more virtuous grader than others; since I work in hostile territory and know that everything I say or do is examined critically, I would have to play it straight with grades even if my preferences were to push me in a different direction. Such restraints may not exist elsewhere.

We do not know what informal blacklisting does to the academic prospects of Christians and conservatives. I have been blessed with good health, a tough skin, a supportive family and church, and the ability to write fairly quickly. But lots of others who refuse to ignore God in their work never get through the ideological pounding of graduate school, never get a university job, never get tenure.

There is, after all, a culture war going on throughout the United States, and it threatens to become more vicious at UT and other academic hothouses. That's why the upcoming decisions on a new president and provost for the university are so crucial. Will the university subsidized by Texas taxpayers, including many conservative Christians, have a policy, "No fundamentalists allowed"? Or will this be a university where professors who have seen the nakedness of the left are able to say that the emperor has no clothes?

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### All About Politics

I offer my opponents a bargain: if they will stop telling lies about us, I will stop telling the truth about them.

—Adlai Stevenson, campaign speech, 1952.

## New Insights Raise Awkward Questions for Cosmologists<sup>1</sup>

Do we have to modify Newton's theory of gravitation as it fails to explain so many observations? Voices are increasingly being heard that support this heretical hypothesis. Two new studies conducted by physicists at the University of Bonn, in collaboration with scientists from Austria and Australia, are likely to provide yet more grist for the mill. Their latest results about so-called "satellite galaxies" at the periphery of the Milky Way could rock the theoretical foundations of standard physics.

### Introduction

As modern cosmologists rely more and more on the ominous "dark matter" to explain otherwise inexplicable observations, much effort has gone into the detection of this mysterious substance in the last two decades, yet no direct proof could be found that it actually exists. Even if it does exist, dark matter would be unable to reconcile all the current discrepancies between actual measurements and predictions based on theoretical models. Hence the number of physicists questioning the existence of dark matter has been increasing for some time. Competing theories of gravitation have already been developed which are independent of this construction. Their only problem is that they conflict with Newton's theory of gravitation. "Maybe Newton was indeed wrong," declares Professor Dr. Pavel Kroupa of Bonn University's Argelander-Institut für Astronomie (AIfA). "Although his theory does, in fact, describe the everyday effects of gravity on Earth, things we can see and measure, it is conceivable that we have completely failed to comprehend the actual physics underlying the force of gravity."

This is a problematical hypothesis that has nevertheless gained increasing ground in recent years, especially in Europe. Two new studies could well lend further support to it. In these studies, Professor Kroupa and his former colleague Dr. Manuel Metz, working in

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<sup>1</sup> Metz, Manuel; Kroupa, Pavel; Theis, Christian; Hensler, Gerhard; Jerjen, Helmut: 2009. "Did the Milky Way dwarf satellites enter the halo as a group?" *The Astrophysical Journal*; (doi: 10.1088/0004-637X/697/1/269) and Metz, Manuel; Kroupa, Pavel; Jerjen, Helmut: 2009. "Discs of Satellites: the New Dwarf Spheroidals," *Monthly Notices of the Royal Astronomical Society*, (doi: 10.1111/j.1365-2966.2009.14489.x).



collaboration with Professor Dr. Gerhard Hensler and Dr. Christian Theis from the University of Vienna, and Dr. Helmut Jerjen from the Australian National University at Canberra, have examined so-called “satellite galaxies.” This term is used for dwarf galaxy companions of the Milky Way, some of which contain only a few thousand stars. According to the best cosmological models, they exist presumably numbering in the hundreds around most of the major galaxies. Up to now, however, only 30 such satellites have been observed in orbit around the Milky Way, a discrepancy in numbers which is commonly attributed to the fact that the light emitted from the majority of satellite galaxies is so faint that they remain invisible.

A detailed study of these dwarf galaxies has revealed some astonishing phenomena: “First of all, there is something unusual about their distribution,” Professor Kroupa explains. “The satellites should be uniformly arranged around their mother galaxy, but this is not what we found.” More precisely, all classical satellites of the Milky Way—the eleven brightest dwarf galaxies—lie more or less in the same plane, where they form some sort of a disc in the sky. The research team has also been able to show that most of these satellite galaxies rotate in the same direction around the Milky Way like the planets revolve around the sun.

### **Contradiction upon Contradiction**

The physicists do believe that this phenomenon can only be explained if the satellites were created a long time ago by collisions between younger galaxies. “The fragments produced by such an event can form rotating dwarf galaxies,” explains Dr. Metz, who has recently moved to the Deutsches Zentrum für Luft und Raumfahrt (German Aero-space Center); but there is an interesting catch to this crash theory: “theoretical calculations tell us that the satellites created cannot contain any dark matter.” This assumption, however, stands in contradiction to another observation. “The stars in the satellites we have observed are moving much faster than predicted by the Gravitational Law. If classical physics holds this can only be attributed to the presence of dark matter,” Metz states.

Or one must assume that some basic fundamental principles of physics have hitherto been incorrectly understood. “The only solution would be to reject Newton’s classical theory of gravitation,” says Pavel Kroupa. “We probably live in a non-Newton universe. If this is true, then our observations could be explained without dark matter.” Such approaches are finding support amongst other research teams in Europe, too.

It would not be the first time that Newton's theory of gravitation had to be modified over the past hundred years. This became necessary in three special cases: when high velocities are involved (through the Special Theory of Relativity), in the proximity of large masses (through the theory of General Relativity), and on sub-atomic scales (through quantum mechanics). The deviations detected in the satellite galaxy data support the hypothesis that in space where extremely weak accelerations predominate, a "modified Newton dynamic" must be adopted. This conclusion has far-reaching consequences for fundamental physics in general, and also for cosmological theories. Astrophysicist Bob Sanders from the University of Groningen in the Netherlands declares: "The authors of this paper make a strong argument. Their result is entirely consistent with the expectations of Modified Newtonian Dynamics (MOND), but completely opposite to the predictions of the dark matter hypothesis. Rarely is an observational test so definite."

### **Lousy Physics?**

As far as I, your editor knows, no one has ever examined the problem using Kepler's law of gravitation. The main difference between Newton's model of gravitation and Kepler's is that Newton considered the mass of a body to be concentrated in the center of an orbit while Kepler's law of gravity considers the mean density inside the orbit. Newton's law of gravity, however, dies off as the inverse square of the distance from the center of the orbit to its circumference. In Kepler's case, the orbital speed of orbiting bodies can increase the further away you get from the common center of the bodies' orbits. This is not the case for Newton's gravitational formula. I have derived the equations and they work. Lord willing, I shall finish the work this year.

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### **Jewish Proverbs**

You can't control the wind, but you can adjust your sails.

—Yiddish proverb.

### **All About Politics**

A politician is a fellow who will lay down your life for his country.

—Texas Guinan

## STANDING-WAVE UNIVERSE

The following note was precipitated by an email exchange involving how much NASA relies on the geocentric model for its launches and orbital adjustments. Specifically, it arose about a reference to NASA using a specific off-center version of the earth-firmament rotation axis. It turns out that, depending on how one wants to define the rotation-axis, one can eliminate certain perturbations and introduce other anomalies. Here is the text of my response to how this could be the case:

First, two definitions: a Compton wavelength is the wavelength a body has at rest. Its value is derived from  $E = mc^2 = hc/I_C$  which gives the Compton wavelength of  $I_C = h/mc$ . The deBroglie wavelength is the wavelength of a moving body. It derives from the body's momentum, i.e.,  $mv = h/I_B$ , which gives the deBroglie wavelength of  $I_B = h/mv$ . As usual,  $m$  is the effective mass,  $E$  is energy,  $c$  is the speed of light,  $h$  is Planck's constant,  $I_B$  and  $I_C$  are the deBroglie and Compton wavelengths respectively, and  $v$  is the speed of body  $m$ .

Suppose that the dynamic center of the earth (effective center of mass) coincides exactly with the dynamic center of the universe. The universe would look like a standing wave about the earth. The gravitational pressure on the earth would be of the order of  $10^{24}$  dynes, but the effective mass of the standing (Compton) wavelength that equals the diameter of the universe is a mere  $10^{-66}$  gram. By comparison, the effective mass of the earth when seen as a standing wave is  $10^{-46}$  gram, which is  $10^{20}$  times greater than the effective Compton mass of the universe.

In other words, in the Compton geometry of dead-centers, the universe is far less massive than the earth and thus responds to forces exerted on the earth's surface or attempts to change the position of the earth relative to the universe. Thus the moon's mass, which attempts to force the earth in an orbit about the earth-moon barycenter results in the universe "absorbs" (for want of a better word) the barycenter motion as its own. It's like your hand (representing the moon) in a rowboat (the universe) pushing off from a 200,000-ton tanker (the earth).

Now here's the fascinating part. The above statements refer to Compton waves (which pertain to a body at rest). The effective mass for a deBroglie wavelength of two astronomical units (the diameter of the earth's alleged orbit) at a speed of 30 km/sec (the alleged orbital speed of the earth) also turns out to equal  $10^{-46}$  gram, the same as the Compton wavelength for the earth at rest. Just what this means I'm not certain of yet, but it is obviously a geocentric phenomenon.

The Compton effect appears to determine the period, i.e., the frequency of the mass ( $c/I$ ) and the deBroglie effect involves the momentum ( $mv$ ). Thus the “coincidence” that the earth’s Compton mass and the deBroglie mass of the earth-sun orbit<sup>1</sup> both equal  $10^{-46}$  gm apparently verifies that the earth is located at the dynamic center of the firmament.

The only shift in perspective presented in this paper is a philosophical one. Modern physics holds the mass as “more real” than the wavelength. I think this preference for mass may be of Roman Catholic influence, possibly subconsciously induced. But there is no reason why wavelength could not be every bit as “real” as the mass. Actually, they are both equally “real,” but because of the popular misconception that mass is somehow more important in dynamics than Compton and deBroglie waves, I feel compelled to present my case in the framework of a central body mass because such is indeed manifest in a standing wave, namely, at its node.

Have fun going crazy thinking about this! Ecclesiastes 3:11.<sup>2</sup>

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### CHILDREN ARE QUICK

Teacher: Winnie, name one important thing we have today that we didn’t have ten years ago?

Winnie: Me.

Teacher: Millie, give me a sentence starting with “I.”

Millie: I is...

Teacher: No, Millie. Always say, “I am.”

Millie: All right, I am the ninth letter of the alphabet.

Teacher: Clyde, your composition on “My Dog” is the same as your brother’s. Did you copy his?

Simon: No, it’s the same dog.

Teacher: Harold, what do you call a person who keeps on talking when people are no longer interested?

Harold: A teacher.

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<sup>1</sup> It doesn’t make any difference if the sun actually goes around the earth in the course of a year or if the earth orbits the sun.

<sup>2</sup> Ecclesiastes 3:11—[God] hath made everything beautiful in his time; also he hath set the world in their heart, so that no man can find out the work that God maketh from the beginning to the end.

## Bar Stool Economics

Suppose that every day, ten men go out for beer and the bill for all ten comes to \$100. If they paid their bill the way we pay our taxes, it would go something like this:

- The first four men (the poorest) would pay nothing.
- The fifth would pay \$1.
- The sixth would pay \$3.
- The seventh would pay \$7.
- The eighth would pay \$12.
- The ninth would pay \$18.
- The tenth man (the richest) would pay \$59.

So, that's what they decided to do. The ten men drank in the bar every day and seemed quite happy with the arrangement, until one day, the owner threw them a curve. "Since you are all such good customers," he said, "I'm going to reduce the cost of your daily beer by \$20," so drinks for the ten now cost just \$80.

The group still wanted to pay their bill the way we pay our taxes so the first four men were unaffected; they would still drink for free. But what about the other six men—the paying customers? How could they divide the \$20 windfall so that everyone would get his "fair share?" They realized that \$20 divided by six is \$3.33. But if they subtracted that from everybody's share, then the fifth man and the sixth man would each end up being paid to drink his beer. So, the bar owner suggested that it would be fair to reduce each man's bill by roughly the same amount, and he proceeded to work out the amounts each should pay.

And so:

- The fifth man, like the first four, now paid nothing (100% savings).
- The sixth now paid \$2 instead of \$3 (33% savings).
- The seventh now pay \$5 instead of \$7 (28% savings).
- The eighth now paid \$9 instead of \$12 (25% savings).
- The ninth now paid \$14 instead of \$18 (22% savings).
- The tenth now paid \$49 instead of \$59 (16% savings).

Each of the six was better off than before; and the first four continued to drink for free. But once outside the restaurant, the men began to compare their savings.

"I only got a dollar out of the \$20," declared the sixth man. He pointed to the tenth man, "but he got \$10!"

“Yeah, that’s right,” exclaimed the fifth man. “I only saved a dollar, too. It’s unfair that he got ten times more than I!”

“That’s true!!” shouted the seventh man. “Why should he get \$10 back when I got only two? The wealthy get all the breaks!”

“Wait a minute,” yelled the first four men in unison. “We didn’t get anything at all. The system exploits the poor!”

The nine men surrounded the tenth and beat him up.

The next night the tenth man didn’t show up for drinks, so the nine sat down and had beers without him. But when it came time to pay the bill, they discovered something important. They didn’t have enough money between all of them for even half of the bill!

And that, ladies and gentlemen, journalists and college professors, is how our tax system works. The people who pay the highest taxes get the most benefit from a tax reduction. Tax them too much, attack them for being wealthy, and they just may not show up anymore. In fact, they might start drinking overseas where the atmosphere is somewhat friendlier.

—David R. Kamerschen, Ph.D.  
Professor of Economics  
University of Georgia

For those who understand, no explanation is needed. For those who do not understand, no explanation is possible.

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### **They Walk Among Us**

To all you hunters who kill animals for food, shame on you, you ought to go to the store and buy the meat that was made there, where no animals were harmed. [From a letter to the editor – anon]

Most scholars “suffer from Bibliophobia so badly that they can’t even find the verses in the Bible that deal with the UN, segregation, abortions, humanism, world history after 2001, knowledge of God, sex perversion, adultery, growing old, dealing with stress, facing death, or the causes of war.”

—Peter Ruckman, Ph.D., *BBB* 34(5):1, May 2010.

## SNOWFLAKES, THE FLOOD, AND THE FIRMAMENT

Gerardus D. Bouw, Ph.D.

The first chapter of Genesis tells us that the firmament separates the waters on earth from the waters above the heaven. In the last several issues of the *Biblical Astronomer*, we have dealt extensively with the firmament and, at this time, we conclude it is a solid, likely a crystalline structure made up of particles that are tiny in the extreme (Ezekiel 1:22).<sup>1</sup>

The particles making up the firmament are called “Planck particles,” after the physicist Max Planck who first recognized them in the 1890s. A Planck particle has a diameter of the order of  $10^{-33}$  cm (or inch...close enough...) and has a mass of a few hundred-thousandths of a gram.

On page 21 of issue no. 139, we are introduced the idea of scale dimension and noted that since the Planck particles are the smallest particles possible, they are at the low-end of the scale dimension. On the largest end of the scale dimension is the universe. We know intuitively that we can travel through the scales appropriate to and larger than we are, but we cannot travel into scales smaller than we are. Thus we can physically move through planetary scale-space, but we cannot physically move through molecular scale-space. Likewise, molecules and atoms can move through the universe but they cannot move through the firmament. This observation raises the question: although the Planck particles are fixed in the firmament, can they nevertheless move through the scale dimension that they fill? The question makes sense in that atomic matter and things made up of atoms or elementary particles such as photons can move through the firmament.

### A Modest Proposal

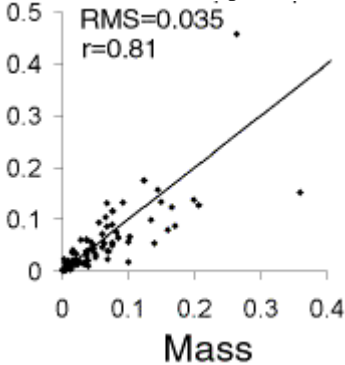
The plain text of Scripture appears to say that there is water above the outer edge of the universe and that there is water here on earth and that said water is under the firmament. But there is a second way to interpret that latter situation and that is from the scale dimension. In that case, the water is tied up in the firmament. It may sound improbable, if not impossible, but over the 39 years of Bible study I have learned that if there are two ways to take a passage of Scripture, it should be taken both ways. Is the firmament, at the Planck scale, re-

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<sup>1</sup> Ezekiel 1:22—And the likeness of the firmament upon the heads of the living creature was as the colour of the terrible crystal [jasper; Revelation 21:11], stretched forth over their heads above.

lated to water? May it even be made of “frozen” water? It appears that the answer to those two questions is, “Yes.”

Let us first consider the mass of a Planck particle. The Planck mass is  $2.18 \times 10^{-5}$  gm. Since the atmosphere is called “the open firmament of heaven” in Genesis 1:20, and since clouds are associated with a covering and the dust of the Lord’s feet, is there a relationship between the water droplets or ice crystals in clouds and the Planck particle? In particular, is the mass of such a droplet of the same order as the mass of a Planck particle? The answer is a qualified, “Yes.”



Consider Figure 1. The vertical axis plots a theoretical estimate for the mass of a water droplet, ice crystal or a single snowflake in a cloud. The horizontal axis plots the actual mass. All we really care about is the horizontal scatter of crystalline masses listed in milligrams. Thus the 0.1 on both axes of the figure is  $0.0001$  or  $10^{-4}$  gm. Note the concentration of measured masses near the origin of the diagram. The concentration implies

that most crystals have a mass less than 0.05 microns. The figure is representative and one of several that were published in a proceedings paper presented circa 1990.<sup>2</sup> The study weighed some 630 crystals, most of which were concentrated into the first 0.05 gm of the ordinate. This implies that a significant fraction of ice crystals in a cloud has a mass clustered around the Planck mass ( $1 \times 10^{-5}$  through  $5 \times 10^{-5}$  gm). The Planck mass of  $2.18 \times 10^{-5}$  gm is squarely in that range. My proposal is that the Planck particles are baby cloud droplets, ice crystals, and single snowflakes that are compressed—with the “memory” of their structure and their initial composition intact—into a black hole.

## The Flood

I mentioned earlier that the Planck medium, which is the firmament, is a crystalline lattice strongly constraining each Planck particle, (which is the “atom” of the firmament) into its location. In three dimensions the particles are not very free to move. However, if we regard the scale dimension as a fourth spatial dimension, the Planck particles are allowed to move through it if they are loosed from their location in the crystal. Such things can happen in regular crystals; even in

<sup>2</sup> Baker, Brad, Carl Schmidt, Paul Lawson, & Dave Mitchell, 1990. “Further analysis and Improvements of Ice Crystal Mass-size Relationships.”



the “crystalline structure called the atomic nucleus. The process is called *tunneling*. Tunneling causes radioactive decay. Theoretically, then, tunneling could release Planck particles from the grasp of the firmament into the 5-D space we call the scale dimension.

Once the Planck particle is suddenly free of the firmament’s confines, it likely will explode in the same sense—but in a much smaller scale—as Steven Hawkins’ miniature black holes. (The scale is smaller because the mass of one of Hawkins’ mini-black holes is the mass of a mountain while the Planck particle’s mass is that of a single snowflake.) The Planck particle thus would permanently “pop” into regular space and, with its watery identity imprinted in it, it would undergo several phase changes to morph into an ice crystal, or a snowflake, or depending on the local temperature, a water droplet. If, by some miracle, enough of these water-based Planck particles recalled their original liquid or crystalline state, one could say that the windows of heaven were opened to rain upon the earth. This may be exactly what happened to partly supply (along with the fountains of the deep being broken up) the waters for Noah’s flood.

### **Attributes Assigned the Firmament by Scripture**

So far, we’ve mentioned a couple of attributes that Scripture assigns to the firmament. The first is that the firmament separates the waters below from the waters above with specific reference to the earth, whose waters are gathered together on the third day. We extended that separation of the waters above and below into the fifth dimension, called scale space to separate the waters above the firmament, which is the largest, most massive object that God created during the creation week to the smallest particle God created, the Planck particle.

The second scriptural attribute we noted about the firmament is that it is crystalline. Specifically this means the firmament is a solid with crystalline properties. One of the properties that a firmament atom (Planck particle) has is an electric charge. Since the physical expression describing the charge is a square root, the charge on a single particle is either positive or negative. I find it easiest to view the Planck particle as a sphere, but that’s a matter of preference. Given the property of charge, it seems most likely that the form of a Planck particle is a torus, i.e., a doughnut shape.

A third attribute, which we have not covered, is the face of the deep. The first mention of the face of the deep occurs in Genesis 1:2 where we are told that darkness was upon the face of the deep while the Spirit of God moved upon the surface of the waters. Job 38:30 records that “The waters are hid as with a stone, and the face of the deep is frozen.” The most obvious application is that the waters above the firmament, that is, beyond the edge of the universe, are frozen and so form

the base of the third heaven. When applied to the scale dimension, the surface of the Planck medium, (which forms a crystalline surface,) can also be regarded as frozen.

Ezekiel 1:28 mentions a bow: “As the appearance of the bow that is in the cloud in the day of rain, so was the appearance of the brightness round about. This was the appearance of the likeness of the glory of the LORD. And when I saw it, I fell upon my face, and I heard a voice of one that spake.” The mention of a rainbow implies water is present; the “round about” describing the bow suggests to me that the rainbow was a complete circle. All rainbows actually form a circle unless the ground or some other object gets in the way. It seems that wherever the firmament is found, water is not far away.

As a fourth attribute, fire is also associated with the firmament. We see this in Ezekiel’s visions (Ezekiel 1:13, 27; 10:2, 7), which speak of fire and coals. That the firmament is bright is also related to us in Daniel 12:3, which relates: “And they that be wise shall shine as the brightness of the firmament; and they that turn many to righteousness as the stars for ever and ever.

When we look at the firmament at night, it hardly appears bright. In truth, the firmament has a surface temperature of a hundred-trillion-trillion degrees but God has designed the firmament so that a light that bright can neither be seen nor felt by the material, atomic universe. In the same way, they that are wise in the scriptural sense can preach the Truth to burn the consciences of men with God’s light and his heat but appear as nothing, as nonsense to the natural, that is, physical man (1 Corinthians 2:14).<sup>3</sup>

And that, dear reader, is my modest proposal; that the atoms that make up the firmament—which are not the same as the atoms that make up our universe and our bodies—are crystals of ice, each containing about  $10^{18}$  water molecules which were compressed into the firmament so that each molecule retains its identity (meaning each Planck particle is its own, tiny universe). My proposal further assumes that during the rains of the flood, Planck particles were encouraged to sublimate from the crystalline structure of the firmament through tunneling, expanded back into its constituent water molecules, until it reached temperatures normal to earth’s climates at which time it precipitated as snow, ice, or rain. In that way, the windows of heaven were opened (Genesis 7:11) in a way impossible for us to crawl through. My proposal may be a bit further fetched than that the waters from the windows of heaven came from Mars, ... but ... maybe ....

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<sup>3</sup> 1 Corinthians 2:14—But the natural man receiveth not the things of the Spirit of God: for they are foolishness unto him: neither can he know them, because they are spiritually discerned.

# CREDO

The Biblical Astronomer was founded in 1971 as the Tychonian Society. It is based on the premise that the only absolutely trustworthy information about the origin and purpose of all that exists and happens is given by God, our Creator and Redeemer, in his infallible, preserved word, the Holy Bible commonly called the King James Bible. Any scientific endeavor which does not accept this revelation from on high without any reservations, literary, philosophical or whatever, we reject as already condemned in its unfounded first assumptions.

We believe that the creation was completed in six twenty-four hour days and that the world is not older than about six thousand years. We maintain that the Bible teaches us of an earth that neither rotates daily nor revolves yearly about the sun; that it is at rest with respect to the throne of him who called it into existence; and that hence it is absolutely at rest in the universe.

We affirm that no man is righteous and so all are in need of salvation, which is the free gift of God, given by the grace of God, and not to be obtained through any merit or works of our own. We affirm that salvation is available only through faith in the shed blood and finished work of our risen LORD and saviour, Jesus Christ.

Lastly, the reason why we deem a return to a geocentric astronomy a first apologetic necessity is that its rejection at the beginning of our Modern Age constitutes one very important, if not the most important, cause of the historical development of Bible criticism, now resulting in an increasingly anti-Christian world in which atheistic existentialism preaches a life that is really meaningless.

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*To the law and to the testimony: if they speak not according to this word, it is because there is no light in them.*

– Isaiah 8:20

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