Solar Energy [Rev. 20190322]

By J — Latest revision: http://allis.foundation/Solar_Energy.pdf

Playing Devil's Advocate... Discovery of Gravitational Waves

On September 14, 2015, the LIGO (Laser Interferometer Gravitational-Wave Observatory) observed a "chirp" lasting about a fifth of a second (GW150914). Analyses of the signal suggest that it was produced by the cataclysmic collision of two black holes a billion light years away.

This was probably the verification of the most dramatic prediction of Albert Einstein's General Theory of Relativity. Accordingly, we ought to have a critical look at the relevant experiment before we finally incorporate this great achievement into the body of scientific knowledge.

The LIGO experiment consists of two identical stations, one at Hanford, Washington, and the other at Livingstone, Louisiana, some 3,000 km apart. Each station consists of a system of optical, electronic, mechanical, and hydraulic components, and each has three optically polished surfaces across which the light signal must pass.

The mirrors in each LIGO interferometer are set four km apart. The expected change in length of the arms of the interferometer induced by the gravitational waves is around one ten-millionth of the diameter of a single atom.

Note, the best precision mirror surfaces have smoothness of about 25 nanometres—a nanometre is a millionth of a millimetre. That is incredibly fine tolerance, but even this pales when compared with what LIGO claims to measure.

Put another way, the most precisely polished astrophysical mirrors like those used in LIGO, can have peaks 25 nm above and below the theoretical surface plane of the mirror, meaning that some parts of the mirror can be 50 nm further from or closer to the point of observation.

And 50 nm is a billion times bigger than the distortions induced by the expected gravitational waves. Because of this, it is practically impossible to measure the distance between the two mirrors in each interferometer to the required tolerances.

They have had to take an average, which is no more than a guessed approximation. The likelihood that LIGO did indeed detect a signal from GW150914 is remote, simply because it exceeds the limits of technological precision, more so than any other discovery in human history.

There is also something which appears to be too fortuitous about GW150914, as noted by the distinguished Indian astrophysicist Dr. Abhas Mitra: Given that the radius of Earth is 6,370 km, we can calculate the linear distance between the LIGO detectors at Livingstone and Hanford at around 2,500 Km.

Because this distance is absolutely negligible compared with the distance to the origin of GW150914 (1.3 billion light years), both detectors should see the event almost simultaneously. There should be a delay of a few microseconds at most if both detectors received the signal from the sky above.

However, the actual delay of seven milliseconds was very much larger, and is possible only if the source was almost perfectly aligned with a straight line joining Livingstone and Hanford. Furthermore, while moving from Livingstone to Hanford, the signal must have travelled through Earth's crust. And this sounds like some sort of cosmic conspiracy.

Dr Bibhas De, a radio astronomer of some 40 years' experience and a PhD in applied physics from the University of California-San Diego, noted that there seems to be some minor anomaly between the amplitudes (strengths) of the two signals recorded by the two LIGO detectors.

He admits that this could be ascribed to the instrumental differences between the detectors. If so, we should simply be able to normalize them to ensure that the two signals match exactly with one another. And the Physical Review Letters paper publishing this result needs to explain this apparent anomaly.

In the event that normalisation cannot be effected, there is some chance that the extremely sensitive LIGO detectors picked up a fake signal despite the best efforts of the LIGO team to filter them out.

There is undeniably some possibility, however slight, that the well-studied effect of geo-magnetically induced currents in long metal structures might have triggered both the LIGO detectors.

These currents in the Earth's magnetic field would create stresses in LIGO's lengthy vacuum tubes. These stresses, though extremely small in most cases, may nevertheless be non-negligible for LIGO in view of the extraordinary sensitivity of the instrument.

Furthermore, the time-scale and the form of the signal seem to be suspiciously well-matched to geomagnetic interference. In addition, it is significant that the Lebedov Institute, Moscow, recorded September 14, 2015, as a day of geomagnetic storms: These disturbances originate in the ionosphere, thus they would consequently affect both detectors. We cannot be certain such effects were filtered out.

Finally, these points are raised not to take away due credit from the monumental effort by the LIGO team, but rather to emphasise, with a phrase made popular by Carl Sagan, that "extraordinary claims require extraordinary evidence". *1

NASA Stunner: Burning Fossil Fuels Cools Earth

A stunning new development is creating waves across the global warming community of activists with a report from NASA that burning carbon fuels actually lowers the temperatures in local environments.

According to a new report in the Express, the result throws "into doubt" many of the major theories about what causes temperatures to rise.

"Environmentalists have long argued the burning of fossil fuels in power stations and for other uses is responsible for global warming and predicted temperature increases because of the high levels of carbon dioxide produced—which causes the global greenhouse effect," the report said.

But the new findings discovered aerosols, which are given off by burning fossil fuels, "actually cool the local environment, at least temporarily."

As part of research intended to find out if global warming models were accurate, investigators looked into the Transient Climate Response and Equilibrium Climate Sensitivity of the earth.

"As part of that calculation, researchers have relied on simplifying assumptions when accounting for the temperature impacts of climate drivers other than carbon dioxide, such as tiny particles in the atmosphere known as aerosols, for example," one NASA official told the newspaper.

The report said the spokesman confirmed it is "well known" that aerosols such as those released in volcanic eruptions and from power stations operations cool the earth's surface.

"In a similar fashion, land use changes such as deforestation in northern latitudes result in bare land that increases reflected sunlight," the spokesman said.

Climatologist Kate Marvel, a lead author, added, "Take sulfate aerosols, which are created from burning fossil fuels and contribute to atmospheric cooling. They are more or less confined to the northern hemisphere, where most of us live and emit pollution....

"Because earlier studies do not account for what amounts to a net cooling effect for parts of the northern hemisphere, predictions for TCR and ECS have been lower than they should be."

The report said, "Climate scientist Gavin Schmidt, the director of NASA's Goddard Institute for Space Studies (GISS) in New York and a co-author on the study, published in the journal Nature Climate Change, said: "The assumptions made to account for these drivers are too simplistic and result in incorrect estimates of TCR and ECS."

Schmidt continued, "The problem with that approach is that it falls way short of capturing the individual regional impacts of each of those variables."

NASA's conclusion is that existing global warming models "have underestimated ... the future impact."

WND reported only days ago on President Barack latest actions to promote the agenda of global warming.

He smirked when he was told Republican presidential primary frontrunner Donald Trump criticized Obama's claim that global warming is one of the nation's greatest threats.

He and "CBS This Morning" co-host Norah O'Donnell had a good laugh over the issue.

Only in the last few weeks, in the wake of the terrorist attacks in Paris, Obama suggested a global warming conference in Paris would somehow serve as a rebuke to the Islamic State.

Yet in light of recent scandals over the validity of climate data, the president's confidence in the science could be misplaced. As revealed in Sen. Jim Inhofe's "The Greatest Hoax: How The Global Warming Conspiracy Threatens Your Future," the "Climategate" scandal showed the United Nations' Intergovernmental Panel on Climate Change (IPCC) may have been manipulating data and was putting a political agenda above scientific objectivity.

Recent data even revealed the arctic ice cap is actually growing, not shrinking, defying the predictions of climate change activists like former Vice President Al Gore. Expert observations in early 2015 also showed official temperature records cited to prove the existence of global warming had been systematically adjusted to falsely present the Earth as having "warmed" far more than the data showed.

This led a writer at the United Kingdom's Telegraph to call the manipulation of climate data "one of the greatest scientific scandals of all time."

Not surprisingly, the public seems to be tuning out warnings of apocalyptic doom. A recent poll from Fox showed only three percent of Americans thought "climate change" was the most important issue facing the country. Another poll taken in mid-October showed fewer than one in four Americans were extremely or very worried about climate change and only 36 percent saw climate change as a moral issue.

Nonetheless, don't expect the climate change movement to go away anytime soon. Brian Sussman, a talk show host, former meteorologist and author of "Climategate" and "Eco-Tyranny" predicts environmentalists will simply double down on their claims. After all, he says, "climate change" has become a big business.

"I don't see the climate change industry backing down because there is too much money to be made and too much power to be acquired," Sussman told WND. "Again, the goal for some is to make loads of money, and for others to use 'sustainable development' as the key to pushing for global socialism and communism."

Sussman accused the mainstream media of "carrying the torch for the climate agenda" and alleged the recent summit in Paris was dominated by this cynical agenda.

Global warming activists, as WND reported recently, have suggested a way to deal with those who don't believe in their dogma.

They want Obama to use RICO laws to prosecute opponents who deny mankind is causing catastrophic changes in the climate.

That's the Racketeer Influenced and Corrupt Organizations Act, which can put people in jail.

In a letter addressed to Obama, Attorney General Loretta Lynch and Office of Science and Technology Policy Director John Holdren, the scientists from multiple universities said they "appreciate that you are making aggressive and imaginative use of the limited tools available to you in the face of a recalcitrant Congress."

"One additional tool—recently proposed by Sen. Sheldon Whitehouse—is a RICO (Racketeer Influenced and Corrupt Organizations Act) investigation of corporations and other organizations that have knowingly deceived the American people about the risks of climate change, as a means to forestall America's response to climate change," they wrote, according to Politico.

The scientists said their critics' actions have been documented in various publications.

The scientists accused those who are not on a party of their campaign of using methods "quite similar to those used earlier by the tobacco industry. A RICO investigation (1999 to 2006) played an important role in stopping the tobacco industry from continuing to deceive the American people about the dangers of smoking."

They continued, "If corporations in the fossil fuel industry and their supporters are guilty of the misdeeds that have been documented in books and journal articles, it is imperative that these misdeeds be stopped as soon as possible so that America and the world can get on with the critically important business of finding effective ways to restabilize the Earth's climate, before even more lasting damage is done," they said.

However, recent reports reveal new evidence that indicates the polar ice cap is growing, not declining.

Blogger Steven Goddard at Real Science cited information from the National Snow and Ice Data Center in Boulder, Colorado, showing the Arctic ice mass, as of Sept. 7, is substantially bigger than it was in September 2012.

"Nobel Prize winning climate experts and journalists tell us that the Arctic is ice-free, because they are propagandists pushing an agenda, not actual scientists or journalists," he said.

In the past three years, he pointed out, the Arctic ice mass "has gained hundreds of miles ... much of which is thick, multi-year ice."

WND long has reported the predictions of an ice-free Arctic by scientists who believe mankind is causing global warming.

But in just last few winters, Cairo saw its first snow in 100 years. And Oregon, like several other states, reached its coldest temperature in 40 years. Chicago saw the coldest days ever recorded, and—as if to add finality to the trend—Antarctica reached the coldest temperature ever recorded anywhere on earth.

The holes in the theories that form the basis of ice-free Arctic forecasts are evident.

For example, London's Independent newspaper declared at the turn of the millennium "Snowfalls are now just a thing of the past." The report quoted David Viner, senior research scientist at the Climatic Research Unit of the University of East Anglia, long considered an authoritative resource for global warming research, saying snow would soon be "a very rare and exciting event" in Britain.

"Children just aren't going to know what snow is," he claimed at the time.

Former vice president and current carbon-credit entrepreneur Al Gore told an audience in a 2009 speech that "the entire north polar ice cap during some of the summer months could be completely ice-free within the next five to seven years." And his 2006 documentary "An Inconvenient Truth" famously predicted increasing temperatures would cause earth's oceans to rise by 20 feet, a claim many scientists say is utterly without rational basis.

A 2013 column by Mark Hertsgaard was headlined: "The End of the Arctic? Ocean Could be Ice Free by 2015."

He wrote: "Say goodbye to polar bears and a whole lot of ice. New research suggests the Arctic Ocean could be ice-free by 2015, with devastating consequences for the world. Can it be stopped?"

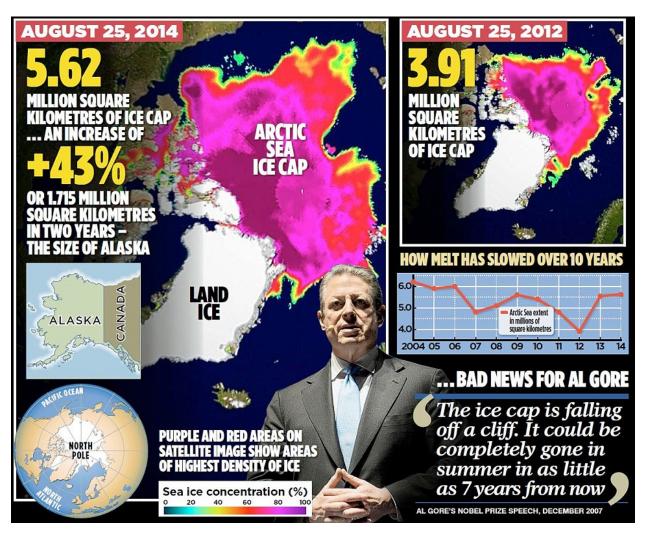
Goddard also cited another of Gore's predictions, that the "polar ice cap may disappear by 2014."

Taking one more step back in time, the BBC said the Arctic summers would be ice-free by 2013.

Sierra Club Canada also said in 2013 that the Arctic sea ice would vanish that year.

Well-known scientist Art Robinson has spearheaded The Petition Project, which to date has gathered the signatures of 31,487 scientists who agree that there is "no convincing scientific evidence that human release of carbon dioxide, methane, or other greenhouse gases is causing or will, in the foreseeable future, cause catastrophic heating of the Earth's atmosphere and disruption of the Earth's climate."

They say, "Moreover, there is substantial scientific evidence that increases in atmospheric carbon dioxide produce many beneficial effects upon the natural plan and animal environments of the Earth." *2



ABOVE: DAILY MAIL INFOGRAPHIC — 'PEDDLER OF IMMINENT DOOM AL GORE, CRIES WOLF, MAKING A FORTUNE ON YOUR GULLIBILITY. *4

"Everything around you that you call life was made up by people that were no smarter than you. And you can change it, you can influence it. Once you learn that, you'll never be the same again." —*Steve Jobs*

"The three great forces that rule the world: stupidity, fear and greed." —Albert Einstein



ABOVE: (CROPPED) IMAGE BY NASA/JPL-CALTECH/SPACE SCIENCE INSTITUTE — "THIS RARE IMAGE TAKEN ON JULY 19, 2013, BY NASA'S CASSINI SPACECRAFT HAS SHOWS SATURN'S RINGS AND OUR PLANET EARTH AND ITS MOON IN THE SAME FRAME. AT THE TIME, CASSINI WAS 2013 FROM A DISTANCE OF ABOUT 898.414 MILLION MILES (1.4458 BILLION KILOMETERS) FROM EARTH. IT IS ONLY ONE FOOTPRINT IN A MOSAIC OF 33 FOOTPRINTS COVERING THE ENTIRE SATURN RING SYSTEM... TAKEN BY CASSINI'S WIDE-ANGLE CAMERA." *4

"It is not, I believe, too much to say that all the vital problems of philosophy depend for their solution on the solution of the problem of what Space and Time are and more particularly how they are related to each other."

-Samuel Alexander

More Than Two Billion Years Ago

More than two billion years ago on a group of planets attached to the Sirius B star system lived a race of warrior priests. Think of them somewhat like the Jedi—except that in addition to their abilities as warriors and philosopher priests they were also scientists and mathematicians of great ability.

Next door to them in cosmic terms lies the star system of Orion, home of the Aryans.

The Sirians conquered the Orion star system and began a genetic breeding program to make super soldiers out of the Aryans.

They built in a lot of special features—and bred out the ability for anything but binary "either/or" thinking. The Aryan super soldiers were also bred to thrive in atmospheres of fear and death, and developed an ability to siphon energy from the terror and misery of the dead and dying.

So those were the beginning two castes—the Sirian warrior-priest-scientists and the Aryan super soldiers.

Later they conquered the Pleiades star system and subjected the people there to act as Merchants and Traders for them.

Members of all three castes came to Earth and set up a planetary civilization somewhat similar to the Hindu Caste System still practiced by Hindus today.

So some of you have been faithfully concentrating on the mental and emotional discipline of melting away the Seventh Seal on Bardsey Island and have become aware of what the energy blockage of thousands of "bound souls" feels like.

Now as we continue past Bardsey Island and pass the healing wave of energy over the European Continent you will notice that there is a giant blockage over Rome itself. The entire city is built on human bones and blood. You can still view the catacombs and once you start to think about all the charnel houses and "holy relics" and venerated corpses in Catholic Churches it will become apparent that a Death Cult is involved in all of this.

That Death Cult and the system of numbered "seals" created by this Death Cult is a holdover from the Aryan super soldiers—as it served a double purpose.

Remember that these bred-for-battle beings feed off the energy of fear and death and dying. By encapsulating large numbers of dead bodies and binding the dead and dying souls to these locations, they were not only using them to block the Earth's energy conduits, they were creating food caches for themselves.

So when the seals are removed two benefits are achieved—we restore the balance of the Earth's energy system and deprive the Aryans of their food sources.

There is a similar food cache in New York City and another Seal there, that was formed by the miserable bodies of 15,000 largely Negro slaves who were worked to death to build the city and whose bodies were piled up like cord wood and left to rot along the ghastly corridor of Wall Street.

You will find the same thing in Washington, DC—again, literally thousands of largely Negro slaves were worked to death to build that city and they were dumped into huge pit graves. The entire Capitol Mall is a giant bone pile soaked in blood and the energy of all those miserable people is bound there, forming another Seal.

For all those of Negro descent it is a special calling to bid these ancestors peace and love and comfort and to release them at last by melting away the Seal that binds them to that time and space coordinate.

If you wish you can all certainly "choose" your target for your greatest attention—start your healing "wave" concentration in NYC or Washington, DC instead of Bardsey Island if you feel drawn to do so. Those seals have to be released, too...

Think of all the innocent dead, collected like a squirrel collects nuts, and bound as food source and not allowed to rest or journey on for hundreds and in many cases, thousands of years?

We have the power now to free them all and help force the remaining Aryans out of hiding. Without easy access to their stored "food" caches and being constantly disturbed by our concentrated will to heal the Earth and release those seals and the souls trapped by them, the remaining "nests" of Aryans (sometimes called "Archons" by mistake) will be forced out, captured and transported back whence they came all these many years ago.

Yes, Virginia, this is a spiritual and energetic war going on, and your good will and compassion and mindful intention to heal the Earth and release these seals is needed. *5



ABOVE: SCI-FI ARTWORK BY JOHN HARRIS — 'SYMBOLIZING UNCONSCIOUS WOUNDS, FROM A LONG FORGOTTEN PAST, NEED HEALING' *6

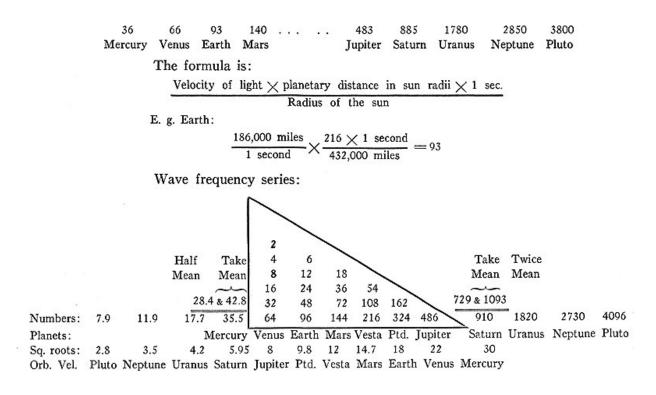
Introduction to Electromagnetic Solar System

Nothing in the history of science is more remarkable than the fundamental influence exerted by the teachings of Pythagoras in mathematics, astronomy and physics. To the great discoveries in those fields, perhaps now may be added a solution of the baffling mystery of electromagnetism.

It has been found that the regularity of planetary intervals which has attracted many astronomers since Kepler's time can be attributed to the action of electromagnetic waves radiated by the sun. This discovery conforms with the original ideas of Johann Kepler, a modern disciple of Pythagoras. Kepler believed the physical basis of his laws was identified with magnetism, which he conceived to be a form of vortical motion.

Electromagnetic Solar System

Through a simple formula it can be shown that planetary distance intervals closely follow a common series of wave frequencies. The numbers derived through the formula are:



The tabulated numbers extended right and left with ratio 3:2 are as planetary mean distances from sun; square roots of the numbers taken in reverse order are as orbital velocities. It will be seen that the serial numbers are paired, i. e., products of pairs are constant: numbers for Mercury and Saturn; Venus and Jupiter; Earth and planetoid; Mars and Vesta. Orbits of Uranus, Neptune and Pluto would pair with possible orbits between Mercury and the Sun.

That corresponding planetary numbers are derived through a formula involving the velocity of light as shown above, leads to the inference that planetary distances and motions are regulated by electromagnetic waves radiated by the sun. This inference is supported by the fact that a related series of numbers shows direct correspondence between the velocity of light and the cube roots of planetary periodic times (in seconds).

P.time numbers	192	256	324	384	486	576	729	972	1380	1728	2048
Planets	Merc.	Ven.	Earth	Mars	Ves.	ptd.	Jup.	Sat.	Uran.	Nep.	Pluto
Cu. rts. of per time	197	268	316	390	480		722	975	1383	1735	2000

The serial numbers are paired, i. e., products of pairs are constant:

Mercury & Saturn	Venus & Jupiter	Earth & planetoid	Mars & Vesta
(192 X 972)	(256 X 729)	(324 X 576)	(384 X 486)

The constant product is 186,624, which when multiplied by appropriate length/time units (1 m.p.s. or 1.6km./s.) equals the velocity of light.

From the foregoing figures the conclusion may be drawn that the frequencies of the solar electromagnetic waves are as the cube roots of the periodic times; these frequencies and the velocity of light determine wave-lengths...

The initial amplitude of the waves would be as the radius of the sun and the electromagnetic intensity (equivalent to gravitational mass) would be as the square of the amplitude.

The space between Mars and Jupiter would correspond to a region of wave interference, directly affecting the orbits of Mercury and Saturn and contributing to orbital ellipticities.

Similar wave elements can be computed for all planet-satellite systems.

The planetary numbers are also related to the characteristic line spectra of all atoms.

The planetary numbers:

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64 96 144 216 324 486
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are as the actual vibrational frequencies of:

on a diatonic scale.

Truly, there is "Music of the Spheres."

The identification of solar system motions with electromagnet-ism is a reminder of the "Central Fire" of Pythagoras.

Solar system bodies often have been compared to giant electromagnets and planetary orbits are comparable to the concentric rings which surround wires carrying electricity familiar to all students of physics.

Thus the sun may be conceived as a great stabilized electromagnetic vortex radiating a continuous succession of spinning ring-waves in which the planets move in obedience to Kepler's laws. The planets would be similar but smaller vortices and the chemical elements would be similar structures on an atomic scale.

Electromagnetism might be defined generally as vortical motion in a Space Plenum. Positive and negative effects would be due to differences in the direction of rotation.

The spiral form and simple numerical relations seem to be characteristic of all natural phenomena from celestial galaxies to atoms. The Pythagorean right-triangle represents the projection of a spiral; Mendeleef's octaves in the chemical table and the helical arrangement of atomic progression shown by de Chancour-tois and Stoney and Mendel's biological laws all illustrate the principle. The progression of genera and species in biology is analagous to the progression of the chemical elements. Leaf formations are universally spiral and the blood stream follows a spiral circuit. And all have a rhythm in harmony with the "Music of the Spheres."

Genung has shown that creative thought follows a spiral law. There are curious traces of this in the history of human beliefs. The vortical nature of electromagnetic motion may be compared to a fiery serpent pursuing its tail. The swastika might be interpreted as a symbol of rotation. Intuitively we perceive the significance of the symbols but a Pythagoras is required to interpret them for us.

The doctrine of Love which eventually will lead us to a real brotherhood of men, was voiced by great spiritual leaders, including Lao-Tse, Gautama, and Jesus, as well as Pythagoras. Through their beautiful teachings we hope to achieve some day a social state on earth worthy of the sublime harmonies of the Universe now so vaguely apprehended.

Note by C. J. Ryan

Mr. O'Connor's article with its mathematical demonstrations of the orderly relations between the velocity of light (an electro-magnetic phenomenon), the *radius* of the sun (the distance of the center of the sun from its surface), and the distance of the planets from the center of the solar system, is extremely interesting to students of *The Secret Doctrine* for many reasons. It is another demonstration that the universe is not a helter-skelter combination of objects thrown together by blind chance, but that there is Mind working in an intelligent way behind the visible manifestations, or, as Sir James Jeans says, the universe is nearer to a great thought than to a great machine.

Mr. O'Connor refers to Pythagoras and his modern disciple, Kepler, with justified admiration; but those great men looked more deeply into the causes of the exquisitely beautiful adjustments of celestial motions than most of our modern physicists. Dr. Max Planck is one of the few who boldly declares the ancient doctrine that consciousness is fundamental, and that matter is derivative from consciousness. Without this vital factor astronomy is a body without a soul.

Kepler, whose three "Laws" of motion have long been accepted as fundamentals, realized that the "harmony of the spheres" was controlled by Cosmic Intelligence in the ether of space, the "Holy Ghost" as he called it. He accepted the ancient belief in an "Angelus Rector," a spiritual conscious entity conducting each planet, and he understood how the Pythagoreans could believe that all the globes disseminated through space were rational Intelligences or Spiritual Powers which may be regarded as Divinities. Even in these prosaic days one leading astronomer has dared to suggest that every star may well be the seat or vehicle of a sublime Being whose conscious life-history transcends our highest conceptions as greatly as his span of years—millions or billions—exceeds that of a human incarnation!

In the 15th century Gilbert of Colchester made his great discoveries in magnetism which must have been known to Kepler, who declared that the sun was a powerful center of magnetism (now scientifically demonstrated). Kepler worked out a curious relationship between the Platonic solids and the orbits of five of the seven "Sacred Planets," naturally omitting the sun and the moon (and of course the outer planets, which were not known in his day).

It is curious that the work of Copernicus and Kepler, which was founded on a mystical basis derived from Plato and Pythagoras and ultimately from Oriental teaching, should have led through Galileo, Newton, and the French Encyclopaedists of the 18th century, and the modern Germans, to a purely mechanistic philosophy of nature and life! Fortunately, Relativity and the new atomic theories bid fair to liberate science from the crude materialism of the 19th century and to open the way to a more spiritual outlook. Speaking of the materialism that was so general at the time she brought Theosophy to the West H. P. Blavatsky says:

It is only with the theories of such men of learning as Kepler, Kant, Oersted and Sir W Herschel, who believed in a Spiritual world, that Occult Cosmogony might treat, and attempt a satisfactory compromise. — *The Secret Doctrine*

She shows that Space is a substantial "living entity," the real world, while ours is an "artificial" one. Space is studded with countless phenomenal universes, systems, and mirage-like worlds; a Unity, bottomless at its depths, illusive (*maydvi*) on its surface. The Ancient Wisdom—Theosophy—has always taught that the real universe is a complex of forces indeed, but not of blind, unintelligent forces. Theosophy is an objective idealism. Students would benefit by a careful perusal of the magnificent philosophic passages in *The Secret Doctrine...*

In Mr. O'Connor's presentation we see that a perfectly adjusted rhythm is back of the solar system, a true "harmony of the spheres," corroborating the Pythagorean teaching that a marvelous system of mathematical combinations lies hidden behind the physical appearance. Plato, a Pythagorean, expressed the same idea when he said that God geometrizes. But these mathematical concepts were far from being mechanistic, for it was the *gods* and their intelligent guidance that were expressed geometrically or numerically in the theogony of the heavenly host.

Pythagoras associated the numerical arrangement of the planets with the harmonic intervals between musical sounds which he is credited with discovering, though "revealing" would probably be a more correct term. Mr. O'Connor carries the analogy into the world of electro-magnetism which perhaps may be called "sound" or vibration on another plane. "Sound," according to the Oriental philosophy, is the great creative power, the Logos, the Word. H. P. Blavatsky devotes many pages to this important topic, and modern science is beginning to study the extraordinary powers of *inaudible* sounds of high pitch.

It is exceedingly difficult to explain to those who have been trained in the mechanistic schools of the West what is meant by intelligent, creative forces as understood by Oriental philosophers. The subject is so important that H. P. Blavatsky and the Masters of Wisdom devoted many pages of *The Secret Doctrine* to its elucidation. A few modern scientist-philosophers, such as Dr. Gustaf Stromberg of Mount Wilson Observatory in his The Soul of the Universe, etc., and perhaps Sir Oliver Lodge, have approached very nearly to the Oriental position. Dr. Stromberg's hypothesis of an "immaterial" fine-structure in space through which the Cosmic Consciousness can express itself intelligently in atomic, electronic, or perhaps still finer forms of matter is a close approach to H. P. Blavatsky's "real world," the *substantial* (not material) "living entity, Space." For the benefit of those readers who have no copy of *The Secret Doctrine* at hand we will quote a comprehensive passage from Vol. I, page 493:

The Occultist sees in the manifestation of every force in Nature, the action of the quality, or the special characteristic of its noumenon; which *noumenon* is a distinct and intelligent Individuality *on the other side of the manifested*

mechanical Universe. Now the Occultist does not deny—on the contrary he will support the claim—that light, heat, electricity and so on are affections (not properties or qualities) of matter. To put it more clearly: matter is the condition—the necessary basis or vehicle, a sine qua non—for the manifestation of these forces, or agents, on this plane.

In regard to Mr. O'Connor's demonstration of the electro-magnetic vortex theory of the solar system, the following quotation from *Scientists are Human* by David Lindsay Watson, just published by Watts and Co., London, will interest our readers as illustrating the trend toward entirely new views in regard to the forces of nature, which is exactly what H. P. Blavatsky said would occur before the 20th century was very old. Mr. Watson seems to agree with the principle advanced by Mr. O'Connor:

The orthodox gravitational theory of the sun, the mathematics of which is impeccable, will probably go into the discard for this reason. . . [the lack of sufficient imagination being used by scientists in not giving due consideration to all sides of a problem before starting to work it out] . . . The recent theory of Ross Gunn, on the contrary, suggests that the stability of the sun and the configuration of the solar system can be adequately explained only if previously-ignored electro-magnetical forces are taken into account—not gravitational forces alone. The accepted theories have hypnotised the scientific world by the elegance of their mathematics, and this elegance has retarded the realization that electro-magnetic forces are crucial to the problem...

Dr. Ross Gunn is a member of the Naval Research Laboratory at Washington. In 1933 he criticized the estimates of the solar temperature in view of his observations of the magnetic conditions of the sun's atmosphere and the corona. He claimed that electro-magnetism and suchlike forces have a major part to play in solar phenomena. Since then moving pictures of the solar prominences have revealed phenomena, hitherto unseen, which are said strongly to suggest the activity of electro-magnetic forces.

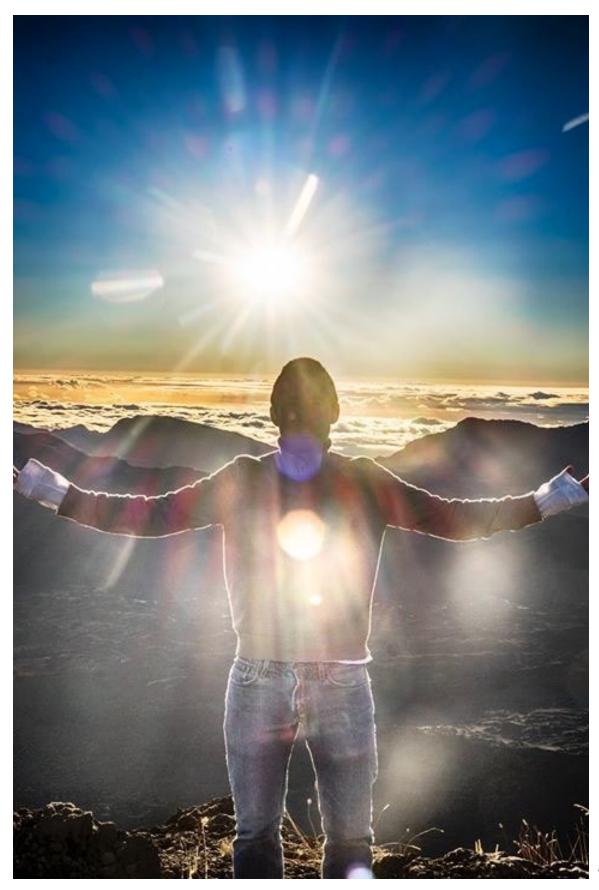
Mr. O'Connor's reference to vortical and spiral motions in Cosmic and atomic phenomena is particularly interesting in view of the importance attached to them in the Esoteric Philosophy. While the vortical movement is one of the oldest conceptions of Greek philosophy it is really an echo of the far older archaic wisdom, wherein it is found in the Tibetan teaching about "Fohat," the dynamic energy of Cosmic Ideation. H. P. Blavatsky defines Fohat as the intelligent guiding power in all manifestation, the "Thought Divine" transmitted and manifested through the "Dhyan Chohans," the Architects of the visible world, the mysterious link between Mind and Matter, the animating principle electrifying, as it were, every atom into life. Christian theology called such Intelligences Archangels, Seraphs, and the like. She says Fohat is the key to Occultism and that it unriddles many mysteries of the Egyptian, Chaldaean and Indian religious philosophies. Quoting from the archaic Stanzas of Dzyan, on which *The Secret Doctrine* is based, she writes in regard to the "circular and spiral" action of Fohat:

FOHAT TRACES SPIRAL LINES TO UNITE THE SIX TO THE SEVENTH [THE INNER TO THE OUTER]....

HOW DOES FOHAT BUILD THEM? [THE WORLDS]... HE MAKES BALLS OF FIRE, RUNS THROUGH THEM AND ROUND THEM, INFUSING LIFE THEREINTO; THEN SETS THEM INTO MOTION, SOME ONE, SOME THE OTHER WAY. THEY ARE COLD—HE MAKES THEM HOT. THEY ARE DRY—HE MAKES THEM MOIST.

THEY SHINE—HE FANS AND COOLS THEM.

THUS ACTS FOHAT FROM ONE TWILIGHT TO THE OTHER DURING SEVEN ETERNITIES...*7



Sources

- *1 = https://www.thehansindia.com/posts/index/News-Analysis/2016-02-22/Playing-devils-advocate-on-the-discovery-of-gravitational-waves/208860
- *2 = https://www.wnd.com/2015/12/nasa-stunner-burning-fossil-fuels-cools-earth/
- *3 = https://i.dailymail.co.uk/i/pix/2014/08/30/1409435267461_lmage_gallerylmage_polar1_JPG.JPG
- *4 = https://www.space.com/22047-earth-moon-photos-from-saturn-mercury.html
- *5 = http://www.paulstramer.net/2018/11/more-than-two-billion-years-ago.html
- *6 = https://www.wired.com/2014/05/john-harris-art-dreams/
- *7 = https://www.theosociety.org/pasadena/forum/f14n03p181_introduction-to-electromagnetic-solar-system.htm
- *8 = https://scontent-mia3-2.xx.fbcdn.net/v/t31.0-8/
- s720x720/12916790_10153549858832475_3419624761991759140_o.jpg

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