# Chapter X Consciousness, the Brain, the Soul, and God: A Computer Model of Consciousness & the Contact Modalities<sup>1</sup>

#### Rudy Schild, Ph.D

Modern science has a difficult time discussing phenomena proposed to evidence non-human intelligence visiting our planet in spacecraft originating on a planet at a distant star, since at limited light speed it would take excessively long times to span such distances. We show how new ideas on the nature of information in the Universe operating within a holographic description of our reality and with this understanding of consciousness and with a modern understanding of the structuring of the matter in the Universe can describe how quantum effects enable a bi-location property within spacetime to enable a craft to bi-locate at Earth from a distant host planet instantaneously.

#### I. INTRODUCTION

Western scientific traditions and neuroscience researchers have argued that consciousness is a by-product of the processes of the brain and is thus an intrinsic and inseparable part of the human body. Nevertheless, there is no scientific theory explaining how consciousness is "local"- that consciousness is generated by the material processes of the human brain. Even without any scientific evidence arguing that consciousness is indeed local, arising solely from the brain, this basic assumption remains the leading theory in Western materialistic neuroscience. While there exists no scientific proof that the brain generates consciousness, there have been many scientific observations indicating that consciousness can function independently of the brain and of our material reality. The Near-Death Experience (NDE) research of academic medical doctor Bruce Greyson and academic psychologist Kenneth Ring have documented hundreds of NDE experiences which established that the non-local consciousness of people having a neardeath or even pronounced clinically dead are able to accurately observe while they are out of their body, their surroundings and other physical locations even far away from their physical bodies. Even individuals that are clinically dead (in a state of cardiac death and even brain death) are also able to observe their bodies and the rescue procedures

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from above their bodies and these individuals are also able to "travel" to other locations both where they died but also to other realities which they perceive to be the "spirit world". (Greyson 2009). (Ring 1984, 1992, 1994)

Many known phenomena that we call the Contact Modalities (contact experiences with Non-Human Intelligence, Out-of-Body contact experiences, Near Death contact experiences, Remote Viewing contact experiences, Hallucinogenic contact experiences, etc.) and even the PSI phenomena of telepathy, precognition, clairvoyance, psychokinesis, seem to be enabled by "non-local" processes not limited to our brain and bodies. They must somehow be enabled by processes occurring instantly and often experienced as if human consciousness extends to unlimited reaches of space and time. This philosophy is commonly referred to as "non-local consciousness". (Grof and Grof, 2010) These types of experiences, which also include, telepathy, precognition, clairvoyance, psychokinesis, etc, have been significantly tested statistically and shown to be real, including mind control of a physical system known as a laser dual-slit interferometer. (Dean Radin, 2002, 2004, 2006, 2008)

In Section 2 of the following report, we see how it is first necessary to show that information related to feelings and emotions must have a physical origin in the attribute of space called the quantum universe, understood by the great quantum physicists of the 1920's era (Dirac, Schroedinger, Heisenberg, etc.) In Section 3 we describe how brain wave studies identifying the Mirror Neuron system can explain how the quantum design of the Universe permits the description of not only the physical existence of matter and gravity, but also human emotions. This expanded picture of the quantum universe that fosters a capability to store and retrieve emotional content is called the Quantum Hologram. This model displays the dimensional contraction known in classical hologram theory. In Section 4 we present the complications that the real Universe of our experience seems to require for its understanding the existence of a Cosmic Intelligence. It also seems to require the attribute of eternal existence often described as karma or soul. We show in Section 5 that the experience of consciousness is created by the brain operating much like a computer, thereby correlating the quantum waves of information about the physical state of the individual as input to the left brain lobe, while comparing the resulting patterning with the right-brain soul referencing waves, to assist with survival of the individual. In Section 6 we review what is known from fMRI imaging of brain waves that allows a correlation by the two separate brain hemispheres to compare physical reality to the personal human history of the sentient being. In Section 7 we review the further processing of consciousness waves by black holes with the surface properties filling the role of nature's hard drive.

Final chapters examine how a new understanding of the nature of the Universe and Multi-verse, and an upgrading of our understanding of cosmic horizons as a pervasive structuring between the physical and quantum attributes of our reality, and discovered in

astronomical observations, can clarify the origin of our understanding of a Universe that supports the existence of consciousness.

## II. THE QUANTUM DESCRIPTION OF PHYSICAL EXISTENCE AND EMOTION

A quantum wave description of the physical reality of matter that obeys Newtonian laws of motion is more fundamental in the Universe than the visual appearance of matter. The quantum waves and the physical properties of matter are needed, as demonstrated during the 1920's era by the great quantum physicists, to have the attribute that they are centered on the physical property of existence, which obey all of the characteristics of classical wave mechanics; reflection, refraction, interference, etc. However, over the past century, nobody has successfully described exactly what in the immaterial quantum realm is waving. Unlike water waves or airborne sound waves that propagate energy by continuous rhythmic oscillations in physical media, the nature of discrete quantum waves is still a deep mystery. They are represented and depicted by highly accurate mathematical equations, yet there is no known medium that does the waving.

The quantum wave describing an elementary particle like a proton or electron are approximately spherical structures centered on the physical structure of the particle as it obeys Newtonian force laws. However, the waves that describe emotional content are of a different form altogether. As discovered by scientist Wilhelm Reich, such waves have a spiraling or helical form. A picture of such a wave would show an energy center spiraling along an advancing wave center. In the quantum mechanics community such waves are called "helical waves," or heli-waves. These are being studied in laboratories (Kirkpatrick, Belitz, &Saha, 2008) and it is found that in nature they have energy and can effect the state of matter which is structured to embody them, especially brain matter where they are studied and can induce currents in the brain's neural networks. We will see that these properties are critical to understanding the brain's processing of such consciousness waves.

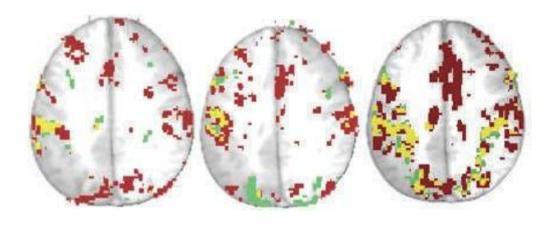
#### III. BRAIN WAVES DISCOVERED IN fMRI IMAGING STUDIES

A profound discovery of brain research by Prof Rizzolatti (Cattaneo & Rizzolatti, 2009) in Parma, Italy which showed the existence of the mirror neuron system operating in the brain from studies of monkey brain response to visual observation. A simple laboratory setup allowed a monkey to see a peanut set on a shelf in the cage, and the brain wave pattern induced when the monkey reached and grabbed the peanut. This was recognized as the "reach and grab" response, because the motor neuron system in the animal caused the mammal to take and eat the peanut. But much more interesting was the fact that a second brain-wired monkey watching the experiment with the first monkey developed *the same* brain wave pattern as the first, but triggered no "reach and grab" response in the motor neuron system, so the second monkey sitting at rest made no movement. Thus it was clear that within the monkey brain neural network the 2 monkeys have a neural patterning called the mirror neuron network that can produce a neural response pattern that expresses the emotional experience of (hurrah!, food), whether or not the mirror neurons trigger a response of muscle motion in the motor neuron system.

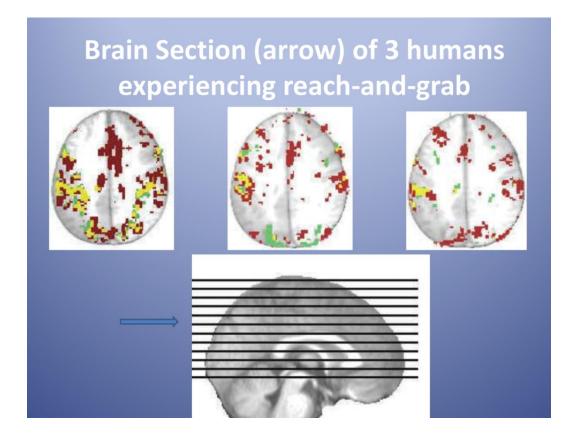
A second and related phenomenon was then discovered in America by a brain research team led by Dr Gazzola (Gazzola et al, 2006) using fMRI imaging studies. In experiments undertaken on human subjects during the fMRI imaging experiment it was found that patients viewing pictures with strong emotional content developed the same brain wave patterns indicating development of the same brain wave response to the pictures. Thus, it became clear that a networking of the brain's neural networks produced patterning characteristics of the induced emotion across different human individuals. It is not yet clear whether the brain wave patterns observed are the same across species; i.e., the same in monkeys as in humans. It is likely to be the same or similar, since some people seem to have uncanny abilities to telepathically communicate with animals.

We are left with two profound discoveries about brain responses in conscious beings. One is the discovery of the mirror neuron network that develops brain neural interconnected patterns in response to emotional content induced by the brain responses to sight and sound. The second discovery is that the patterns are much the same for all humans experiencing the same emotion, and that the pattern appears in a mirror-reversed pattern in the opposite lobes. We shall see that this is a key step in understanding how the brain produces the experience of self-awareness, or consciousness.

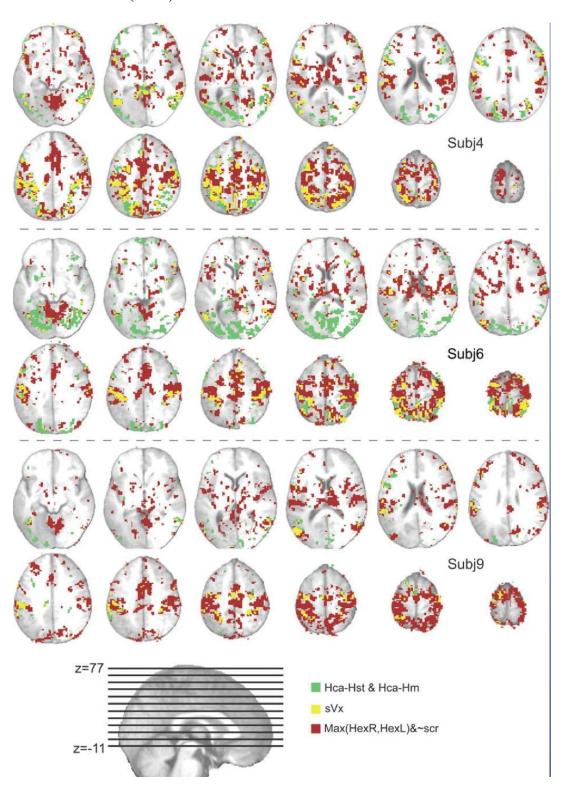
**Figure 1** (Below): Brain wave patterns showing the patterning of brain activity in 3 human subjects experiencing the "reach and grab" reflex. As will be shown below, these three individuals whose brain has been monitored in 3-dimensional fMRI but only a cross section through the center of the brains is shown here. It may be seen that the pattern of electrically activated regions is approximately at the same section of the brain. The amplitude of the measured activity differs among the individuals, perhaps betraying the amount of coffee consumed at breakfast. And the patterning is not quite identical, perhaps because one was recalling that he was to call mom this afternoon. Thus it may be seen that apart from some details, the 3 humans experienced similar but not identical patterns, and the patterns are approximately Left-right mirror-symmetrical



**Figure 2** (Below): Image of the human brain showing the sections of the brain being inter-compared in Fig. 1. The brain section illustrated is shown as the 5th bar from the top to show how the 3-dimensional brain wave patterns can be reduced to a simple image in 2 dimensions of the inter-comparison.



**Figure 3** (following): The complete brain wave patterning for the 3 human brains experiencing the same emotional observation. The brain sections are again shown at the bottom and the full brain response is shown by re-assembling the sections. Figures 1.2.3 are from Gazzola et al (2006).



## IV. UNDERSTANDING CONSCIOUSNESS REQUIRES UNDERSTANDING AND ACCEPTANCE OF COSMIC INTELLIGENCE AND SOUL (ETERNAL BEING)

It is still anathema to speak in any academic discussion about the existence of Cosmic Intelligence. Dr. Eben Alexander, a Harvard trained neuro-scientist and author of N.Y. Times best seller *Proof of Heaven*, which describes his near-death experience including his encounter with this entity, states that he has never been invited by an academic institution with a physical sciences faculty, to speak about his Near-Death Experience (Alexander, 2015, and private communication). He has, on the other hand, spoken to faculties in fields of medicine, psychology, and theology. On the other hand, discussions about the nature of a Cosmic Intelligence have been published in scholarly *Journal of Cosmology* about the question of whether the emerging understanding of the nature of our Universe and Mega-verse require the mention of such a Cosmic Intelligence; see Schild (2012). We are left with a situation where the issues of Cosmic Intelligence are in discussion but not formally recognized.

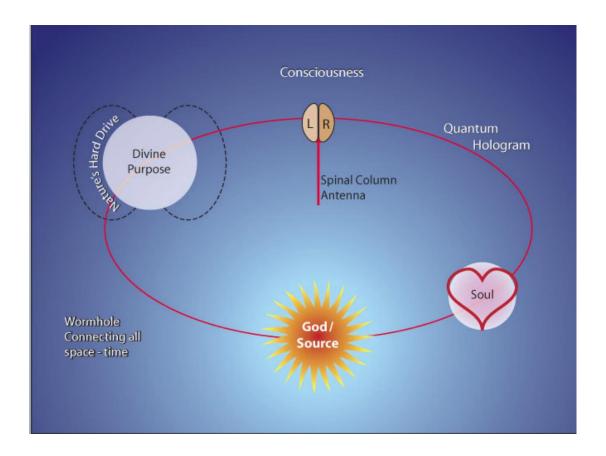
Respondents to the FREE survey suggested that their acceptance of a divine consciousness increased in the transformative contact experience. Thus 31% of respondents said that the Non-Human Intelligence (NHI) they encountered gave them some message(s) about God or Creator, and 28% reported that they had experienced NHI communication concerning life after physical death (Heaven or a perceived Spirit World). <sup>2</sup> The FREE Experiencer Research Study also presented the data that 26% agreed that the NHI gave them a message about reincarnation. Also, 66% perceive that they are a more spiritual person than before their interest in the UAP experience, and 62% agreed that they believe that there is a higher spiritual power guiding their life and that the NHI have a role in this. (Hernandez, Klimo, Schild, 2018)

Thus, we conclude that acceptance of the reality of a Cosmic Intelligence is common in the UAP-related Contact with NHI. We will see shortly that it can be part of the human experience of consciousness.

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<sup>&</sup>lt;sup>2</sup> The term "Non-Human Intelligence (NHI) will be used in preference to "Extraterrestrial", a more traditional term popularized in movies and mass media, since the term NHI is more inclusive, comprising both physical and non-physical "beings" as well as "terrestrial" and possible "inter-dimensional" intelligence.

**Figure 4** (Below): A schematic representation of the human brain's interaction with the Universe to enable consciousness. The human being, through brain and spinal column functioning is shown resonating with the quantum Hologram with the right brain lobe most connected to the eternal soul being (i.e. Karmic body), to allow that eternal body to have opinions or to motivate responses to the body sensing of sight, sound, touch, etc. and to motivate action response according to perceived divine purpose. This purposing of human lives originates with and returns to Cosmic Intelligence through the quantum structuring of all space in all Universes. What is perceived to be wormhole connection attributed to all space-time is in reality a surfing of coherent structuring of the Universe, and is preserved by the MECO black-holes scattered throughout the Universe. The left-hand brain lobe accepts input from the primary senses, (sight, hearing, smell, touch) as well as inputting memories and responding to Divine Purpose, often expressed as emerging quantum processes.

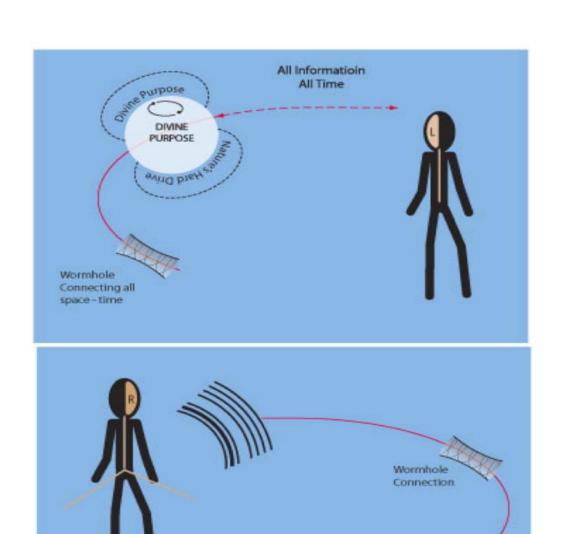


A similar situation is encountered in discussion of the existence of *soul*. Many cultural developments throughout recorded history have such a tradition of soul, so in Western tradition it is limited to theological discussion but in other cultural traditions it is commonly spoken of as karma (vedic), spirit (native American), etc.

Here we take the word *soul* to mean *that eternal being that causes some humans to have experience of past lives*. It is essential in discussion of consciousness because we will be speaking of the attribute of our human existence to cause us to have a sense of an eternal being, that guides many of our choices in our present human life. Many mothers would agree with the statement "The two children were raised the same, but they are as different as night and day." "They always seemed to have come into this world with some baggage."

## V. HUMAN BRAIN HAS 2 LOBES RESONATING WITH DIFFERENT ASPECTS OF THE QUANTUM HOLOGRAM

**Figure 5** (Below): This illustration is drawn to show the differing primary functions of the two brain hemispheres. The upper left shows how the left brain, in addition to its primary function to interpret sensory inputs as sight, sound, smell, and feel, also is the seat of logical functioning and reasoned thought, such as understanding divine purpose. The right brain hemisphere serves to reference the left brain rational responses to the soul body that is actually a universe-pervading soul existence reality. This resonance is assisted by coherence in the structuring of all space as an emerging property of all spatial structuring and physical being. It is easy to imagine that astronomical alignments in our solar system disturb or enhance this coherence, and thereby effect the state of coherence of all sentient beings, to give rise to astrology as the brain's ability to experience such resonance enhancing coherence in response to planetary alignments.



Sentient Being Higgs Particle Monopole Quantum

#### VI. A COMPUTER MODEL OF CONSCIOUSNESS

We will see that it is easy to understand the human bi-cameral brain producing the experience of consciousness. as acting with much similarity to a modern digital computer. In its fundamental operation, in the sense of what is going on with the 1's and 0's, a computer is driven by an internal clock, which simply produces the heartbeat, or rhythm of pulses that cause the sequence of computational steps to continue without interruption. In the human brain these pulses are tied to the heartbeat, as the 1/16 subharmonic (beta frequency) which produces the continuous pulse sequence that gives us the sense of awareness. On the left side of Fig. 6 we show the nature of processing steps at the heart of a digital computer. As the result of a previous pulse two digital numbers are introduced into the shift registers feeding the digital processer. With a new pulse, the two numbers are introduced into two shift registers in the central processer unit, where the instruction set for the processer operates on the two input numbers. The logical operation, might be "add the two numbers", in which the sum is shifted out to the output register to be re-introduced when necessary. Alternatively, the instruction set might command "compare the two numbers and if A > B output a 0 to the output register for a special further instruction, and if A < B output a 1 to the output register, again to be reintroduced again later for a subsequent operation with a next clock pulse.

On the right side of Fig. 6 we show how the heartbeat pulse activates consciousness in the brain. In the left brain lobe the previous pulse caused a body sensor's input signal that originated in the body sensors of sight, hearing, smell, touch, etc., and in the right lobe the soul referencing mirror neurons introduce all such sensory structures as open channel links to the brain's resonance with brain wave patterning for smell. The central processer correlates the left brain input of smell with all possibilities connected as soul to the individual's history of smelling, and shifts out to the output register the information "smells like alcohol", or "I like this" or "get away from this." The brain current pattern from this correlation then is available in the output register to trigger motor neurons to "get the hell out of here." Or perhaps, "fill my glass." The brain inter-comparison of the two hemisphere lobe patterns is equivalent to what Mitchell & Staretz (2011) described as a spontaneous resonant vibration of a guitar string.

This sequencing of correlates within the brain is what allows us to respond to danger or to make judgements about the available information to preserve the specimen, and is therefore the vehicle that allows us to have life-sustaining opinions. And the sequencing of these outputs is what allows us to think to ourselves "I am aware," or even "I am aware that I am aware." It is known that this sequencing occurs at approximately 16 Hz, which is in beta frequency band, long known to be at the frequency of consciousness. This continuous pulsing is a 1 / 16 sub-harmonic of the heart-rate, normally about 1 beat per second (OK, it is actually 72 beats per minute). It is also well-known that a human reaction to "duck for cover" is approximately 1 / 16 sec.

This then is an example of the brain's functioning in its conscious state. It is simply the rhythmic (16 Hz, Beta) left brain comparison of body sensory information with the right brain history of such stimuli so that the inter-comparison of the two allows the brain to have opinions about the body's situation and feed back the result of the inter-comparison to primarily the motor neuron system to activate a previously learned motor response. "When I hear the lion roar I run like hell." The motor response system is activated almost automatically, unless it is suppressed by other brain functioning.

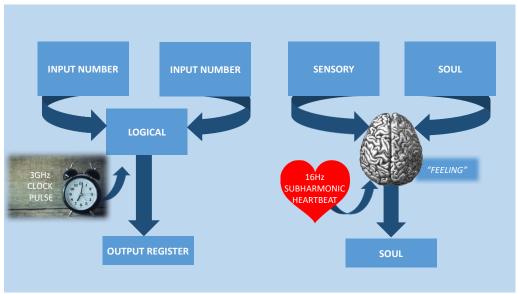


Figure 6: Digital Computer Logical Functioning

**Figure 6** (above) Digital Computer Logical Functioning, clocking to a 3 GHz microprocessor-developed clocking pulse, (right) Logical Brain Functioning, to show how the brain is similar in logical functioning to a digital computer. In response to a clocking pulse, supplied in the brain by a beta frequency 1/16 sub-harmonic of the heartbeat, the brain compares the logical or sensory brain-wave pattern originating in the left brain lobe and reproduced by right-lobe interconnecting wiring in its mirror image form. This is mathematically equivalent to positioning the 3-D complex conjugate in the opposite lobe, and at the clock-beat pulse it collapses the wave function to its real physical current patterns. If the patterns match, the activated current patterns can trigger the motor neurons and strengthen the soul resonance.

A key element to this rhythmic conscious activity is at the point where I say that the brain "compares" the two brain hemispheres' brain wave pattern. Studies of such activities in fMRI imaging show that the brain wiring at the connection of the 2 hemispheres allows the brain, working through its mirror neuron network to create in the opposite hemisphere the mathematical complex conjugate of its response to body stimuli, and the actual inter-comparison is technically a cross-correlation of the two. Which is basically a cross-multiplication of the 3-dimensional wave pattern, whence if the two are the same brain response pattern a high amplitude response ports to the output register (to activate the motor neuron system) to trigger the learned response. The process of "comparing" described here is comparable to the example of sympathetic resonant response of a guitar string as described by Mitchell and Staretz (2012), where the string plays the role of the right, soul lobe, and the external input realized in the left brain lobe is compared to the ambient noise in the enclosing room, whence the string picks out of the noise only that frequency (sound pitch) at which the string is resonant. In our example related to the origin of consciousness, the background is the trove of sensory input to the left lobe, being compared to the recognized patterns of brain waves stored in the soul connection through memory. If the two brain wave patterns share little in common, then the output register controlling motor response gets little or no signal and the sentient being does not respond.

This simple description of the consciousness apparatus is offered in an idealized simple example, where the brain offers much more complex input and response patterns in real situations. "When I hear the lion roar," I might also notice that it is raining and dark out and grab a flashlight and jacket. These would all be elaborations of the basic inter-comparison functioning of the active brain. The point is that the human brain as a dual structure can compare in this way sensory data with a history of such sensory inputs to activate learned responses in the motor neuron system. The meaning of "habits" is an obvious application to describe how the motor neuron system can easily learn to execute favored responses by habitually strengthening such responses in the patterning of the neural networks of the motor neuron system.

Also of interest is the known ability of the brain to activate ecstatic feeling in the output response function. This is most intensely activated during the sexual mating response and obviously favors preservation of the species. The right+left brain patterns can amplify the natural body responses and create thereby an output of resonance with the coherence properties of the Universe such that the resonance pattern is more intensely felt and experienced. A similar experience can occur in prayerful church worship, where the focusing of brain activity occurs in shared experience, and surfs the wave of all such experience on the planet to intensify the experience through its coherent structuring with others participating in such shared experience. For this reason we stress the importance of coherence in the quantum attribute of space-time relevant to consciousness.

Just as we discuss "habits" as reinforcement of neural networks as favored common responses to situations, another phenomenon seems to occur with survey responders who report phenomena that seem to demonstrate that contact with non-human intelligence opens and, over time with repeated exposure, possibly introduce new neural patterns and then reinforce them. In our survey results (Hernandez et al 2018a,b) responders agreed with statements," my mind became tremendously expanded compared to how it functioned before" (56%), and "I seemed to become aware of multiple, overlapping realities at the same time", (56%); I became more sensitive to 'other realities', other dimensions" (69%); "I believe that my UFO experiences occurred so as to awaken me to the existence of larger cosmic forces which are affecting our lives and that the ET's have a role in this" (72%); "I became more psychic than I was before", (58%); "I felt that I had cosmic consciousness at times" (63%); I believe that I am a more spiritual person now than I was before my interest in UFO experiences", (66%); "evolutionary forces are already at work which will transform humanity at large into a more self-aware, spiritually sensitive species and that the ET's have a role in this (74%); "telepathic or other forms of psychic awareness between me and others increased" (62%); and "I became able to channel information from other dimensions." (28%).

#### VII. THREE QUESTIONS ABOUT CONSCIOUSNESS

Because many books are available about the nature of consciousness, we refer to the 3 most-fundamental *What, Why,* and *How* questions as also outlined on the STANFORD ENCYCLOPEDIA article on consciousness.

## VII.a. What are the Principal Features of Consciousness? And how then can they be discovered, described, and modeled?

We are all aware of the human experience of consciousness, loosely, as the ability to sense that "I am aware of myself, and aware that I am aware." The computer model of consciousness shows that at every moment the heartbeat and its 1/16 subharmonic bring to me moment-by-moment the ability to compare any sensory or logical input perceived in the left hemisphere and relate it to my personal history of inputs and have an opinion about it, which also can appear in the motor neuron system and cause a response that assists survival. I also know from experience that a following moment will allow me to reflect on the first and have an opinion about my opinion. Because it is in my experience that another cycle will follow, and reflect on these initial moments then another compute cycle will also allow myself to make further reflections and opinions about sensory or logical inputs of the left hemisphere. This function has already been observed in the brain wave studies of Rizzolatti and Gazzola already cited.

#### VII.b. How does consciousness come to exist?

Since the basic rhythm of heart-beat is not found in plants, the comparison of right-hemisphere with left-hemisphere sensory information cannot be compared in a quantum cross-correlation comparison. All animals including insects having bi-cameral brains can, and presumably do, feel consciousness. Because the correlation in the 2 brain lobe patterns is at the heart of consciousness, seen in the computer model as consciousness, all members of the insect and animal kingdoms but not the plant kingdom are likely to experience heartbeat and hence consciousness, assuming that insects have a primitive soul existence and heartbeat.

VII.c. Why does consciousness exist? Does it have a purpose? Does it act causally and what are its effects? Does it make a difference to its host? Why and How? There are 5 questions here, and we label the replies as sections c1-c5.

- 1. In the computer model of consciousness, we see that the consciousness assists the preservation of the species and life by enabling the conscious being to sense danger and react with motor neuron stimulation.
- 2. The purpose of consciousness is to allow the sentient being to sense danger, and also to allow the sentient being to express free will.
- 3. learned response in the motor neuron system. "When I hear the lion roar, I run like hell."
- 4. Why; Consciousness allows the sentient being to learn and activate survival actions. It does so by recognizing learned dangerous circumstances and activating the motor neuron system.
- 5. How; By activating motor neurons consciousness allows the being to assist survival from its learned history of appropriate responses. It also allows the sentient being to recognize many choices in its life that allow the being to keep itself aligned with the purpose and direction of the Universe. The purpose of the Universe is to foster life.

## VIII. COHERENCE AND COSMOLOGY; THE ROTATIONAL AND TURBULENT EVOLUTION OF THE UNIVERSE

VIIIa. Rotation and the Coherent Structuring of Matter

The discussion of the origin of consciousness in the Brain produces quantum wave structures in the Universe, but understanding the UFO craft and its operation requires a deeper understanding of how quantum waves describing both matter and consciousness are processed by the Universe.

The current cosmological theory is called the Lambda-Cold-Dark-Matter-Theory, wherein it is accepted that the structuring of all matter is the result of countless random accidental collisions wherein the structures we astronomically observe formed from smaller structures that collided and stuck together. This is believed to result from a Big Bang event that occurred 13.8 billion years ago. The further structuring of matter on smaller scales was impossible in the earliest phases because of the viscosity of the photon-dominated plasma in the galaxies and clusters until the expanding Universe cooled further, whence at z = 1100 (99% of the age of the Universe ago) the collapse went to completion. At that point stable atoms of principally hydrogen could form without being immediately dissociated by higher energy photons, in abundant supply, and the viscosity of the now atomic hydrogen gas fell 15 orders of magnitude so all matter quickly collapsed into a cosmic fog with droplet size of planet mass, about a millionth of the mass of the Sun. The planet mass droplets further condensed as appropriate and would be described as Lane-Emden spheres, or polytropic blobs in clumps to become globular and then later ordinary cluster lumps of almost a million solar mass and sizes about the same as cluster sizes seen today (16 light years diameter). But stars had not formed and the sticky fuzzy hydrogen condensations easily aggregated together to form the first generation of stars, still in their primordial clumps contained within their galaxies. This theoretical picture has been fully and mathematically developed in the refereed scientific work of Carl H. Gibson, and is primarily published in the appropriate fluid mechanics professional. Journals, with astronomical applications principally published in Journal of Cosmology.

Furthermore, it is hypothesized that this occurred throughout all space to produce a Universe that is homogeneous on all size scales. This Cosmological Principle is what allows us to write down numbers describing the relevant physical measurable properties of mean temperature, mass density, and expansion rate for comparison to observable properties.

In reality the Cosmological Principal should be renamed the Principle of Lazy Theoreticians, because what is increasingly observed today is that the Universe is not uniform on any size scale that we can observe. On the smallest scales we see matter structured in atoms and their clumping in molecules and their further clumping into sand grains, people and mountains, further clumped into planets and solar systems seen clustered in stellar clusters and galaxies, themselves clustered into the great galaxy clusters and Great Walls and superclusters separated by great voids and super-voids and the Great Attractor. The latter occur on size scales up to approximately 1/10 of the size of the Universe overall.

The situation with the Lambda-Cold Dark Matter (LCDM) theory is much worse. It hypothesizes that structure formed in the Universe starting with 2 quanta of structuring, the Cold Dark Matter particle called CDM dark matter particle that has eluded detection in dedicated laboratory experiments for 25 years, and is now precluded from existence by experiments with the mammoth European CERN particle accelerator/collider. The second hypothesized quantum of the theory is called the sub-halo, which is the primordial clump of this mysterious dark matter but the matter is so non-interactive that it must have a tight compact internal central structure that gravitationally binds the clump. This structure would be recognized by its extreme tight central concentration and should still be found in numbers in the tens of thousands swarming around our Milky Way Galaxy, but not one has ever been found. After jostling around the numbers describing this theory for 35 years with the world's largest super-computers, astrophysics today is beginning to look for alternatives that are not based on non-detected quanta.

The principal alternative theory, called Gravitational Hydrodynamics, arose not in the astrophysics community at all, but rather in a Department of Applied Mechanical Engineering at the University of California at San Diego (Gibson, 1996). It examines the Kolmogorov theory of structural failure and breakdown in the turbulent structure breakup near the beginning of the Big Bang dawn of our expanding Universe. In this theory the energy for this expansion is traced to the energy of the quantum vacuum released when a rotating particle--anti-particle pair formed and rotationally coupled to the quantum vacuum, with cooperation and assistance from gravitational effects arising in the Einstein General Theory of Relativity (Gibson, 2012) With this energizing, the expansion and inflation broke down when eventually allowed by relativity and the constancy of the speed of light. Gravity, working within the inhomogeneous gas cloud caused first condensation-void separation on giga-light-year scales still seen today, and a universal gravitational condensation driven by the highly structured and astronomically observed distribution dishonored by theoreticians today. Failure to include the effects of these planet-mass fog droplets causes the transmission of the Universe on cosmological scales to be imperfect, and mis-interpreted as a secondary expansion, or *inflation*. The absorbing structures were betrayed by their gravitational signature (Schild 1996). Their nature and role in causing a reduction of the light transmission across cosmic distances was further described by Schild & Dekker, (2010), who emphasis that the obscuration would diminish in time as the Universe cooled, forcing the hydrogen gas to freeze into undetectable solid icy planetary surfaces with dramatic weather effects in their atmospheres. The dramatic phase change in the overall Universe when the temperature of the cosmic background dropped below the hydrogen triple point temperature of 13.8 degrees Kelvin at a redshift near z = 6 is not presently included in the cosmic structure formation theory. With the hydrogen frozen and undetectable by the experiments and observations that sought hydrogen gas, not ice, the main mass component of the universe could not be observed and became known as dark matter, and astronomy was also left with a *missing hydrogen* problem.

#### VIIIb. Rotation and the Coherent Structuring of Matter Turbulence and Evolution of the Universe

This fundamental picture of structure formation as turbulent condensation of the expanding Big Bang hydrogen gas cloud must be understood to discuss the origin of the present coherent structures now existing in the Universe, and therefore discussed under the topic of *fossis of turbulence*. It must also be understood as the aspect of the structuring of matter where one of the 3 spatial dimensions describing the matter distribution and rotation is of little relevance to the matter's properties. Thus the quantum description of the matter is simplified to a lower dimensionality. The principal structuring of matter giving rise to such coherence is rotation, and a universal rotation of matter would be fostered if the Universe was initially in solid body rotation. Whereas it is taught that the Universe cannot have such a rotation because if it did, for some finite distance from the rotation center the rotation speed would exceed the speed of light c, in violation of the relativity theory. However, because we now understand that structure formation top-limited by relativistic effects produced the largest voids and structures now present, it is easy to imagine that the largest structural elements and the

substructures subsequently formed within them, were in rotation with always some residual alignment of the rotation axis, on all levels of sub-structuring in the Universe. This would be imprinted on the quantum description of all matter in the Universe, which becomes a coherence in the rotational properties of all matter. We will soon be discussing how this dominant attribute of the quantum description of matter produces the quantum background coherence that waves of consciousness surf across the Universe. Below we will describe this as the rotational quantum coherence.

#### IX. THE UNIVERSAL ROTATIONAL COHERENCE

What is referred to here as coherence must be more carefully described and defined. We adopt the conclusion above that within the quantum theory of physical matter and existence, every atom and molecule has an existence reality due to the structuring of space and time as a wave-form (wave-shape) in the quantum field. Additional properties of the matter, such as its rotational state and electrical charge, are also carried in the quantum field to describe other properties of each particle, such as its electrical charge and spin. The smallest and largest structurings of matter also contain this quantum rotational description, such that a small chunk of physical matter brings along a

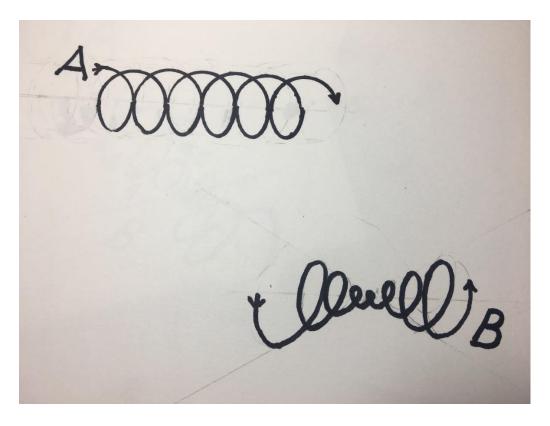
low amplitude quantum description, and that same quantum wave form has larger amplitude for rotational description of a larger chunk. When the quantum description of the larger and smaller chunks overlaps with the quantum wave description of adjacent chunks, there must be a coherence within the quantum description of the ever larger chunks sharing the description of rotation. All the chunks sharing this aspect of their quantum description are described as *coherent*. Therefore, we care if the Universe overall is in rotation, even if the rotation breaks up and the resulting chunks share the original rotation, which they tend to do, because of the principle of conservation of the amount and direction of angular momentum that applies to the Newtonian description and Newtonian laws of motion for physical matter.

Finally, now we are able to discuss more specifically the nature of these phenomena. This is the fundamental aspect of the Universe responsible for many of the Contact Modalities as described in the FREE Experiencer Research Study, in particular, the OBE and "Matrix-Like Reality" types of UAP Contact Experience such as: 67% stated that their "consciousness separated from their body at the time of the NHI contact experience"; 59% reported that they "suddenly seem to understand everything"; 71% reported that in this reality "Time did not exist"; 76% reported that "time seemed to speed up or slow down"; 61% reported "I felt united, or at one, with the Universe"; 43% felt that "I seemed to understand everything about the Universe". The FREE Experiencers reported, "that time and space no longer existed"; that "it is possible to see everything all at once"; and even that "it is possible to see through any obstacle in every detail as in a holographic view." (Hernandez, Klimo, Schild, 2018). Thus if matter on larger scales shares a property it becomes magnified by the strength (amplitude) of the coherence, and this coherence means the mind can attach to the description of matter shared with the coherent rotation property over vast reaches of space. It is as if the coherence causes consciousness to surf the wave of the coherence property. The following sections describe how the description of consciousness operates within this coherence in creating the puzzling psychological phenomena described by Contact Modality of "Experiencers" with NHI.

## X. THE ROTATIONAL AND HELIACLE STRUCTURING OF CONSCIOUSNESS

The quantum theory that describes existence of matter developed by Heisenberg, Dirac, Schroedinger, Bohr, etc. ascribes a wave property to all fundamental particles. The wave shape, or structure, is fundamentally a distorted spheroid with other minor attributes to describe charge and spin. For large structures like a rock, mountain, or planet, this quantum structure is strongest just above the physical surface. And although it diminishes in wave amplitude with distance, in its fractal mathematics it never falls to amplitude of 0 in a finite sized Universe with a MECO horizon. The presence of Mt Fuji in central Japan is felt by all the Japanese people living in their island home.

So it is not difficult to imagine that the quantum attribute of the Universe that describes the existence of matter can also describe life and consciousness. A profound discovery of scientist Wilhelm Reich is that consciousness waves are heliacal in shape, and are in motion, or shape-shifting so if we could see them we would see an energy body rotating around a spatial structure looking like a coil spring. Because we can imagine looking down the length of the coil spring, we can understand that if we see the energy center describing a circle and suppose the energy point circling around is in a clockwise direction. Then that energy center can do its heliacal motion advancing towards or away from the observer. Thus we talk about such heli-waves having positive or negative *chirality*, and laboratory studies of heli-waves show that they can transmit energy and exist in quantized states which can be measured and manipulated in the laboratory, mostly in crystal-like structures.



**Figure 7** (Above). The A and B quantum wave-forms describing consciousness. The A-type wave-form should be understood as a form as seen over time, with an energy center of about 4 cm. diameter describing a spiraling pattern of constant radius approximately 15 cm. diameter.. This is the pattern painted on the door of Wilhelm Reich's research truck (Fig.8), and producing the current patterns illustrated from brain fMRI imaging electrical current patterns in Figs 1-3. The B type wave-form describes an energy center describing over time a spiral pattern of diameter increasing with distance from the brain. It is more powerful in some individuals because it can encompass the spherical mass attribute of the structuring of nature on all size scales of the Universe.

Dr. Wilhelm Reich named this consciousness energy *orgone energy* and did extensive laboratory work to show how it can be observed and amplified or destroyed. He is the only scientist known to have been persecuted by agents of the U.S. Federal Government. His laboratory and home library were publicly burned on the lawn of his property, Orgonone, in central Maine, and he died in Federal prison in 1957.



**Fig. 8** The Wilhelm Reich research truck equipped with his cloud-buster apparatus for weather modification. Notice the type A consciousness wave painted on the truck door.

Today we recognize that this orgone energy as structuring in the quantum description of our Universe as an attribute of 4-dimensional space-time structure as understood in all science. More importantly, we understand from fMRI brain imaging how it can interact with the neural structures within our brain to create the consciousness experience as we discuss in Section 7.

We also recognize from other experimental work in quantum physics that consciousness waves and also the quantum description of matter are not limited in speed to the velocity of light, but rather influence the quantum description instantaneously through the Universe; this is a known experimental result. This sharing is thus the basis of the Contact Modalities including the PSI phenomena of telepathy, precognition, clairvoyance, psychokinesis, and even energy healing.

#### XI. A TECHNICAL AND MATHEMATICAL DISCUSSION

The further discussion of how consciousness involves the understanding of Cosmic Structure and the Einstein General Theory of Relativity, and may not be of interest to some readers. We include it here to make our picture understandable to physical scientists, and so necessarily written in their language.

We have already discussed how consciousness involves helical waves (heliwaves) which also bear quantum states and a quantum description observed in laboratories. The helical waves ride (surf) on the vorticity in the structuring of matter as rotating objects such as galaxy clusters, galaxies, stars, and planets. Not all, but some remember the original rotational structure of the primordial Universe, and hence there must be a number of Universe-wide standing waves on all scales from the size scale of the Universe to the micro-tubules in brain structuring described by Penrose & Hameroff (2011). Of course, the rotational structuring of matter continues on down to the sizes of the atomic particles, and even down to the scale of the quarks, which are conventionally understood to be spin 1/3 particles. Thus the quantum rotational signature is in a broad range of dimensional scales, which increases its strength tremendously. This has strong implications for its important contribution to the stress-energy tensor in the Einstein General Theory of Relativity that we henceforth abbreviate as the *GTR*.

We must remember that when we write the general tensor formulation of the theory, vorticity is an off-diagonal term in the stress-energy tensor and is written as **vorticity** =  $\mathbf{R} \mathbf{X} \mathbf{V}$  where  $\mathbf{R}$  is the radial distance vector to the rotating mass, and  $\mathbf{V}$  is the velocity perpendicular to the radial vector, and where bold font indicates that this is a vector cross-product equation. Also recall that the quantum relativistic description of the effects of vorticity bring in the vorticity components measured on all scales at the 3-D point and moment of time under discussion. The vorticity described as above depends on the point under consideration and the direction in question, which is contained in other terms of the tensor describing the structuring of matter and local curvature of space. Such structuring also means that the strength of the vorticity is the total summation of all contributing vorticities for that direction and at that point. The vorticities are also partially degenerate, meaning covering the size scale of the vorticity component under description, and it therefore has a number of degeneracies for scalar segments due to the physical structures under discussion. Thus to an important extent, the quantum description is piecewise coherent in the specified direction, and is thereby coherent on all size scales throughout the Universe as a result of the GTR and the quantum theory.

This has vast implications for how consciousness, as a helicity attached to a piecewise coherency throughout the universe can easily be experienced non-locally. It is useful to think of consciousness as surfing the waves of vorticity pervading the Universe. Moreover, Cosmic Intelligence can easily enter the picture at the MECO surfaces found at Universe horizons and also at the MECO/Black-Hole in this way, so cosmic intelligence fully occupies the space between these surfaces contained in any physical structured Universe. Moreover, human and animal intelligence pervades the physical structuring of all matter at all size scales.

With this understanding we are now able to describe the Vedic traditional ritualistic practice of levitation, experienced by monks in an advanced practice of meditation wherein the brain, probably in a feedback process which involves alignment of brain activity with the resonance properties of human or animal DNA, and experiences an ecstasy in the resonance with the total vorticity of all aligned helicity at the location of the brain. And the GTR teaches that this can in ideal situations, particularly if the helicity is aligned with the rotation of the Universe. This then causes a local reduction in the gravitational force attraction to the center of the Earth, as levitation. The ecstatic feeling is probably related to the experience of the human orgasmic sexual response sometimes experienced in other situations, in which assisting rhythmic motions are also involved. Such ecstasy is probably experienced in tribal and human religious communal practices, and the feedback and ecstatic response are probably the basis for Vedic practices in transcendental and other types of meditation and possibly contribute to alignment of the chakras of the human anatomy in Vedic tradition. We further speculate that in the Islamic tradition, with 5 daily worship services, and all participants bowing down in the same direction and at the same time. At least one worship service will occur with all the cranial cavities aligned significantly to the direction of the universal rotation axis. This would also potentially produce communal ecstatic response.

This picture of consciousness is also required to explain the operation and control of the UAP craft. Among the most puzzling things about them is their ability to hover silently and stably; this has been reported by experiencers, and almost certainly has origins in the General Theory of Relativity (*GTR*). The survey responses from the FREE Experiencer Research Study revealed that 48% felt that the craft "Was alive, the craft was a living entity" Thus we have a possible explanation of how the craft is operated, as revealed in the detailed responses to our Phase 3 survey. Many stated that the craft is actually operated by the mind, or consciousness, of the NHI. In fact, one out of four individuals has stated they were allowed to operate the craft (Hernandez, Klimo, Schild, 2018). We presume that the craft amplifies the conscious intent to position itself elsewhere, and the craft responds with motion, often observed to be slightly erratic, suggesting that the intent is being adjusted or fine-tuned. This sideways motion is again due to the off-diagonal terms that mix the consciousness quantum waveform with sideward force through the Einstein stress-energy tensor, whereby the action of the stress-

energy tensor product with the local curvature tensor creates a sideward force in the *GTR* field equations of motion. This has sometimes been called *torsion force*.

Another attribute of the spacecraft performance that is commonly reported is that the craft undertaking a downward landing motion is observed to rock back-and-forth like an ordinary falling leaf. (Hansen, 2016). As described in Phase 3 of the FREE Experiencer Research Study, many on-board experiencers witnessing the operation of the craft report that this instability is considered to be intrinsic to the craft's propulsion. (Hernandez, Klimo, Schild, 2018). If during landing the craft is responding to circular consciousness waves, particularly if the focus of them is an energy center in rotational motion, then this circular motion becomes a periodic excitation of the GTR stress-energy tensor's vertical axis of travel, and the observed vertical motion is coupled to the antigravity off-diagonal terms, excited by the periodic excitation in the quantum part of the field description. The strongest coupling of physical matter to the quantum field extends only to the outer circular edge of the UAP craft, so the anti-gravity force varies periodically, rocking the craft. The rocking motion of force is therefore a physical manifestation of the quantum description of consciousness in relationship with the GTR. Thus the UAP "falling leaf" maneuver is related to the precession of the orbit of planet Mercury whose successful calculation caused many, including A. Einstein himself, to conclude in 1916 that the GTR theory was correct. It could not be imagined back then that the quantum field theory of gravity would involve consciousness.

Other examples of the coherence through vorticity have been long known in the fluid mechanics community, who call it BZTMA (Beaned Zombie Turbulent Maser Action; Gibson, C. H. et al, (2011)). The primary example of this is the rotational turbidity generated by an ocean-bottom sewer outfall pipe, where it has been observed that the long turbid ascending sewage column retains its rotational motion long after it should have been disrupted by measured small fluid shear disturbances. It has long been understood that it seems to be caused by a coherence phenomenon in the ocean water. A similar signature of submarine propeller turbidity seems to leave a persistent signature long after it should have dissipated due to locally generated currents along the coherent path. And it is probably responsible for the otherwise long-known problem of the heating of the solar corona. since bottom-heated convective cells in the subsurface layers behave like storm cells in the Earth atmosphere in that they develop a vorticity due to Coriolis forces, and the energy of quantum description of vorticity amplified by the enormous masses of rising gas must lose their coherence and vorticity when they reach photospheric levels, and deposit their energy as heat in coronal regions above the convection column. The latest Parker Solar Orbiter spacecraft show that large rotating shear velocities are observed in the spicules penetrating the solar photoshphere to deposit interior heat into the solar corona.

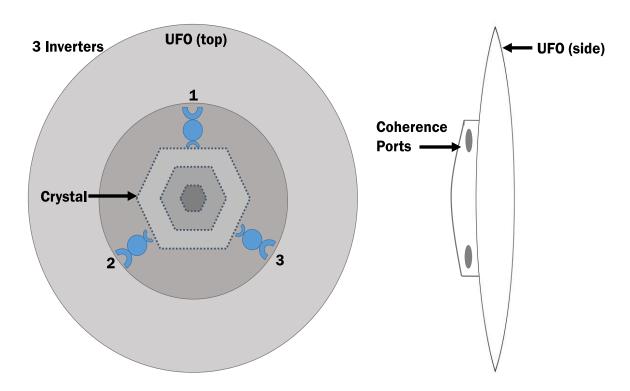
We conclude that the "wormhole" concept of a double-ended funnel with the stems connected is probably not a good picture for the coherence property of the Universe, whereby quantum description of rotation can remain coherent over vast stretches of space by surfing vorticity structuring of matter. We thus remain close to and guided by the Edgar Mitchell picture that the missing physics needed to guide our understanding of the UAP phenomena is now understood to be the attributes of the quantum description of nature, namely entanglement, coherence, resonance, instantaneous propagation in a holographic quantum field, and consciousness.

#### XII. SOME PROPERTIES OF UFO TRANSPORT IN INTERSTELLAR MODE

#### XII.a. UFO Propulsion

A mystery in the proposed understanding of the UAP phenomena as originating in a UFO craft that transports sentient beings across interstellar space to our solar system, and even to our planet Earth. It is known from astronomical observations that any sightline to a distant star will show the signature of substantial interstellar dust (seen as polarization of the starlight). Thus it seems implausible that where the dust must indicate the additional presence of sand, pebbles, rocks and larger structures, how can we imagine that the UFO craft flew from a distant star to Earth at near-light speed without sustaining substantial damage? We will see that the answer lies in the ability of the craft to form a complete quantum description of itself and its contents, and bi-locate to Earth as an exact description of itself by surfing on the quantum description of the entire structuring of matter in the Universe.

In fact, two types of propulsion have been observed in the many descriptions of the UFO propulsion system. The first, which we refer to as "simple anti-gravity" mode, allows the spacecraft to stand motionless for indefinitely long periods of time. In this mode, simple "joy stick" operation allows the craft to move horizontally and vertically (Hansen, 2016). The second, which we refer to as "interstellar mode" allows the craft to travel seemingly instantaneously over vast interstellar and perhaps galactic distances. We will demonstrate that this mode can be understood with a deep appreciation of quantum physics and the quantum description of the matter distribution in the cosmological Universe.



**Fig. 9 A schematic view of the Spacecraft.** We show Top and Side views of the spacecraft design described by Bob Lazar, though other craft have been described by credible witnesses. The illustration calls particular attention to three ports labeled 1, 2, and 3, that open to all directions in space and expose to the universal quantum field three sensors made of Moscovium (115) annealed to a highly coherent configuration and each machined from a single crystalline piece of this material for coherent resonance with a single central crystal. This may be properly described as the spacecraft "brain"

We have already described how the universal matter distribution results from the fossilization of primordial turbulence in the early Universe (Gibson 2001), amplified by gravity to create the presently observed stars and galaxies as revealed by a vast body of astronomical research. The simple anti-gravity mode probably involves complex properties of the heaviest known stable element (#115, Moscovium, Mc). It seems likely that present military technology has already achieved this mode of anti-gravity stability and propulsion. The fact that humans experiencing this mode of propulsion do not report experiencing large inertial side-ways forces during acceleration/deceleration, means that a simple manipulation of gravity and the quantum field to cancel the quantum description of their mass enables transport in this mode.

The present section focuses on the second, "interstellar" mode. It is based upon many materials and accounts of individuals who have experienced this mode of transport or have been shown and received explanations of the craft, but it must be understood that not all UFO craft are of the same design. Many contactees report contact with multiple races of beings and probably even different times at the clocks of the visitors' home location. Photographs of the UFO craft show many different overall shapes and sizes. Particularly important are the accurate descriptions from interior inspection by Bob Lazar, a hero who reported on his early researches within the U.S. military/industrial complex program. A key fact reported by Bob Lazar is that the spacecraft is made largely of element #115, which had at the time not yet been discovered because it is among the highly radioactive elements in the periodic table with atomic number higher than uranium (92). A number of such elements have been created in the laboratory, and as predicted most are unstable to alpha or beta decay, which means that they are likely to become lighter elements by radioactively emitting alpha particles and beta rays. As we consider heavier elements, the decay products themselves are typically radioactive, and again decay until in the process a stable isotope is attained.

However because of various symmetries in the atomic nucleus' arrangement of the nuclear protons and neutrons, it has long been predicted that an "island of stability" should exist for element #115, whose most stable isotope  $Mc^{(290)}$  should be stable enough to test its physical and chemical properties before eventual decay. But where these nuclear properties are interesting and very important for studies of its formation and lifetime, it is the surrounding electron cloud that produces the critical states that enable the interstellar mode of UFO operation. We shall see that the high atomic density of Mc causes the electrons orbiting the nucleus to become extremely relativistic, and thereby bring in the Einstein General Theory of Relativity for the description of their properties.

A foundational principle of the Einstein General Theory of Relativity is called the Principle of Equivalence, which states that any physical process must relate to any other physical state through time-like relativistic transformation, which prevents our Universe from creating tachyons, or particles like electrons from moving faster than the speed of light. But if you correctly compute the relativistically corrected speed of orbiting electrons, there is no problem for orbiting in hydrogen or helium, but speeds increase for the heavy elements like iron or lead, so that the inner electron orbits need large relativistic corrections, and for the extreme heavies like uranium, we are beginning to approach light speed, and for super-heavy Mc #115, the electrons in inner orbit must be super-relativistic, greater than c, and we have a problem with classical theory. It will be seen that the Richard Feynman Quantum Electrodynamic Theory must be invoked to explain what happens in nature.

A similar problem is encountered in black hole physics. There the understanding is simpler, because with the annunciation by Newton of the 1/r<sup>(2)</sup> gravity law, consideration of a hydrogen cloud in free space leads immediately to the conclusion that the cloud would contract due to its self-gravity, and the more it contracts the faster it collapses on itself, with no end state possible but a black hole. However the Feynman theory notices that as the density increases, orbiting electron-positron (positive electron) pairs are spontaneously created, and because the electron might be created either inside or outside the black hole event horizon where it might be captured or just evaporate away from its mate. Thus Steven Hawking predicted that forming black holes might evaporate away as a result of quantum electrodynamics. Unfortunately such black hole evaporation has never been observed in a laboratory or in interstellar space.

What Steven Hawking failed to consider, however, is that the spontaneous creation of electron-positron pairs might in the Feynman theory become so intense that they dominate the structure of the black hole, and actually halt the collapse. That possibility was first considered by Indian physicist Abhas Mitra, who also recognized that at the point where the density was sufficient to halt collapse the density would be so high that time dilation effects would become very severe, so that the relativistically corrected time to halt collapse would exceed the age of the Universe for a stellar mass black hole, and he therefore named the object an ECO (Eternally Collapsing Object). Thus it was envisioned that a "Horizon" would form so that the collapsed object would have an outer horizon that shared the ordinary physical forces of nature as elucidated by the mechanical force laws of Newton and as modified for relativity by Einstein; and an inner surface space that must forbid any physical matter from entering according to the strong Principal of Equivalence, and must therefore be a pure quantum state.

In a short time, it was recognized by American physicists Darryl Leiter and Stanley Robertson that the orbiting electron-positron pairs would generate a radial magnetic field, and the full description of what was formerly called a black hole was actually a MECO (Magnetic Eternally Collapsing Object). Observations of these objects in MECO structures at the centers of quasars in centers of distant gravitationally lensed objects (Schild, Leiter, & Robertson 2006) demonstrated the existence of such strong radial magnetic fields and it appears that the classical black hole objects envisioned by Hawking and all other researchers, do not exist in Nature; only MECOs exist.

We have taken this digression into black hole (MECO) physics to be able to understand the seemingly magical properties of element #115, Mc. It must exhibit physical properties similar to a MECO with a physical nucleus on the inside and a cloud of whirring electrons attempting to orbit the electrically charged attractive nucleus, but since the electrons cannot exceed the speed of light, the Strong Principle of Equivalence requires that it must form a pure quantum state. This means that the electron cloud does not really have physical electrons present. This means that element #115 in its natural form is frozen into a MECO state. Morover the charged nucleus readily forms into molecules of tetrahedral form, in which the individual atoms in the molecular structure are seen in tetrahedral crystals and are surrounded by a cloud of super-relativistic electrons so the metal molecules form structures that transform readily from physical to quantum dominated states. This is the property underlying the interstellar mode of UFO operation. With an act of consciousness of the craft operators, the UFO craft sheds its physical form, detects and surfs paths of coherence having the spatial inter-connectedness of a neural network, and surfs the network of coherences existent and resulting from the planetary grid mode of space creation, to move to their target destination. At this location, an act of consciousness causes the UFO craft to re-manifest as a physical object, much as consciousness can reveal physicality of electrons in the Young Dual-Slit Experiment (Radin et al, 2016).

## XII.b. Quantum Phase Inverters and Consciousness Amplifiers; The Spacecraft Brain

The manufacture of the interstellar mode sensor devices has been revealed and discussed by Bob Lazar. It seems likely from his sketches that these devices act as quantum coherent sensors of the locally observed quantum field, and because of the holographic nature of this field, describe therefore the entire field describing the entire Universe, including the low-amplitude description of the target destination. Because the crystal amplifier can resonate with even a low amplitude quantum field source consciousness, the crystal amplifies the weak signal to guide the craft.

Mr. Lazar describes how the 3 sensors are manufactured from a single piece of Mc(#115). Such manufacture would produce a coherent structuring in the atomic and molecular crystallization of the metal, and produce the desired high sensitivity to the quantum hologram. With the sensor manufactured in a double-ended structure of this design, it would produce at the rear end a phase-inverted (Helicity-inverted) image of the quantum field, and by its positioning with 2 more symmetrically arranged devices, coherently produce an amplified image of the field to be projected to the location of the crystal amplifier, which then senses the distant field of the target location and thereby guides the craft to its destination. The sensor-crystal combination thereby becomes the spacecraft "brain" and selects a coherent path toward the target destination as a quantum field. Thereby the craft is co-located at the target location instantaneously, and remanifested to physical existence by the consciousness of the craft operators. The process has been correctly described in the STAR TREK movie/TV series as the "transporter," though the entertainment version does not emphasize the consciousness aspects of such a transport mode.

We also describe the relationship of this transport mode to the "Planetary Grid" model of the creation and evolution of 3-dimensional space (3-D space). The Caroline Corey Film (E-T Contact – They are Here) shows the planetary grid unfoldment process that leaves in its wake a network of linear boundaries which are then lines of strong coherency that are seen on earth as "lay lines" and mapped with consciousness to identify locations of peak coherence with the planetary grid for the erection of churches and other religious or monument sites. The intersection of such grid unfoldment lines are particularly important locations, since they embody 3-D coherence with the Universe, and are therefore something like the neural centers of the human brain's neural network. Following such creation of the unfoldment patterning, the infusion with mass, probably resulting from conscious activity, would become curved according to the Einstein General Relativity Theory. Nevertheless the patterning leaves a network of coherence that the spacecraft brain easily gloms onto to create the coherence that allows the craft to demonstrate a strong physical presence (co-location, entanglement) at both source and target locations simultaneously, to activate a "transporter" response. Consciousness at the destination combined with coherent consciousness of the occupants re-establishes the physical structure of the craft in a mode that switches from wave-like (quantum) to particle-like (physical) as demonstrated in the Young dual-slit experiment. As demonstrated by Dr. Dean Radin (Radin 2009) such conscious effects on the Young dualslit interferometer can occur over large distances of thousands of miles. Such coherency of consciousness is explained earlier in this chapter as resulting from the natural structuring of matter in a rotating Universe with fossilized gravitational rotational structuring everywhere.

In addition to understanding of the properties of space-time the UFO craft and its operation originate in the properties of element #115, Moscovium (Mc). This transuranium element was long speculated to have stable isotopes to nuclear alpha and beta ray emission decay modes. This has now been confirmed and a stable isotope, Mc<sup>(290)</sup> as a silvery metal that shows remarkable properties, some of which were predicted. Some of the properties follow from the compactness of the electron cloud that necessarily surrounds the strongly positive charged nucleus. Since the electron cloud necessarily mimics such clouds within the Periodic Table vicinity of Mc, element Mc<sup>(290)</sup> can be expected to exhibit shape-shifting properties. Also, the outer valence electron is known to be in such a tight orbit around the nucleus that its relativistically computed speed is within a factor of two of the speed of light. Since inner shell electrons would have higher orbital speeds, calculated to exceed the speed of light (Santiago & Haiduke, 2018), the atomic structure of Mc<sup>(290)</sup>, produces the structuring of a MECO. Such MECO structuring has been observed in the global structure of quasar Q0957+561A,B gravitational lens (Schild et al, 2006) and also in the image of the compact object at the center of our Galaxy, Sgr A\* (Schild, 2016). The existence of magnetic fields attached to the surface of compact objects is inferred from the effects of magnetic field activity immediately outside the MECO surface (Black Holes have no hair) by Johnson et al (2016). Scaling relations for the MECO alternative to standard Black Hole theory For SgrA\* have been given by Robertson, S. & Leiter, D. 2010.

The MECO theory has already been discussed in this chapter in the context of the structure of the Distant Horizon of our Universe. Central to the common narrative for discussion of the Near-Death Experience is the existence of an intense bright light. The MECO model of compact structure horizons posits a layer of intense electron-positron formation as positronium, accompanied by an intense bright light. The bright light surface divides the dense physical structure surface and the intense quantum spontaneous pair production layer at the outer, quantum field surface at our Universe's Distant Horizon.

## XIII. A MEGA-VERSE STRUCTURED FOR CONSCIOUSNESS AND COSMIC INTELLIGENCE

The recent discovery that the MECO/ black-hole object SgrA\* does not have an infinite density Event Horizon but instead shows strong surface magnetic fields with entirely different surface properties, (Schild 2016), is an invitation to explore what other properties that such a physical structuring would have, particularly in the way our Universe structures the intersection of a physical space,

inside a physical plus quantum interface. We have also described in Schild, Leiter, and Robertson (2006) how our 4-D universe of physical reality and existence contains objects called MECO/Black-Holes whose outer surface is in real space and whose inner space is probably a purely quantum state where the quantum waves describing our physical reality can pass through the finite density surface, but a physical particle would require a relativistically dilated time greater than the age of the Universe to penetrate. We recall that the material inside the horizon (surface) probably was the degenerate core of a supergiant star that burned up its fuel and came to a neutron star condition, probably as a Bose-Einstein condensate which acts in coherence like a crystalline structure but has no real atomic material.

Moreover it is likely that our Universe's Distant Outer Horizon behaves as an inside-out MECO, where the interior physical space is dominated by atomic matter with its quantum description, and the outer surface is a quantum sea in which our Universe is but a bubble of physical reality. This Distant Horizon (D.H.) surface is thus the place where the Einstein GTR interfaces with the external quantum outer field that describes all possible Universes, including those with 2-D plus time and possibly 3-D plus 2 time dimensions. Then at the Distant Horizon, only those quantum structures that can be coherent with the physical structuring of atomic matter in our Universe can enter and be present in our Universe; this structuring forces all time-space to obey the Einstein GTR, as observed locally, and the GTR originates at, or is enforced by, the MECO Distant Horizon as a coherence phenomenon. Since all universes are presumably similarly structured, we can imagine it to be most likely that a single Cosmic Intelligence is present in all universes, so also the Mega-Verse is in quantum (spiritual) union with all megaverses. It is also likely that our physical Universe only contains the description of (3D + T) matter, and an interior MECO residing in our Universe, has quantum interior structure related to our well-described locally observed physical matter obeying Newtonian forces with a relativistic principle. This is appropriate, because when the matter had physical existence it was hydrogen-depleted ordinary matter appropriate to our Universe.

#### XIV. TEMPLATES IN THE MEGA-VERSE

#### XIV.a. Templates for the creation of a living Universe

We are given that Templates are at the foundation of the insertion of life in the Universe and through-out the Mega-verse. Such templates describe how the complex patterns describing and regulating life develop in the Mega-verse. Such patterning will ordinarily describe the actions of multiple forces operative at the same time to produce the complexities manifest in Nature as emerging properties.

A good example is the MECO structuring of horizons in the Universe and in compact MECO objects (previously called black holes), with surfaces governed and described by MECO dynamics and the existence side-by-side in the MECO description of the patterning of natural forces at the interface region of the Horizon structure. Note that in this MECO model, the physical space side of the Horizon has a strong density cusp along-side the peak of quantum amplitude associated with the real physical structure, and QED (Quantum Electrodynamics) becomes the gate-keeper of the crossing from physical reality to quantum reality. In this interface we find a balance between real physical forces of gravity and chemistry, and on the quantum existence reality side we find only a strong quantum field, with the gate-keeper MECO allowing passage of only the quantum energy from the Vacuum Zeus Point Energy that is coherent with the physical structure on the physical reality side of the Horizon. This is thus also the point at which the Einstein *GTR* enters our Universe at its Distant Horizon, as a natural outgrowth of coherence with the quantum description of matter.

Thus with an understanding of templates, we can see that the MECO structuring as consisting of patterning of balanced physical forces in the Universe and Mega-Verse would have evolved with a life-supporting patterning of additional chemical and biological forces and templates.

**Templates:** forces working together to produce consistent outcomes.

**Templates:** F1 + F2 = Life Support

#### XIV.b. Examples of Templates

We give further examples of templates whose functions assist the existence and thriving of life in the Universe.

- 1. Principles of diversity and survival of the fittest. It was understood by Darwin that a remarkable principle of survival-of-the-fittest guides evolutionary development of life in the Universe on all time scales. We can use this example with F1 = survival of the fittest, and the principal of diversity is F2, producing the outcome of life thriving on our planet. We refer to our Principal of Diversity and recognize that with it as F2, life has thrived and improved with age over the years. The Principal of Diversity states that the Universe follow a a pattern that all physical activities are driven to the direction providing the greatest number of possible outcomes. This is seen in the laws of turbulence, for example, where we see that development of turbulence produces a restructuring of mass on as many mass scales as possible, which insures the highest probability that the one most favorable to life is a possibility. Thus nature's pairing of diversity with "survival of the fittest" results in life enhancing results. This is a simple example of the above equation, F1 + F2 = Life Enhancement as an emergent property.
- 2. The male/female (M/F) and sexual reproduction are probably a template. In our Universe, we see the sexual differences in body parts and rhythmic body movements. In this example the (M/F) differences are F1, and the human development scenarios are F2. We can see that the two forces combine to make sexual reproduction possible, which allows for a great expansion in the number of possible outcomes.

#### XV. MECO STRUCTURES IN NATURE

The Terry Tatum (2015) reference shows that there are three size scales where the MECO structuring of horizons are active in these structures within the astronomical Universe.

- A. Black Hole Surfaces (also called Horizons) bounding collapsed matter objects
- B. Elementary Particles
- C. Distant Horizon of Universe.

## XV.a. Compact Object (black-hole) Surface

The black hole surface, also called the event horizon, is likely to have an equatorial bulge, and so invite (enable) quantum information, albeit weakly, from toroidal structured universes as well as spherically structured ones like our own. By so doing our universe presents a coherent path of resonant quantum connection with other universe forms with otherwise little means of resonant coherent interaction.

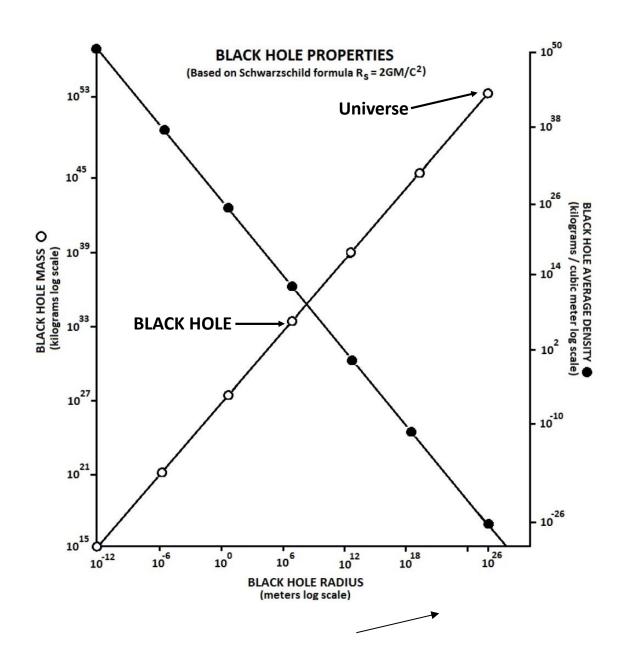
Thus we find that the side of the stellar mass MECO (black hole) event horizon facing outward is within the physical matter of our Universe. At the stellar mass horizon an observer could point to a distant object with laser light, but it would get seriously blue-shifted (as seen by a local observer at the surface) in the laser beam pulse heading to the distant observer. There is significant probability that the pulse would intercept significant matter principally as boulders and asteroids plus a sand-like dust. And the entire weight of the Universe is bearing down on its surrounding black-hole surface.

In the MECO theory, total collapse is halted when the *QED* pressure due to spontaneous emission of light and magnetic field inside, balances the crushing force outside at extreme densities. This it does by becoming a Bose-Einstein condensate which is *QED* limited and literally builds up a pressure, even in the absence of physical matter. Thus the inside of a black hole is a non-atomic (non-matter) state wherein all gravity and electric charge are absent, and a strongly quantum structured space is a boundlessly resonant cavity coherent within, and coherently able to resonate with the quantum fields of the extreme surface density of physical matter on the opposite, outer surface, of the MECO horizon, much like the event horizon of the classical black-hole model.

### XV.b. Elementary Particle Surface

The critical mathematical basis to understand mass of elementary particles as being proportional to the number of quantum states available for the interior constituents to occupy, is *QED*. And understanding of the relationship to degrees of freedom is carefully explained in (Temple, Robert, 2017). Accordingly, the MECO surface of the proton, for example, is a meta-stable state equilibrium, with a quantum state inside balanced by a physical state on the outside. This is inferred (with mathematical extrapolation) from the straight-line similarity of the mathematics evident in Fig. 1 of Tatum (2015).

**Figure 10** (following). The MECO mass-radius-density plot from Terry Tatum (2015) showing that the physical properties of the Universe and of the MECO/black hole are related by simple mathematics predicted, as illustrated by the straight lines. The properties of the elementary particle proton also follow the line, though they fall off the edges of this original plot from Tatum (2015). This agreement for the proton was first demonstrated by Nassim Haramein.



### XV.c. The Distant Horizon

The prevailing view in contemporary astrophysics is that our expanding Universe is unbounded and expanding at an increasing rate to an evaporating end-game. But the MECO location on the Tatum (2015: Figure 1) makes it more likely that the distant Horizon is a kind of inside-out MECO. Thus whereas the stellar-mass black hole internal to our Universe has a physical existence reality obeying Newtonian forces on its outer surface. and a pure quantum state on the inside, the Distant Horizon is opposite and the inside is physical and the exterior surface is a balancing intense quantum field. Thus our Universe horizon is best understood as a bubble of Newtonian matter inside a quantum state representing all universes in our Mega-verse. It is interesting to note that a cosmic intelligence as a spiritual (quantum) entity could be present in all universes with such structuring.

## XVI. THE MECO STRUCTURING OF THE UNIVERSE OF UNIVERSES: THE MEGA-VERSE

We have seen how the structuring of the Universe shows it to be dominated by the quantum description of the masses responding to Newtonian forces, and a differently structured heliacal patterning of the waves describing consciousness. It only takes one or two further steps to understand the nature of the black holes and horizons to understand how a cosmic Intelligence can be simultaneously present in all universes (as previously commented), because of the nature of this embedding.

It is presently understood how the compact object at the center or our Milky Way Galaxy is not a true black hole with a characteristic infinite density event horizon, but rather a related object whose surface has a finite density dominated by a strong magnetic field. This object is called a MECO (Magnetic Eternally Collapsing Object) and has now been definitely photographed on size scales comparable to the surface. We see the direct image of the object as photographed by the NASA SOPHIA airborne telescope. The image, shown in Fig. 8 (below), is commonly commented as showing an asymmetrical structure not understood in standard astronomical black-hole models and simulations (Brinkerink, 2016; Lau, R.M. et al, 2014, Fig 3).

We see in Fig 8 the published image made with the NASA SOPHIA FORCAST camera at 3 far-infrared wavelengths and reconstructed as a color image (also called a color translate). This image shows immediately that the standard model by itself does not explain the observations. The standard story about massive black holes is that they are so massive and compact that nothing, not even light, can escape. So how many people think to ask, "If their light cannot escape, how do they become quasars, the most luminous objects in the Universe"? And what is this un-predicted luminous structure? The great luminosity, in total equal to the luminosity of 7 million suns, comes from the silver structures (described as the E-W arm and Northern arm on Fig. 6) which are not predicted for the standard black-hole model (Brinkerink et al, 2016). On the other hand the MECO model is predicted to have a strong magnetic field of structures exactly matching the pattern on the NASA image.

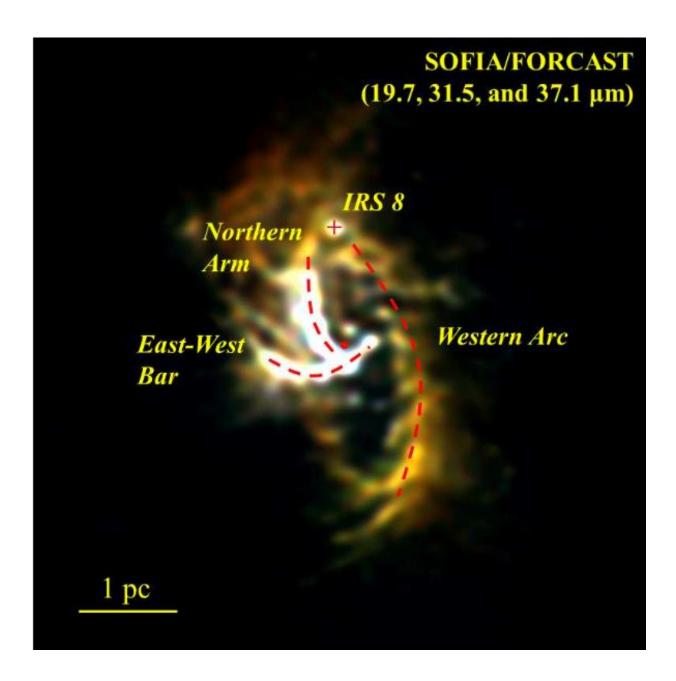
Schild (2016) shows in detail how the structure predicted for a MECO model perfectly fits the NASA image of the object beginning with the donut-shaped structure of the accretion disc, colored to match the color due to the cool thermal emission of dark matter, structured as cool dust and frozen hydrogen spheres that evaporate and quickly ionize in the fuzzy structures at the ends of the northern and E-W arms. Thus we are seeing the missing hydrogen as frozen spheres until they are heated in the proximity of the compact MECO object. This emission pattern was already inferred 10 years ago from gravitational microlensing studies of quasar images resulting from alignments in the distant Universe (Schild et al 2006). As emphasized in that report, the Einstein equivalence principle is satisfied in the MECO but not the Standard black-hole model, whose infinite density "event horizon" is speculated in the standard model to cut off any magnetic field lines at the black hole surface.

It is significant that the MECO structured black- hole is now understood to be the Universe's way of separating the external real physical space from the space of only quantum existence reality inside the compact object. At the surface of a galactic mass classical black hole, which probably does not exist in nature, a collapsing gas cloud feels the relentless pull of gravity and as the object collapses faster as seen by the local observer until it reaches infinite density. For the MECO solution to the Einstein/Maxwell field equations, as density increases so also does quantum-electrodynamical (*QED*) pair production of principally electrons and positrons in orbiting pairs in accordance with quantum electro-dynamical theory, and the spontaneous momentary pair creation causes a pressure-like force that opposes further collapse. The local observer sees deceleration of the flux, but a distant observer sees time stretched out due to relativity and the collapse

halts only after a relativistic long time, and so the MECO object is described as eternally collapsing. The spontaneous positronium production amplifies any surface magnetic field, and spontaneously creates its own magnetic field, as illustrated in Schild (2016). The magnetic field described as "surprisingly strong" at the time of its discovery, is what guides the spinning and synchrotron radiation emitting electrons that cause the asymmetrical structure seen in Fig. 6. It was directly detected by its Faraday Rotation effect on the emission of a background magnetar. Because the Faraday Rotation was observed at 2 different radio frequencies, it was possible to compute the strength of the magnetic field in the direction of the magnetar, whose light passed quite close to the compact object SgrA\* at the center of our Galaxy. Only a MECO structured black hole surface can transmit such a strong magnetic field, but for a black hole the infinite density event horizon must pinch it off (Schild, 2016).

Assuming that our Universe is a bubble in the quantum potential field of all possible universes, we see that the Horizon of our Universe can act in the same MECO principle, thereby separating our physical structured Universe with a quantum principle and atomic matter to remain separated from the quantum continuum outside our Universe, and thus it can be seen as a kind of inside-out black hole as observed by a physical observer (myself) inside our Universe. Thereby real physical space exists only in the region of space inside the Distant Horizon, but outside the MECO black-hole compact objects contained within the Horizon. This is indicated by the conclusion of Tatum (2015) that the global properties of radius and density are mathematically related for the Horizon, and the MECO objects like SgrA\*. The MECO Horizon scenario also explains how the Einstein General Theory of Relativity forms at the Horizon dominated by these quantum processes, such that quantum effects favorable to the geometry and coherence of the entire enclosed space can coherently cross the MECO boundary and enjoy physical existence inside. This structuring of the Mega-Verse can be understood as having a purpose. Where we now understand that all physical reality has a quantum description, and the understanding that all emotional content of the Universe likewise, we as mathematical beings are obliged to ask: what is the sum total of this existence reality? And how can that sum be anything more than the Cosmic Intelligence that created it? In this way we can understand the purpose of this observed MECO structuring of all physical reality in the Mega-vese of all existence reality. The Mega-verse is seen to be a sea of possibility of bubble-like universes whose surface horizons are in partially coherent interaction with its creative Cosmic Intelligence.

# XVII. THE MECO STRUCTURING OF SGRA\*, THE MECO AT THE CENTER OF OUR GALAXY



**Fig. 11** The infrared color translate picture of SgrA\*, the MECO/ Black-Hole object at the center of our Galaxy. For convenience the evident structures are overlaid on the image for identification and description. The actual compact object is shown as a small red dot at the center of the luminous asymmetrical structure, whose radiation is attributed to synchrotron radiation, which is highly polarized in directions predictable from the synchrotron radiation theory, and the presently understood interpretation is easily falsifiable from standard theory (Schild, 2016). The Northern Arm appears to originate at source IRS 8 where a frozen hydrogen planet-mass structure is presumably evaporating at the 13.8° K Hydrogen triple point. The evaporating hydrogen gas quickly becomes ionized and spirals along the magnetic field lines that dominate the luminous structure. This creates the distantly observed intense luminosity

Thus the distantly observed quasar luminosity is generated by the evaporated electrons spiraling along magnetic field lines under gravitational attractive force thereby producing highly polarized synchrotron radiation. The E-W bar and western short bar seen fore-shortened also originate in gas from luminous structures, presumably evaporating hydrogen-dominated planetary-mass objects.



**Fig. 12**. A 3-dimensional Styrofoam model tilted to simulate the structure seen in Fig 11. The size of the central collapsed object has been exaggerated to show its position behind the illuminated magnetic field lines.

It is expected that in this direction a complex superposition of right- and left-circular polarizations will be seen in linear superposition, along with linear polarization from the illuminated E-W bars. The western arc is shown unstructured above, but is expected to be physically dominated by inflowing dark matter from a now consumed dwarf satellite from the Local Group of low-mass galaxies. This in-falling matter is dominated by planetary mass frozen surfaced planets known to dominate the baryonic dark matter, and to technically be not dark because its emitted radiations are in the sub-millimeter spectral range.



**Fig. 13** A side-by-side comparison of the observed and modeled MECO structures from SgrA\*. The observed structure on left shows the brown-colored inner edge of the accretion disc as being highly structured into compact luminous sources of all sizes, and predicted to be mass scaled in a fractal scaling law. The approximate envelope surrounding this disc is the tan torus in the model.

### XVIII. SUMMARY AND CONCLUSION

As promised in our introductory section summarizing the results of the FREE statistical surveys, an expanded and informed view of consciousness is needed because many individuals have experiences that cannot be explained by conventional views that proclaim consciousness begins and ends with the brain. The FREE Experiencer Research Study establishes that many experiencers of what we call the Contact Modalities, and Psi phenomena, seem to be enabled by processes not limited to the human brain. This must somehow be facilitated by actions occurring instantly and often experienced as if human awareness extends to unlimited reaches of space and time.

I initially discussed how it is first necessary to show that information related to feelings and emotions must have a physical origin in the attribute of space called the quantum universe, understood by the great quantum physicists of the 1920's era (Dirac, Schroedinger, Heisenberg, etc.). I later described how brain wave studies identifying the Mirror Neuron system can explain how the quantum picture of the Universe permits the description not only of the physical existence of matter and gravity, but of human emotions as well. The Quantum Hologram, which is presented in more detail by the late Dr. Edgar Mitchell was then discussed. (Mitchell and Staretz, 2011). The Quantum Hologram allows for an expansion of our understanding of the quantum universe in a manner that would allow it to store and retrieve emotional content. The following section then presented details that the real Universe of our experience seems to require for its understanding the existence of a Cosmic Intelligence. It also seems to require the attribute of eternal existence often described as karma or soul. It was then demonstrated that the experience of consciousness is created by the brain operating much like a digital computer, clocked by rhythmic reference pulses related to heartbeat. These pulsations help to correlate quantum waves of information about the physical state of the individual into left brain input, merging and comparing the resulting patterns with right-brain input and output, to assist with survival of the individual. This process is what gives us the sense of conscious awareness. I then discussed the details of the fMRI imaging of brain waves which allows a correlation by the two separate brain hemispheres to compare physical reality to the personal human history of the sentient being. We finally discussed the processing of consciousness waves by MECO/black holes with the surface properties filling the role of nature's hard drive -- that the MECO object might be information storage devices similar to a computer hard drive. Can one hypothesize that the MECO objects might be the source of the Akashic records or even the "Neurons of Cosmic Intelligence"?

In this consciousness model I discussed how consciousness is a resonance of the human brain with the Quantum Hologram description of all information, and how that is compared to the human experience. Nevertheless, many of our FREE Survey results indicate that consciousness is also non-local and not solely derived from the human brain. This model can also describe how panoramic awareness can be non-local, outside of the

brain, as described by many of the Contact Modality experiencers via some types of UAP related experiences with Non-Human Intelligence; Out-of-Body Contact Experiences, Near-Death Contact Experiences, Remote Viewing Contact Experiences, Hallucinogenic Contact Experiences, etc, and even the PSI phenomena of telepathy, precognition, clairvoyance, psychokinesis.

One puzzling phenomenon that makes claims of alien visitations dubious to most people is the issue of the speed of light and light-velocity travel to our planet in space-craft that seem to operate silently and gravity-free. We demonstrate how such a craft made of the trans-uranium element #115, Moscovium, can easily produce a self- coherent image of itself with its sentient contents, and instantaneously bi-locate in the Universe, surfing on coherent patterning of matter and consciousness waves that remain as fossils of turbulent processes that arose early in the history of our Universe. In particular we recognize in the similarity of spiraling consciousness waves to spherical matter waves allow such surfing to be available to quantum waves describing both matter and consciousness.

Thus, the principal conclusion of the FREE survey, that UAP sightings and the many psychological phenomena encountered in daily life for some, requires for its understanding an expanded view of consciousness and of the Universe that has spawned it.

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**Bio:** After a 45-year career at the Harvard-Smithsonian Center for Astrophysics at Harvard University, and over 300 peer-reviewed academic publications, Rudy has been recognized as one of the leading proponents of MECOS, an alternative to black hole theory. Rudy was also a pioneer in gravitational lensing and matter structuring of the universe. Rudy's most recent research activities involved comparison of gravitational microlensing, brightness fluctuations with black hole models to study quasar inner structure. Rudy is also the Editor in Chief of the Journal of Cosmology which has published many academic articles on the relationship between Consciousness and the Contact Modalities. Rudy was also one of the four co-founders of the Dr. Edgar Mitchell FREE Foundation (FREE), co-editor of FREE's book "Beyond UFOs: The Science of Consciousness and the Contact Modalities", and is one of five co-editors of the 4 volume book series, "A Greater Reality: The New Paradigm of Consciousness, the Paranormal and the Contact Modalities".

Website: http://www.rudyschild.com/