Article

Faster-Than-Light Anomalies in Prespacetime & Interstellar Translocation through Hyperdimension

Chris H. Hardy*

This article argues that the speed of light limit C is a law applying solely to the matter and spacetime region. The infinite spiral staircase theory ("ISST") posits that prespacetime is a triune hyperdimension (HD) in which the spacetime and EM laws do not apply, because mass, space, and time are not existing yet. Yet the universe at Planck scale has an astounding non-matter energy, and the inflation and the entanglement have been demonstrated to be superluminal and/or nonlocal. Similarly, research data shows psi to be nonlocal and contradicting spacetime laws. ISST postulates that the energy filling the hyperdimension, called *syg-energy* and driven by tachyonic *sygons*, is linked to cosmic consciousness (or syg-HD), itself enmeshed with hyperspace and hypertime, and that psi and synchronicities are hyperdimensional processes. A thought-experiment is proposed that could instantiate a translocation of either information or a matter system.

Keyword: Faster than light, hyperdimension, entanglement, prespacetime, nonlocality, synchronicity, translocation.

Introduction

The first two decades of the 21st century have seen a major shift in our scientific paradigm with the discovery of dark energy and dark matter in 1998. The observation of supernovae with the Hubble Space Telescope highlighted the acceleration of the expansion of the universe and led cosmologists to the obvious inference that it had to be produced by a totally unknown gigantic force, that they called *dark energy*. And thus we had to adjust to the fact that this dark energy makes up about 69% of all energy in the universe, as goes the latest count from the Planck probe in 2015 – See https://en.wikipedia.org/wiki/Planck_(spacecraft) , and our good old (aka ordinary) matter only about 5%.

As ordinary matter is everything we have always identified as matter, from particles to stars to galaxies, it suddenly robbed the materialist paradigm (that deemed only matter to be real) of any substance, literally so, and therefore of its credibility. Dark energy is a negative energy (repulsive radiation pressure), that counteracts exactly the positive and attractive energy of gravity. As for dark matter, a positive energy, it accounts for 26% of the total energy. The nature of both dark energy and dark matter are unknown. Thus, given that 95% of the energy of the universe is a total mystery… we can assume that actual physics deals only with 5% of the universe's reality.

*Chris Hardy, Ph.D., Eco-Mind Systems Science, Seguret, France. Email: chris.saya@gmail.com
Note: This article was first published in Prespacetime Journal, 11(3): 227-249.

What scientists are looking for with dark energy is a repulsive energy that has to be in such an amount as to overwhelm the gravity attraction of all dark matter and normal matter combined, and it has to make up 69% of the total energy of the universe. An article on the NASA website called *Dark energy, dark matter* (See http://science.nasa.gov/astrophysics/focus-areas/what-is-dark-energy) gives us three actual candidate explanations for dark energy. The third – and the only one without major shortcomings – is "a new kind of dynamical energy fluid or field, something that fills all of space," and has been called *quintessence*. "If quintessence is the answer, we still don't know what it is like, what it interacts with, or why it exists. So the mystery continues."

1. The Sub-Planckian Region Is The Prespacetime Hyperdimension

It is only after the Planck time, when the universe was an infinitesimal fraction of a second old (in effect, 5.3×10^{-43} second), and its diameter was Planck length (1.6×10^{-33} centimeter), that the first energy-particles could be born and acquire mass in the Higgs field. Then, space, time, mass, and matter – and therefore electromagnetic (EM) fields and causality – are born, and the particles of the Standard Model will appear in due order. Thus, it's only after and above Planck scale that the matter universe will deploy itself, from the Higgs bosons to the first stars and proto-galaxies some 420-500 million years after the origin.

Physicists infer that before Planck scale, there were no particles and therefore no matter (nor was there any electro-magnetic force, strong force, weak force, but solely gravity), and that no time and no space had formed yet – hence its name of 'pre-spacetime'. And nevertheless the primordial universe had a gigantic energy, despite the fact that we are still, at Planck scale, an immense time before the Big Bang now identified with the inflation phase at 10^{-36} second. As it is, the new frontier of physics is now set on the pre-spacetime region, with several leading physicists expecting the laws governing the sub-Planckian region (or, in Sarfatti's terms *subquantum physics*) to be widely different from the matter and spacetime region.

ISST posits that below Planck scale starts the hyperdimension, a non-matter region of the universe filled with a boundless *non-matter energy*, in fact a consciousness and active information energy called *syg-energy* (i.e. *sygons* waves). But let's realize that this hyperdimension (sub-Planckian or sub-quantum region) happens both *before* Planck scale at the origin of our universe-bubble, and *below* Planck scale at each point of our 4D matter universe.

1.1. The birth of spacetime, particles, mass, & the speed of light

To get back to the quantum and spacetime region: starting at Planck's scale, quantum mechanics, string theory, and Relativity theory allow us to model the blitz expansion of the universe. Below are the presently agreed-upon events happening in the point-universe (although some tiny details may vary among scientists).

- *Planck scale* happens at 5.3×10^{-43} second.

- Between 10^{-36} and 10^{-32} second happens the *Inflation* (now assimilated to the Big Bang), an explosive expansion of the point-universe.

- Between 10^{-10} and 10^{-4} second, the *Higgs field* is formed, a super hot quark-gluon plasma, and the first energy particles – the Higgs bosons – appear within it; the temperature is down, but it still reaches one million of a billion degrees. In this Higgs field are glued bosons, quarks, gluons, electrons, photons, neutrinos. The experimental discovery of the Higgs boson, on March 14, 2013, proved that masss is not an intrinsic property but just an effect of particles interacting with the Higgs field.

- Within the first second, the *neutrinos* free themselves, they *decouple*, from the super hot plasma, when its temperature was down to 10 billion Kelvin, and are set on a course, thus creating their own 'cosmic neutrino background' (discovered in 2008, from the analysis of the photons' Cosmic Microwave Background).

- At 10^{-4} second, the massless gluons exert a *strong force* on the *up* and *down* quarks (the first and lightest quarks) that then form protons and then neutrons, each having three quarks in a sort of unbreakable connection. Thus protons, neutrons, up and down quarks, and electrons are all that is needed to form all the existing atoms.

- At 10^{2} seconds (1.40 minute) the radiation era ends and *the matter era begins*; all protons and neutrons of our actual universe have already been created. Simultaneously, the *photons decoupling* happens: the photons, which up to now had been glued to the plasma and kept popping up from the field or ocean of Higgs, only to be smashed and reabsorbed, are suddenly able, with a now colder plasma around 3000 degrees, to thrust themselves free and start on a cosmic journey that will light up the universe. It is its relic (or afterglow) image that we detect now at about 370,000 years after the Big Bang, and that forms the Cosmic Microwave Background (CMB). The photons, set on a course, will slowly get cooler (they are now at 2.7 degrees above the absolute zero) and their frequency will progressively decrease (while their wavelength increases) from the gamma rays of the origin, to the low microwave frequency they exhibit now. (According to Planck's relation $E = hv$, the energy of a photon, E, known as photon energy, is proportional to its frequency, v; and the wavelength is inversely proportional to energy.) My view is that these photons, through their travel within a sygons-filled medium, are themselves creating the spacetime as an enclosed bubble as they dart along.

- Starting at minute 3 until minute 20, protons and neutrons will combine via a process of nuclear fusion, thus forming the nuclei of atoms (a process called *nucleosynthesis*). Then the first simple atoms will form when electrons start bonding with these nuclei and orbiting them, mostly atoms of hydrogen (the lightest atoms, comprising one proton, and thus of atomic weight 1), deuterium, and helium-4. It is breathtaking to realize that the nucleosynthesis took only 17 minutes and that all hydrogen still

existing at our present time in our whole universe has been formed within twenty minutes after the Big Bang.

1.2. The speed of light limit is tied and restricted to the spacetime region

We can safely say that before the birth of spacetime around Planck time, and before the onset of the matter era (at 1.40 minute) and the electrons bonding with the nuclei to form the first hydrogen atoms (at minute 3 to 20), there cannot be any EM and Relativity laws governing spacetime; and neither can the equivalence $E=Mc^2$ exist before the onset of mass, with the emergence of massive particles having crossed the Higgs field (along the famous Einstein equation that equates energy (E) to the mass (M) multiplied by the speed of light (C) squared).

Yet, there are also massless (or near-massless) particles such as photons and some types of neutrinos that can reach very high levels of energy. And we know that when the universe was the size of the first quantum (at Planck scale), it had an immense energy (10^{19} GeV – giga or million electron-volts) and a bewilderingly high frequency (1.85×10^{43} Hertz). And it seems similarly that the speed of light C, setting the limit of speed for the whole electromagnetic spectrum (from microwaves to gamma rays) is definitely bound to the spacetime region, at least from the time of the photons decoupling onward.

Spacetime, then, is literally born, either at Planck scale or else just after with the Higgs field and the first particles gaining some mass. Then all the EM radiations will abide by the speed of light C (at 3.00×10^8 m/s in the vacuum), and all speed in spacetime (theoretically at least) will be constrained by the C limit. Similarly, the EM laws, such as the inverse square-law showing a decrease of the signal/force with distance, are strictly bound to the spacetime region.

In brief, the speed of light limit – that no energy ray can exceed C – is a law applying solely to the spacetime region or 4D-matter region, namely to the EM energy spectrum, and to the quantum region. Indeed, in ISST, it is called the QST or quantum-spacetime region, because the theory predicates that the particles/strings, in their particle aspect, do abide by spacetime and the C limit (their position parameter), whereas in their weird wave and superposition aspect they belong to the hyperdimension.

In summary, the pre-spacetime region (sub-Planckian and sub-quantum) is a hyperdimensional region in which the laws of spacetime (EM laws and the speed of light limit) don't apply, because matter (particles), mass, space, time, and material causality are not existing yet. However, at Planck scale, the point-universe has already an astounding energy, as we mentioned, calculated to correspond to 10^{19} giga electron-volts, and we can only assume this energy to be widely accrued the closer to the origin. If matter, mass, and the C limit don't exist before Planck scale, and yet the point-universe has an immense energy, then this energy is by definition of a non-matter type, and linked neither to mass nor to C. In effect, as posited by ISST, it is a hyperdimensional energy, its virtual speed vastly exceeding C and this syg-energy that fills the hyperdimension is essentially (or rather, "quintessentially") linked to cosmic consciousness.

2. Light Speed Anomalies & nonlocal processes

2.1. Inflation phase deemed at billion times *C*

However, there is a first major anomaly in terms of EM laws and the speed of light happening above Planck scale (about 10^{-43} second) and before the Higgs field starts at 10^{-10} second. In effect, during the inflation phase between 10^{-36} and 10^{-32} second (an infinitesemal fraction of a second after Planck scale), the point-universe shows an explosive expansion and its size will be multiplied 10^{50} times. Yet, the size of the point-universe is so small, and the forces it houses so huge, that it stretches our imagination to try to figure its reality. The Big Bang is now considered to be this inflation phase, an immense time after the X-point of origin.

The creators of Inflation Theory, first Alan Guth and then Andrei Linde, estimated the speed at which this happened to be *billion times that of light*. The inflation model had been put into question by some physicists opposed to a universe having such origin; but it is indirectly supported by the high coherency, despite a faint but crucial anisotropy, found in the cosmic microwave background.

As shown on the time axis of Fig. 1 (in seconds at the top), the present cosmological understanding is to view the onset of the *matter era* precisely during the inflation. Yet, in ISST framework, given that the inflation happens so early after the X-point of origin and well before the Higgs field and its plasma of particles, we cannot dismiss the possibility that this enormous speed would reflect a hyperdimensional energy still operating – in which case the spacetime would really start later with the Higgs field, with the onset of massive particles exiting it. And since the neutrinos had decoupled from this ultra hot Higgs plasma by the first second, we can consider that their speed was still immensely greater than that of the inflation phase, and therefore of C.

In this perspective, the neutrinos would be the last HD sygons (with the lowest HD frequency) to cross Planck scale and the (just forming) Higgs field without acquiring mass. ISST assumes that the Higgs field is created by the low-frequency sygons (issued from the late-time and larger turns of the ISS spiral of the origin) whose wavelengths, at one point, became so large as to start interfering, thus creating a turbulent foam quickly densifying, through which the subsequent and even larger sygons will have to pass, as whirling loops, acquiring mass in the process; the massive particles exiting the Higgs field will retain the HD sygons at their core, as a compact sub-Planckian 5^{th} dimension.

Also, the *domain of torsion waves* has seen a volcanic development in Russia lately, with physicists such as Shipov and Akimov. According to them, torsion waves can connect systems at an immense distance at a speed that is a billion times that of light (10^9 *c*). The interference patterns of the torsion waves of stars and solar systems would create a galactic hologram, and those of galaxies would create the universe hologram, through which all galaxies and stars can evolve coherently.

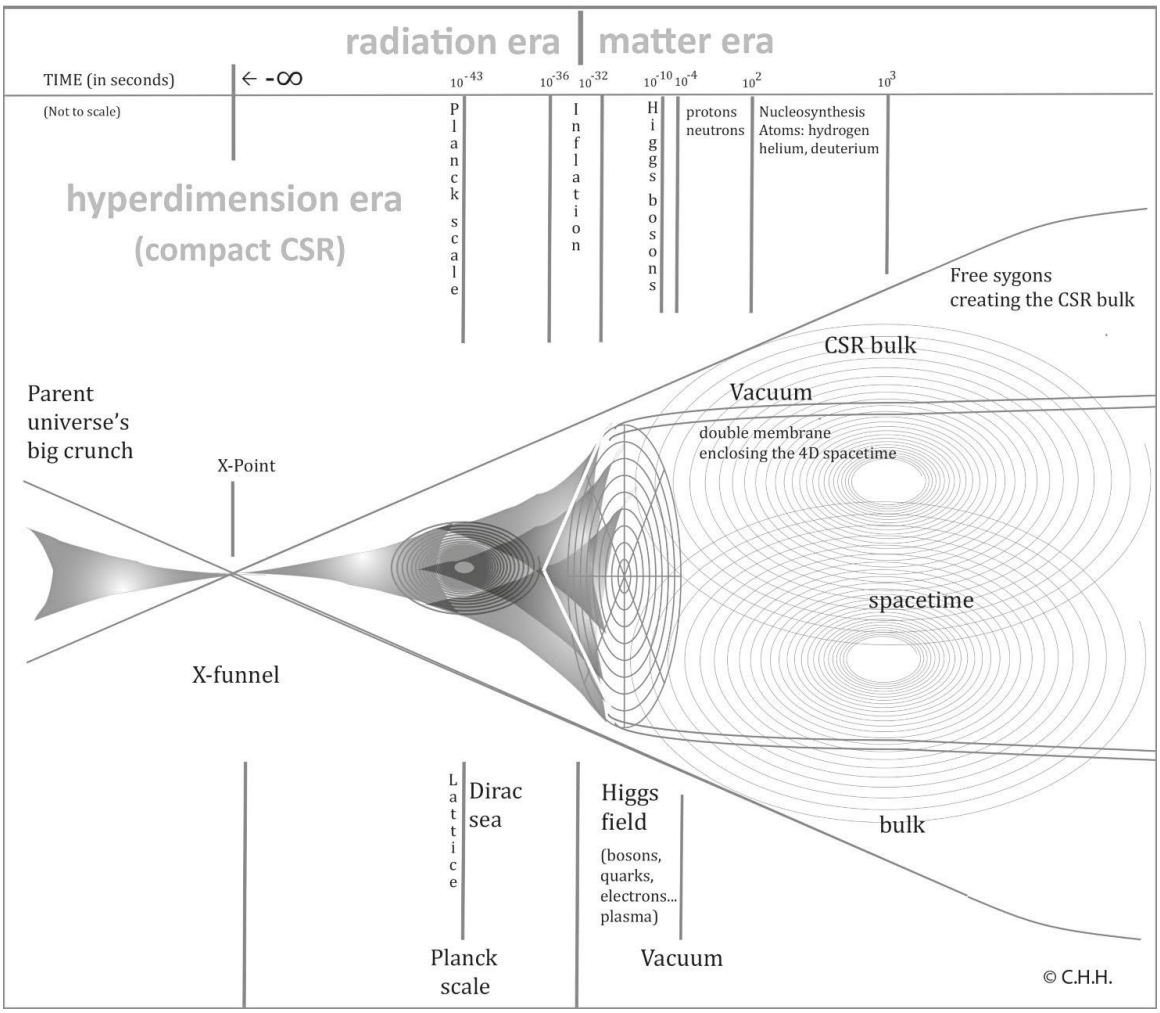

Fig. 1. Timeline in the Infinite Spiral Staircase theory. From the X-point of origin: sygons creating both the CSR-HD bulk and spacetime. Concept and digital artwork by Chris H. Hardy. (Cosmic DNA, 313)

2.2. Entanglement: Communication beyond spacetime

As I have argued in a 2017 paper called "*Nonlocal consciousness in the universe"* there are five types of processes that display a 'beyond spacetime' property or nonlocality. Not only are these at odds with Relativity and EM laws, but also with the indeterminacy of quantum mechanics. We already saw the first three: with the first one being the sub-Planckian region (both the pre-spacetime at the origin, and the subquantum region at any coordinates of spacetime; the second the beyond-spacetime, non-matter, dark energy; and the third the faster-than-light speed during the inflation phase. As for the last two nonlocal processes, the fourth is the entanglement and the fifth type is psi phenomena such as telepathy – proven to operate beyond-brain and beyond-spacetime. Of these five nonlocal (beyond-spacetime) processes, only three present a clear and demonstrated beyond-C (or tachyonic) anomaly; yet, in ISST, I argue that psi, telepathy, and

synchronicities are hyperdimensional processes that operate via the syg-energy of the HD, with virtual speed vastly superior to C (Hardy 2015, 2017).
Let us now focus on the entanglement. In fact, nonlocality has been established via the entanglement experiments, whose protocol has been devised by John Bell, based on the famous Einstein-Podolsky-Rosen, or EPR, thought experiment. According to a series of experiments conducted by Alain Aspect between 1982 and 1984 that conclusively proved the entanglement, particles issued from a unique source (i.e. they are "paired") abide by Pauli's law of spin, in the sense that their spins must remain complementary. He posited that two electrons can share the same orbital at the condition that their spins be opposite, meaning that the spin of such paired particles can only take the values, for example, -1/2 and + 1/2. For instance, if the spin of particle A is modified (as with a mirror), then particle B will immediately change its spin to remain complementary.

One experiment implied one of the particles being bounced on the moon, and the enormous distance thus gained between the two paired particles showed without a doubt that the exchange of information (or nonlocal correlation) between the distant particles couldn't imply a signal transmission through space, given that the correlated change of spin happened quicker than the speed of light. Citing a 2012 paper by John Matson, the Wikipedia article on *Entanglement* states (https://en.wikipedia.org/wiki/Quantum_entanglement) "so-called "loophole-free" Bell tests have been performed in which the locations were separated such that communications at the speed of light would have taken longer – in one case 10,000 times longer – than the interval between the measurements." Thus, we have an experimental proof of an exchange of information (at the very least) 10,000 times C.

Since space is indissolubly enmeshed with time in the spacetime of Relativity, the entanglement reveals a 'beyond spacetime' process. Thus, while the paired particles (photons or electrons) are themselves existing in spacetime (in their particle aspect), *their entanglement instantiates nonlocality* (in their wave aspect). Furthermore, as I've proposed it in ISST, the wave component and wave processes of particles belong to the hyperdimension, and thus their connection and entanglement is, in effect, an instantaneous exchange by the Rhythm hyperdimension (hypertime in ISST).

Hu & Wu (2013) postulate that "quantum entanglement arises from the primordial self-referential spin processes which are envisioned by us as the driving force behind quantum mechanics, spacetime dynamics and consciousness." Moreover, they posit these spin processes as instantiated "in non-spatial and non-temporal prespacetime" – a predicate that is in accord with ISST in more than one respect. Firstly because in their view and that of ISST pre-spacetime and spin are associated with consciousness. Secondly because spin is also an essential dynamics at the origin in ISST.

In fact, the *Infinite Spiral Staircase* (the ISS) of the origin is a golden spiral, therefore constituted of quarter-circles (the staircase steps) whose radii follow the Fibonacci sequence. This spiral issued from the White Hole of the origin with a near-infinite energy is itself spinning outward, but moreover, each quarter-circle is a virtual circular closed-string (the full circle itself with this radius and frequency); the whole ISS spiral is thus a near-infinite set of primordial spins that,

beyond their angular momentum, are also each one associated with a specific frequency (and its harmonics).

Then, each quarter-circle launches a torsion wave (a sygon) of this frequency, and this closed string is also spinning, and these sygons will pervade the (future) matter universe, some being at the core of all particles as a 5th dimension, and others crisscrossing the universe as Free Sygons. And thirdly, while it is an agreed-upon fact that the opposite spin of fermions (asymmetrical) particles is what instantiates the entanglement, we still have, with particles, one foot in the post-Planck region (QST) of matter, C, and mass. But if, as ISST hypothesizes, the wave component of the particles, and therefore their nonlocal entanglement, is a dynamics pertaining to the hyperdimension – both the Rhythm-Rotation and the Center-Circle HD, these two being enmeshed with hyperconsciousness –, then it fully corroborates Hu and Wu's postulate.

In summary, there are three major demonstrated anomalies regarding the speed of light limit: (1) the sub-Planckian region (which exists in pre-spacetime, in each particle, and also at any point of spacetime); (2) the inflation phase; (3) the entanglement. All of them, with the addition of a fourth one, psi phenomena, are hypothetized in ISST as hyperdimensional processes driven by the tachyonic syg-energy of the hyperdimension.

2.3. Some astronomers deem C & gravity originally 10-20 billion times faster

A periodicity has been discovered in the redshift of galaxies, called redshift periodicity or quantization, by William Tifft studying the Coma cluster and corroborated by several astrophysicists in the 1990s, such as Bruce Guthrie and William Napier (from their 1997 study of 250 galaxies). It means that the redshifts of cosmologically distant objects (in particular galaxies) tend to cluster *around multiples of some particular value*; and furthermore, it implied that *the speed of light had been enormously higher at the origin*. In 1987, V. S. Troitskii had argued that the lightspeed had originally been about 10^{10} times faster than now. Then several mainstream physicists argued and published that the lightspeed was hugely higher at the Big Bang scale (such as Joao Magueijo of the Imperial College in London, John Barrow of Cambridge, Andy Albrecht of the University of California at Davis, John Moffat of the University of Toronto).

All this led some astrophysicists such as Tom Van Flandern and Tifft to hypothesize a *wave nature* to the interstellar void, with a higher density of stellar clouds on the force lines. Van Flandern then put out a theory of gravity (based on Le Sage work) in which G derives from "a flux of invisible 'ultra-mundane corpuscles' impinging on all objects from all directions at superluminal speeds," these particles offering limitless free energy. In a 1998 paper, he argued that *gravity (the graviton), based on observations, is "not less than" twenty billion times the speed of light*.[1]

Van Flandern bases his argument on astronomical observations, the crucial one being that all astronomers were taught "that all gravitational interactions between bodies in all dynamical systems had to be taken as instantaneous, [… and] to calculate orbits using instantaneous forces,"

[1]Van Flandern, T (1998). "The speed of gravity ? What the experiments say". Physics Letters A. 250 (1–3): 1–11. Full text at http://www.ldolphin.org/vanFlandern/gravityspeed.html. See also the full text of his 2003 article on "Allais gravity…" https://www.researchgate.net/publication/228453035_Allais_gravity.

since introducing a lightspeed delay into gravitational interactions would give results disagreeing with observations. (These interactions are distinct from gravitational radiation and waves, which propagate at lightspeed.) And in fact, says he, "It is widely accepted, even if less widely known, that the speed of gravity in Newton's Universal Law is unconditionally infinite." Whereas in General Relativity (GR), gravity is an effect of the geometry of curved spacetime and of mass affecting this geometry, and is not considered a force that propagates. Yet Van Flandern underlines that a number of problems remain with GR: "How the external fields between binary black holes manage to continually update without benefit of communication with the masses hidden behind event horizons. (…) Why do total eclipses of the Sun by the Moon reach maximum eclipse about 40 seconds before the Sun and Moon's gravitational forces align? How do binary pulsars anticipate each other's future position, velocity, and acceleration faster than the light time between them would allow? How can black holes have gravity when nothing can get out because escape speed is greater than the speed of light?"

3. The Infinite Spiral Staircase Theory

ISST posits a triune hyperdimension composed of three interwoven strands: hyperspace, hyperconsciousness, and hypertime (See the 2015 book *Cosmic DNA at the Origin* and several articles since 2015[2]). This triune HD sprang forth from the origin (a White Hole coupled with the Terminal Black Hole of the parent universe) as a golden spiral bearing on the quarter-circles composing it a near-infinite data bank of frequencies (the steps of the "staircase") based on the logarithm of Phi (a quasi-Fibonacci sequence). This data bank was (and is still) bearing a near-infinite active information field about all beings and systems optimized in parents universes (thus acting as a cosmic and hyperdimensional DNA) as well as about all new systems existing and evolving in our universe. Each quarter-circle of the ISS sent a torsion wave of the specific frequency and its harmonics, in effect a virtual closed-string (or closed-brane) of immensely faster-than-light (FTL) speed and spin (rotation), called a *sygon*, along the drift of the spiral, in a large cone.

The highest frequency sygons, nearer to the origin, called the Free Sygons, formed the bulk of the HD (see Fig. 1 above); then the low-frequency HD sygons (with larger and larger wavelengths) started interfering at the mouth of the ISS spiral at Planck length, thus forming the quickly densifying and turbulent Higgs field (as an orthogonal near-flat round surface) – a field that the subsequent whirling sygons now had to cross (precisely, to spin and tunnel through), thus acquiring mass and a cloud of charge, and leading eventually to the onset of the particles of the Standard Model and the matter era. Each particle and atom will thus keep, at its core, the original HD sygon, thus forming its 5^{th} dimension, curled up and compact at a sub-Plankian scale.

ISST postulates that the massive particles exiting the Higgs field started the Quantum-Spacetime region (QST) as a near-cylinder enclosed within the larger and already existing HD bulk. One specific triple prediction of the ISST is that, as a consequence of the rotational momentum of the cosmic ISS of the origin, and its enormous negative radiation pressure, as well as that of the

[2] Full articles on https://independent.academia.edu/ChrisHHardy/Papers.

torsion waves of all sygons, *the Higgs field* (1) was itself set in rotation, and it extended and curled itself around the whole QST region, (2) thus imprinting its curvature on spacetime, and (3) it became the *curved* vacuum membrane, turbulent with the HD-sygons creating loops and bubbles of polarized vortices while crossing it back and forth (Hardy, 2015b, "The quantum vacuum…")

3.1. ISST: The triune CSR hyperdimension & the HD sygons

The three strands or 'dimensions' of the hyperdimension are enmeshed, just like our 3D of space are enmeshed with 1D of time in our 4D spacetime region:

- ***Center-Circle HD,*** or **hyperspace**, allows the *self-organization* of individual systems, that is, a creative, innovative, and negentropic force which, enmeshed with the syg-HD, creates ever novel organization and underlies biological evolution. In the ISS, the golden spiral at the origin, Center-HD is governed by Pi.

- ***Syg-HD*** or **hyperconsciousness**, is a hyperdimensional layer of consciousness in all beings and systems in the universe, called semantic field or syg-field in short. Thus, as human beings, our HD layer, or personal syg-field, is our Self (soul, atman). Syg-HD, at the global level (the HD bulk), is cosmic consciousness – as the ensemble of all the HD-Selfs and as the Whole or the One field. This HD instantiates a permanent creation of meaning and information, of collective intelligence and knowledge in the universe, as well as spontaneous connections based on meaning and sympathy (such as synchronicities and psi).

- ***Rhythm-Rotation HD*** or **hypertime**, operates via *rhythm and resonance*, and allows an instant communication at great distances between systems. In the ISS – the golden spiral at the origin – Rhythm-HD is governed by *Phi* (the golden ratio) and the logarithm of *Phi* applied to the radius of the expanding spiral.

The transition from the matter region to the HDL region (and vice-versa) happens in the singularities of black and white holes. Thus, in the parent's universe's terminal black hole (BH), all matter is translated into hyperdimensional (HDl) syg-fields and these complex syg-energy fields will be retranscripted into bio-systems and matter-systems after exiting the White hole of the origin. Thus, in between universe bubbles – precisely in between the preceding universe's terminal BH singularity, and the origin's white hole singularity (the orthogonal membrane) –, there is a region of pure HDl syg-energy.

Interestingly, the co-author of a recent study of stars orbiting our supermassive black hole *Sagittarius A** at the center of the Milky Way, Andrea Ghez of UCLA, states they have corroborated Einstein's General Relativity view of gravity: "In Newton's version of gravity, space and time are separate, and do not co-mingle; under Einstein, they get completely co-mingled near a black hole." (Do, Hees, Ghez, 2019). In ISST's viewpoint, a BH's singularity opens on the HD, and in the CSR-HD, hypertime and hyperspace are indeed co-mingled and interlaced with hyperconsciousness.

Here is the fundamental principle regarding the CSR-HD in ISST:

- All matter systems, at all scales, from particles to galaxies, have an hyperdimensional layer, including ourselves. The HD layer of organic and ecological systems, and even matter systems, is a proto-consciousness called an eco-field, thus instantiating a type of panpsychism (Hardy, 2017).

- As for our global and personal HD layer, it is our own syg-field or Self (spirit, atman, soul); and the HD layer of our body is our body-consciousness. This HD Self is the immortal being (soul) of the incarnated person, and it is a fully autonomous self-conscious, and in fact supraconscious, entity dwelling in the CSR-HD. It is thus in constant communication (1) with the cosmic ISS (bearing the Akashic information), (2) with resonant syg-fields (minds, ideas, places, objects, etc.).

- Even our matter universe has its global HD layer: the cosmic consciousness (brahman, Tao), Jung's collective unconscious; in ISST, the CSR hyperdimension.

3.2. ISST: 3 regions in the pluriverse

In the ISST cosmology framework, the pluriverse is composed of three regions:

1. ***The Quantum-Spacetime (or QST) region***, in which three forces operate – electro-magnetic force, strong force, and weak force – and in which the EM laws and the C limit hold sway. Spacetime is a curved space, as in Relativity theory, but in ISST, in contrast with current models, the quantum vacuum is a curved membrane enclosing it and making the boundary with the HD bulk.

2. ***The CSR Hyperdimension region***, in which hyperconsciousness (mostly the HD Selfs of individuals), hyperspace, and hypertime operate conjointly via syg-energy and a spontaneous connective dynamics based on meaning and fine-tuned by three main parameters – semantic proximity, semantic intensity, and coherence (C. Hardy 1998, 164-6). Intuitive intelligence, psi capacities, and high states of consciousness belong to this CSR-HD and exhibit the constant influence of consciousness and individualized Selfs on their environment and the matter systems they interact with.

   This HD layer both on its cosmic ISS and in all systems' individual ISS (as a 5th sub-Planckian dimension) holds the (ongoing, evolving) information on all beings and systems in the universe, thus acting as a complex Akashic field of active and self-organized information, keeping the memory of all past and current states of systems, as well as their probable future paths. The individual ISSs keep a two-way exchange of information about the state of their system with the cosmic ISS, and this is how the latter is imprinted in realtime about all changes in all systems in the universe (and why the vacuum menbrane is crossed both ways). The syg-energy units of the CSR-HD are the sygons (that constitute syg-energy); they are torsion waves made of circular/annular virtual strings at the high-frequency range of the sub-Planckian cosmic ISS.

3. ***A quantum vacuum membrane*** surrounds the QST region (of positive energy) and stands as its boundary with the CSR-HD (dark energy, negative). As mentioned above, the Higgs field at one point becomes the vacuum's Zero Point Fluctuations field (virtual particles with maximal quantum turbulence). ISST is in full agreement with this vacuum seen as a brane (surface), modelled by Jack Sarfatti (2006) as a complex two-dimensional boundary separating the spacetime from the Dirac sea or dark energy (negative energy), in which all anti-particles (antimatter) reside; for Sarfatti, these are linked through wormholes to their paired matter particles in spacetime and form "stable bound pairs," lots of them being network-linked, thus creating "loop vortices" and "networks of loops."

   ISST adds the prediction that this quantum brane is a curved surface, which would make the integration easier with the curved spacetime – modelled by Einstein on Riemann's hypersphere –, while remaining consistent with quantum theory, which, both in the Standard Model and the superstring M-Theory, is set in a flat space. Let's note that in his 1854 thesis presentation, ten years before Maxwell, Bernhard Riemann, a German mathematician, was the first to predicate higher n-dimensional space – such as a 4th dimension of space in order to model a hypersphere at 3 dimensions, thus inventing the maths of the curved space that Einstein elaborated on.

   In this paper Riemann stresses that if we ascribe to space a constant curvature, not only is it an unbounded surface, but this surface, "in a flat manifold of 3 dimensions would take the form of a sphere, and consequently be finite." (3.2. p. 660). And also, concerning the infinitely small: if we take the metric of space to be a continuous manifold, its "ground must come from outside, (…) in binding forces which act upon it. (3.3. p. 661). And ISST is in accord with that in two ways: the QST bubble is finite within the CSR-HD, and it gets its Einsteinian curvature from the immense negative radiation pressure of the CSR-HD. Also, QST being finite, it calls for both a beginning and a big crunch of the matter universe bubble (the Terminal Black Hole).

3.3. Syg-energy: Two types of hyperdimensional FTL sygons

Altogether, the *Center-Syg-Rhythm HD* (CSR-HD) is filled with a hyperdimensional (HDl) energy called *syg-energy* (whose virtual particles-waves are the sygons), that both pervades the HD and acts as its core dynamics. Syg-energy is a connective dynamics driven by meaning/semantics (Syg-HD), that is self-organizing (Center-HD), and that instantiates HDl frequencies (Rhythm-HD), all at once.

Some cosmology models use both a 'compact, sub-Planckian HD' (as in Kaluza-Klein theory) and a 'bulk HD' (as in the 1999 Randall-Sundrum theory), such as Bernard Carr's universal *higher dimensional information spac*e (Carr 2003, 2009), and my own ISS Theory. *So that in ISST, the HD sygons are of two types*: *the Free Sygons* of very-high-frequency (VHF) that now fill the bulk of the HD and compose our HD-Self; and the low-frequency sygons at the core of the particles and all matter systems (as a 5^{th} dimension), whose collective field makes our body-consciousness ("low-frequency" in terms of the HD, thus at least above, and as a multiple, of Planck frequency).

4. Beyond Space Communication & Travel via Hyperdimension

4.1. Speed of communication in and via the HD

The VHF Free Sygons crisscross the universe unimpeded at billion of billion times the speed of light, as torsion waves that spontaneously link resonant, sympathic, or coupled systems, for example two friends bonded by love and empathy, sharing a telepathic information, or a person having a sudden clairvoyant information about burglars trying to penetrate into their beloved country house several hundred miles away (as it happened to me).

I hypothesize that the virtual speed of communication and exchange in the HD is an enormous multiple of C calculated to be proportional to the frequency of torsion waves sygons – and thus tends to the infinite near the origin. In all practical purposes, the VHF sygons that created the bulk of the HD (some clusters of which constitute our immortal Selfs and the information or syg-fields of all systems) instantiate a near-instant communication, whatever the distance, as shown in the entanglement experiments of the EPR type. As I suggested earlier, ISST postulates that, as any matter system made of particles, Shrödinger's Psi equation would have its own HD, in its wave and superposition component.

As for the sygons at the core of particles and all matter and massive systems, which, as all sygons do, keep interacting and exchanging information between them, while of a lower HD frequency, their velocity is still hyperdimensional and widely higher than C, and they could be a good candidate for instantiating the instantaneous attraction between celestial and stellar masses, in other words, for gravity as a force.

Given that ISST posits that the highest mental, intuitive, and spiritual processes are instantiated by the syg-energy of our (personal) hyperdimensional Selfs, these thought processes partake of the properties of syg-energy and notably of FTL speed. Since a form of synthetic thought (non tied to language) is used in telepathy, I predicate that psi communication involves immensely faster-than-light speed. So that telepathy with alien beings residing on exo-planets in our galaxy does seem instantaneous. As for an astral travel (with the lower-frequency sygons of our energy-body), it appears instantaneous to anywhere on Earth (as goes my experience); and only if the world is far beyond our solar system, does it feel like it takes some short time.

4.2. The CSR hyperdimension as annulling space in the entanglement

The HD Rhythm-Rotation shows all quantum-scale systems (particles/waves) have some spin, and that some may present a double rotation in a torus – both clockwise and anti-clockwise, such as the whole hourglass system of two entangled particles we will now explore. This HD allows information to be shared instantaneously between two systems that are distant in Einsteinian space but that have the same frequency or Rhythm. But let's remember that this information is not an abstract one, but one filled with meaning, intention, and generally the attributes of consciousness (aka of the syg-HD). Rhythm-HD instantiates a real in-formation: a spontaneous communication and influence through the rhythms and the specific frequency (or network of frequencies) of the systems in rotation.

- Whatever their scale, any rotating system, or rhythmic form (such as a spiral shell) – sygons, electrons in the shells orbiting an atom, or planets orbiting a star – all have a signature in the Rhythm-HD. Thus, the electrons' orbits are a complex and plural Rhythm-system with both types of spin – angular momentum (rotation/spin as up, down or zero) and orbital angular momentum; similarly, each planetary system (with two basic rhythms for each planet, rotation and orbital revolution) shows a complex rhythm consisting of all planetary rhythms.

- To the Rhythm is attached the parameter of the positive or negative spin and its value as integers or half-integers (also referred to as spin-up, spin-down, and spin 0 (ground state).

- Each spinning sygon, particle, or system has its own frequency (or network of them) and energy as function of this frequency (according to Planck's relation).

- Rhythm-HD is a nonlocal communication, as all resonant or proximate rhythms communicate between them, and all identical but exactly inverted rhythms are entangled. (In fact, it's the opposition of their spin/rotation that is maintaining the system in an entangled state, and the entire hourglass within the Syg-manifold).

- In brief, Rhythm-HD is annulling the 3D space.

Thus, Rhythm-HD allows us to model the EPR paradox in a new light:

The entangled system with two paired particles with opposite spins can be represented, in Rhythm-HD as a unique rhythmical system – as a hourglass with 2 coupled spinning tops attached at their small end, and turning in the opposite direction:

- For a unique system (such as a closed-string sygon) the spin direction, the angular momentum (rotation speed) and the frequency are the Rhythm-HD parameters.

- For 2 entangled (asymmetric) paired particles, it is the double and inverted spin, angular momentum (rotation speed) and frequency that are the Rhythm-HD parameters.

In the entangled system, the 2 paired particles are coupled via their identical but opposite spins. Notwithstanding the ever increasing spacetime distance between them, their double Rhythm system remains a unique entity in the Rhythm-HD.

If one the 2 spins (Rhythm-HD) is mecanically or artificially inverted, the other one instantly gets inverted in order to maintain the integrity of the system; because, in Rhythm-HD, their double-rhythm is still unique and enmeshed, and they continue to respond to each other and to be coupled in the HD (beyond spacetime), whatever the parameter of distance in spacetime. It means that it is not the 2 particles per se that are entangled, but rather their hyperdimensional Rhythm as a set of parameters. And thus, to perturb (in effect, to invert) one of the 2 spins amounts to rolling over the whole hourglass.

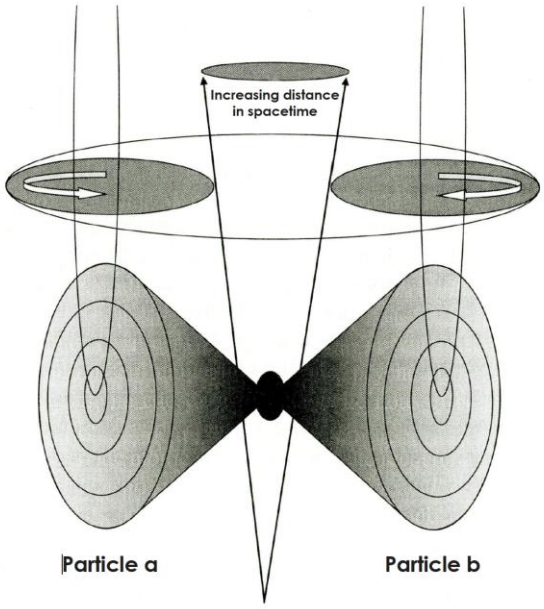

Fig. 2. Entanglement of particles in the ISS theory. The paired entangled particles constitute a complex but single system in the Center-Syg-Rhythm hyperdimension – represented as an hourglass with two spinning tops rotating in an opposite direction. They remain interconnected via their Rhythm-HD, whatever the increasing distance separating them in the 4D-spacetime (the vertical cone). (Digital artwork, Chris H. Hardy, taken from La Prédiction de Jung, 2012, 400)

This double-funnel structure is the same one as the Syg-Funnel appearing to cross the space dimension and to link two distant telepathic-harmonic fields (or Telhar fields, as recounted in *The Sacred Network*, 272-76). It is also identical to the X-Funnel at the origin of the universe (the BH-WH Kerr double system).

Thus this X-shape (double-funnel, hourglass-shaped) structure, as expressed in the Tibetan Dorje, is nothing less than an archetypal form of the CSR-HD. The quantum entanglement can allow only multiples of 2 paired particles with opposite spins. It seems that systems with four (2x2) entangled particles – a double X-funnel, or double hourglass, or double Dorje – are also such archetypal forms, as shown in the Cross, and cross-shaped Dorje.

It is to be expected that systems with more entangled particles or units do exist, on a base-2. Indeed, it was a core step in Pauli's elaboration of the Law of spin, that he posited "a new quantum theoretic property of the electron, which I called a 'two-valuedness not describable classically,'" after which "the general formulation of the exclusion principle became clear to me" (in 1925). (Pauli's Nobel lecture, 1946, 29).

4.3. Hugely Faster Than Light communication and travels

Thus we saw that:

1. Rhythm-HD shows the property of annulling 3D-space between particles entangled via their spin direction, angular momentum (rotation) and frequency; and

2. to perturb one of the 2 spins (of the paired particles) amounts to rolling over the whole hourglass in the HD.

It is evident that the entanglement of particles, at least in the last two or three decades, has been used as a fertile ground for the research into sending and receiving information at FTL speed, indeed quasi instantaneously; and that the exchange or translocation of matter is also being experimented along the same type of entangled systems protocol; this despite the fact that most of the forefront research in the world is probably classified and hushed.

The Wikipedia article on *Quantum teleportation*[3] claims that "quantum information (e.g. the exact state of an atom or photon) can be transmitted (exactly, in principle) from one location to another" (provided a previous "quantum entanglement between the sending and receiving location," but that "it cannot be used for faster-than-light transport or communication of classical bits. While it has proven possible to teleport one or more qubits of information between two (entangled) quanta, this has not yet been achieved between anything larger than molecules." It also insists that "quantum teleportation is limited to the transfer of information rather than matter itself."

The ISST perspective departs from this stated limited view. The argument in 4.2. above allows us to fathom that inverting the spin of the particle at one end of the Rhythm-HD hourglass, provokes in reality the instant translocation of particle A (with its complete system's syg-field information) to the location and momentum of particle B, while particle B takes the 4D-locus of particle A. So that it would not be solely an exchange of information between the two systems at the two ends, but rather a double and *reciprocate translocation – a swapping*. Each system takes the place of the other one, whatever the spacetime distance between them – and that means not only whatever the *4D spatial distance* between them, but also whatever the *4D time distance* between them. It thus opens the possibility of transferring or translocating instantly a system set at the A end, to the B end, and vice-versa.

However, let's not forget that in order to make use of this hyperdimensional dynamics, one of the particles/systems has to be dynamically trapped in the spacetime coordinates of the receiving/departure gate, while the other one has necessarily to be sent at or below the light speed at the gate of sending/arrival. So that, in this protocol at least, even if the 'gates' are somehow stabilized and fixated (and they would have to be for all practical purposes), to establish them in the first place would take a 'normal' spacetime travel duration at either particle speed or at the state-of-the-art interplanetary or interstellar travel speed.

[3] https://en.wikipedia.org/wiki/Quantum_teleportation

5. FTL Interstellar Travels

Let us now focus on the alien crafts and 'fastwalkers' speeding though our interplanetary space and observed by astronomers – such as Jacques Vallee when he was working in his youth at Paris Observatory, something he recounts in his biographical Journals *Forbidden Science* and in his sci-fi *Fastwalker*, observations that, unsurprisingly, were dutifully hushed and erased from the official books. Observations made by the cameras of diverse satellites, or the most sophisticated telescopes on Earth, or else by amateurs astronomers; for example, of crafts crossing the entire moon surface in a few seconds. Or else observations recorded on the diverse cameras and radars of Fighter jets, as making uncanny gravity-defying turns, decelerations and accelerations deemed "impossible" and that would be instantly lethal for us humans, unless the whole craft was in an anti-grav field. Or else the numerous observations of instant (or near instant) disappearances of the alien crafts, as shown on the footages the Navy pilots' intercept of a UFO/UAP, namely, three clips, released by the Navy between December 2017 and March 2018 by *To The Stars Academy of Arts & Sciences*.

These three clips of declassified military footage are "unidentified aerial phenomena [UAP]," Navy spokesperson Joe Gradisher confirmed to CNN.[4] Of course I'm not interested here in analyzing these too numerous cases, but in the principles of such interplanetary or interstellar modes of locomotion. Let's remember the boomerang-moving interstellar visitor Oumuamua, which made a large turn around our sun and approached it on September 9, 2017; its trajectory took it on a path near to Earth, with its closest approach to Earth within 15 million miles only, on October 14, 2017. Oumuamua came from the direction of the constellation Lyra, at about 57,000 mph (92,000 km/h) relative to the sun, and was observed dashing away at 97,200 mph (156,400 km/h) toward the constellation Pegasus (thus enigmatically increasing its speed by 71% in a way that couldn't be explained by the gravitational slingshot it got from orbiting the sun).[5]

And just to keep things in perspective, the Earth orbital speed around the sun is about 67,000 mph (107,000 km/h), and the sun (and our whole solar system) orbits our Milky Way galactic core at a velocity of 828,000 km/hr, and yet, while at about 28,000 light-years from this core, we take about 230 million years to complete one orbit (see fig. 3). And our sun's nearest neighboring stars in the galaxy are the triple star system of Centaurus (Proxima Centauri, and Alpha Centauri A and B, at 4.23 Ly, 4.32 Ly, 4.37 Ly respectively). Our fastest probe, New Horizons (sent to Pluto in January 2006 and that flew by Pluto in July 2015), travels at 33,000 mph. It takes light and radio waves 4.5 hours to get to Pluto.

[4] "The US Navy just confirmed these UFO videos are the real deal" by Scottie Andrew, CNN, 9/18/2019. (https://www.cnn.com/2019/09/18/politics/navy-confirms-ufo-videos-trnd/index.html)
[5] See the 2 posts on my blog, at: http://chris-h-hardy-dna-of-the-gods.blogspot.com/search?q=Interstellar

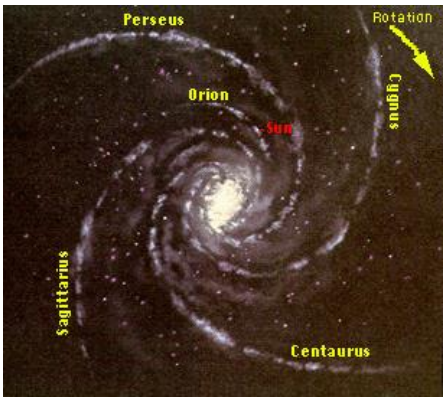

Fig. 3. The main arms of our Milky Way galaxy and our Sun and solar system on the Orion arm. Credit Starchild website, NASA/ GSFC.

5.1. Space-faring aliens most probably use the syg-energy of the hyperdimension

My view about aliens roaming the galaxy, expounded in my sci-fi *Space Allies*, is that very ancient alien civilizations (namely the ones integrated in our galactic Federation), have since ages discovered the boundless and tachyonic (FTL) energy of the hyperdimension (called *syg-energy* in ISST), and this is their primary source of energy (just as electricity is for us) that powers all their machines and allows them interstellar communications and travels via the HD, thus beyond spacetime. And consequently, they have no use for electricity, radio, or TV EM frequencies anymore.[6] Furthermore, syg-energy (the sygons, virtual closed strings and torsion waves) is much more than just a FTL-type of energy: let's remember that in the triune HD, hyperspace and hypertime, interlaced, make up the HD texture and are enmeshed with Syg-HD – the energy of consciousness, or rather consciousness-as-energy. So that in any sygon-based video, photo, or hologram, there's a dimension of psycho-mental depth, that allows to 'read' the emotions and thoughts of the intelligent entities without implying any real telepathic gift, and what's more, that can reach into the past.

This book explores syg-energy and envisions it has seven bands (just like radio and TV are frequency bands in the EM spectrum), and that only the first two bands have been mastered by the aliens, yet these suffice to power all machines, interstellar syg-coms, depth syg-hologram, and instant Be-SpaD travels (beyond-space-displacement) from one "sidereal node" or gate to another one. In *Space Allies*, the most advanced Ur scientists – bent on tackling the immense depth of consciousness – are starting to explore the Syg-3 band, which opens the possibility of reconstructing the local environment of any past event, anywhere, complete with its psycho-mental information, and to "step into the event' (as an alert mind with a virtual body) while being able to influence the minds of the protagonists in this event.

[6] Let me note that this sci-fi was an anticipation on the ISST theory, and a novel visionary take on my previous (cognitive sciences) Semantic Fields Theory (*Networks of Meaning,*1998), which already postulated syg-energy as a beyond spacetime and tachyonic energy, but still lacked its belonging to a hyperdimension.

5.2 Anti-gravity propulsion

Of course there are the anticipated anti-gravity propulsion systems filling our sci-fi visionary landscape, and they will very certainly happen and be fun on Earth (take my sci-fi writer's instinct for it). But this is certainly not the solution for interplanetary or interstellar travels, since the gravity due to Earth mass (whose gravitational field on the surface of Earth accelerates the fall of matter at +9.8 m/s^2) decreases with height, and zero gravity happens at a height of 3200 km (one half of the Earth's radius) and upward we are free from it. As for interstellar space, it has very low density and pressure, and is only an approximation of a perfect vacuum, since it contains a few hydrogen atoms per cubic meter. Gravity is the sole fundamental force (out of three) that we know is operating at a sub-quantum scale; the strength of gravity is 10^{-41} in the scale of the proton, and 10^{-36} in the scale of the quark.

And in these boundless reaches of this sub-Planckian hyperdimensional region (from Planck length back to the origin), a region devoid of any positive mass able to distort spacetime, gravity is bound to be a very different force indeed, and to operate along the HD dynamics and parameters of the CSR-HD – namely Center-HD (hyperspace), Syg-HD (hyperconsciousness), and Rhythm-HD (hypertime). Thus, General Relativity's view that gravity is solely an effect of massive bodies distorting the geometry of curved spacetime, cannot and doesn't hold in the sub-Planckian region devoid of matter and therefore of mass.

In a 2016 article called "The Birth of Gravity and Entropy and The ISS Theory of Cosmic Origin," co-authored with physicist John Brandenburg, we have argued that "Gravity can be fundamentally tied to entropy as a spectrum of states, and that this co-dependence of gravity and an entropic state-space in the Standard Model universe (post Planck scale) makes it necessary that it be founded on a sub-Planckian set of states, or frequency spectrum, thus instantiating a sub-quantum physics. This is in accordance with Hardy's ISS theory that posits a data bank of frequencies set along the quarters of circles of a golden spiral developing from the point of origin and increasing with the logarithm of *phi* up to Planck frequency."

In effect, the ISS, or *Infinite Spiral Staircase*, a golden spiral, follows the Fibonacci sequence (Fn) from the Planck length (ℓP) toward the X-Point of origin of our universe, with the spiral's radii and wavelengths tending to the infinitely small, and frequencies tending to the infinitely high. And as we know, the velocity is function of the frequency, thus leading, in the spectrum of states (the radii of the quarter-circles of the ISS) reaching to the X-Point of origin, to velocities tending toward the infinite.

6. A Thought Experiment in Translocation of Information

Despite Richard Hoagland's old but still relevant complaint that "there seemed [to be] no testable, physical *proof* of 'hyperdimensional physics,'" here is a thought-experiment that, would it work and allow the transmission of information or of a matter system via the CSR-HD, would become a tangible and resonant proof of the reality of the HD. Of course the experimental design should be strongly shielded against any EM energy or possible carrier wave, especially the 2 gates of the system.

Here is the problem we aim at solving. How can we conceive and construct a machine that would allow us:

1. to transfer complex info from one place (in the 4D world) to another one too far to be reachable at the speed of light, by using the HD quasi-instant connection via sygons? (and eventually, in the long term, a network of these 'transfer gates').

2. to transfer matter systems (including organisms) instantly across space via the HD?

7.1. The principles of the Rhythm two-gate system

* Create 2 perfectly resonant gates. For the research phase, and to entangle the two gate-systems, these two gates G1 & G2 (shielded) would be set in proximity to each other, in the same shielded room. When positive results are registered, the two gates are set for testing at a distance, for example at the tip of two nearby hills, a few miles distant, with a flatten top. Their configuration should be exactly identical, and they need to be shielded from each other and from any EM outside perturbation.

* To instantiate the Center-Circle HD, the apparatus has to be set either (*a*) as a high velocity coherent beam rotating in a *torus*, of the highest possible frequency, or (*b*) as a coherent field, a Bose-Einstein condensate (BEC) standing wave on a *round surface*.

* To activate Rhythm HD, the high frequency coherent beam (in *a*) or the BEC's standing wave (in *b*) has to be modulated by either a complex and precise musical rhythmic melody (say, Steve Reich's 18 musicians), or a complex symmetrical design or exactly spatially-inverted symmetrical design (such as some chaos-based crop circles). And secondly, the rotation speed in the torus (angular momentum), the frequency and the melody in G1 have to be in perfect sync with that of G2.

* The "tune-in phase" of the 2 gates G1 & G2 (creating their HD entanglement) will always be the same for the 2 gates (once the optimal configuration has been found); it demands, in each perfectly identical gates, to start the system at a synchronized time for the launching of the coherent energy beam or field, and 'play' the modulated melody or design for a short but exact time.

* The "transfer phase" uses a second replay of the modulation in G1 & G2, to which is superposed, at the sending gate G1, the message as a melody, or as a superposed design.

* The entangled gate G2 (at the receiving end) should immediately be affected and record the superposed message, at the very time it is sent by the sender gate, whatever the distance between the gates. In other words, G2 should be able to detect and extract a distortion of its tune-in melody, which is precisely the message that's being sent.

7.3. Networks of Rhythm-HD gates

- Each entangled gate can function as the sending or receiving end in precise periods (the protocol is just inverted).

- A gate can be entangled with any number of other gates, two by two, each pair having its specific Tune-in melody/design acting as the connection-activating code. If a gate A was entangled with gate B and C…n, then all the entangled gates would receive the information simultaneously and instantly, but the precise sending of a matter- or bio-system (a translocation) would be impossible, as it would land at any one gate by pure chance alone.

- Networks of gates for translocation: Gate A would be entangled with gate B via Tune-in (Ti) melody AB, A is entangled with C via Ti-AC, etc. The selection of an AC transfer would trigger the Ti-AC.

- To translocate a system, large gates about 100 yards/meters in the form of a vertically set torus would be necessary. The system will be made to cross the torus and will emerge at the other location.

- To translocate a person, same configuration. It is hypothesized that the whole syg-field of the person (and that includes their bodies) will relocate at the receiving gate.

Conclusion

To conclude, I would like to stress that it is only because the hyperdimension in ISST ties together hyperspace, hypertime and hyperconsciousness that its virtual strings/particles, the sygons, may carry a complete information about such complex systems as a human being with a mind, a brain, and a body, or about a planet with its billion inhabitants. And similarly, the triune CSR-HD and all the sygons in our universe (HD and quantum-spacetime regions) are able to carry all the information about a universe in which thrive innumerable intelligent civilizations and complex beings.

The universe is gigantic, both at the macro and micro scales; in fact I'm starting to visualize that it extends as immensely below Planck scale as it does above it. We know that aliens are visiting us since ages, having left many a trace in 'impossible' monolithic architectures, and that our ancestors have recorded their existence on Earth with petroglyphs and cave paintings. While any sophisticated futurist propulsion or spaceflight system using a motion through space (such as anti-grav, the use of gravitational slingshot, solar sails…) could be part of their advanced technology, these would be mostly of a 'local' usage, and in no way would it allow interstellar communication or travel in any workable time-lapse.

It makes it all the more probable that they have discovered and mastered the fantastic dynamics and energy of the hyperdimension that can annull space and allow instant communication and translocation of beings or crafts at interstellar distances.

I'm deeply convinced that humanity's next scientific and philosophy paradigm is a holistic integration of cosmic and personal consciousness with physics and cosmology, and that this can and will be achieved solely via a hyperdimensional framework that includes consciousness at the origin and pervading the universe. This will be our gate to meeting other intelligent civilizations and interacting with them in a cosmic age of Earth.

Acknowledgments: This article was originally written for the 2019 MUFON project "Great Questions in Ufology" spearheaded by Dan Wright (editor).

References

Brandenburg, JE. *Beyond Einstein's Unified Field. Gravity and Electro-magnetism Redefined*. Kempton, Ill.: Adventures Unlimited Press, 2011.

———. *Life and Death on Mars: The New Mars Synthesis*. Kempton, Ill.: Adventures Unlimited Press, 2011.

Brandenburg, JE. & Hardy, CH. 2016. "Entropic Gravity in Pre-spacetime & the ISS Theory of a Cosmic Information Field." *Prespacetime Journal 7(*5), 828-838. (9 April 2016). http://prespacetime.com/index.php/pst/article/view/968/944

Carr, B. 2010. "Seeking a New Paradigm of Matter, Mind and Spirit." *Network Review*, Spring & Summer.

———. *Universe or multiverse*. Cambridge, UK: Cambridge Univ. Press, 2009.

Do T., Hees A., Ghez A., et al. 2019. "Relativistic redshift of the star S0-2 orbiting the Galactic Center supermassive black hole." *Science*, Vol. 365, Issue 6454, pp. 664-668. 16 Aug 2019. DOI: 10.1126/science.aav8137

Fletcher L.N., et al. 2018. "A hexagon in Saturn's northern stratosphere surrounding the emerging summertime polar vortex." *Nature Communications* volume 9, Article number: 3564 (2018). *https://www.nature.com/articles/s41467-018-06017-3#Sec8*

Guth AH. 1997. *The Inflationary Universe*. Reading, Ms: Perseus Books.

Hardy, C.H. 2015b. "The quantum vacuum as a boundary to a hyperdimension: the ISST hypothesis." https://independent.academia.edu/ChrisHHardy/Papers

———. 2016. "ISS Theory: Cosmic Consciousness, Self, and Life Beyond Death in a Hyperdimensional Physics." *J. of Consciousness Exploration & Research* (JCER) Vol 7, No 11, pp. 1012-1035, Dec 2016. https://independent.academia.edu/ChrisHHardy/Papers

———. 2017. "Nonlocal consciousness in the universe: panpsychism, psi & mind over matter in a hyperdimensional physics." *Journal of Nonlocality 5(1),* June 2017. Special Issue. The other singularity: Psi and the Nonlocal Mind (edited by Ben Goertzel, Ph.D). https://independent.academia.edu/ChrisHHardy/Papers

———. *Cosmic DNA at the Origin: A Hyperdimension before the Big Bang. The Infinite Spiral Staircase Theory*. USA: CreateSpace, 2015.

———. *Space Allies.* (Exopolitics Sci-Fi series) USA: CreateSpace, 2017.

———. *The Sacred Network*. Rochester, Vt: Inner Traditions, 2011.

Hoagland, R. *Hyperdimensional Physics, Part 1:* http://www.enterprisemission.com/hyper1.html

Hu H. & Wu M. 2013. "What Is Quantum Gravity? What Is Graviton?" *Prespacetime Journal* 4 (11), pp. 1003-1026 (Dec 2013).

Jung CG. *Synchronicity: An acausal connecting principle.* The collected works of C.G. Jung: Vol. 8. (Bollingen Series, XX), Princeton, NJ: Princeton Univ. Press, 1960.

Jung CG, & Pauli W. *The Interpretation of Nature and the Psyche*. NY: Pantheon Books, 1955.

Kaku M. *Hyperspace: A Scientific Odyssey Through Parallel Universes, Time Warps, and the 10th Dimension*. New York: Anchor, 1994.

Magueijo, J. *Faster Than the Speed of Light: The Story of a Scientific Speculation*. Reading, Ms: Perseus Books, 2003.

Matson John. 2012. "Quantum teleportation achieved over record distances." *Nature News,* 13 August 2012. doi*:*10.1038/nature.2012.11163

Maxwell, James C. *A Dynamical Theory of the Electromagnetic Field.* (original publishing 1865)

———. *Treatise on Electricity and Magnetism*. 3rd Ed., 2 Vol. New York: Dover, 1954.

Pauli Wolfgang. *Exclusion principle and quantum mechanics.* Nobel Lecture, December 13, 1946. Full text on nobelprize.org. *pauli-Nobel%20lecture%20on%20Excl%20Princ%20(1946).pdf*

Randall Lisa. *Warped Passages: Unraveling the Mysteries of the Universe's Hidden Dimensions.* New York: HarperCollins, 2005.

Randall L, & Sundrum R. 1999. "An alternative to compactification." Physical Review Letters 83: 4690-93.

Riemann, Georg. "On the Hypotheses Which Lie at the Foundation of Geometry." Presentation made in 1854 at the University of Göttingen in Germany. Whole translation at https://books.google.co.in/books?id=BtZM33PzV9UC&pg=PA652&lpg=PA652&dq=Riemann,+Georg.+%22On+the+Hypotheses+Which+Lie+at+the+Foundation+of+Geometry

Sarfatti, J. *Super Cosmos; Through struggles to the stars. (Space-Time and Beyond III)*. Bloomington, In.: Author House, 2006.

Smolin, Lee. *The life of the cosmos*. New York: Oxford Univ. Press, 1997.

———. *The Trouble with Physics*. Boston, Ms: Houghton Mifflin Harcourt, 2006.

Vallee, J. *Fastwalker: A novel*. Berkeley, CA: North Atlantic Books,/Frog Ltd., 1996.

———. *Forbidden Science: Journals 1957-1969*. Berkeley, CA: North Atlantic Books, 1992.

———. *Passport to Magonia*. Washington, D.C.: H. Regnery Co., 1969.

Van Flandern, Tom. 1998. "The Speed of Gravity – What the Experiments Say." *Physics Letters A* 250:1-11. *http://www.ldolphin.org/vanFlandern/gravityspeed.html*

———. "Allais gravity and pendulum effects during solar eclipses explained." *Physical Review D* 67(2). Jan. 2003.