

CONCEPT OF GRAVITY

This paper does not offer a formal scientific theory. It is an exploration of potential avenues of thought that may inspire formal theories. It employs a brutal application of logic. A starting premiss is that attraction gravity along with space and time are emergent concepts invented by humans. Attraction gravity, along with space/time, are not forces unto themselves. How we have thought about gravity in the past is what matters here. Currently, our many, conflicting and competing theories on the subject of gravity attest to its importance in the quest to define our Universe scientifically. This author believes that the import of what is being presented here will be understood better if it is framed within the constraints of classical gravity research even though the concepts are more akin to quantum-field studies. For those of you that find this premiss too crazy for you to even read another paragraph, please read the FOOTNOTE ON SPACE/TIME before returning here.

There are no gravitons, time sprites nor space-keeper forces of any kind. We should quit trying to formally calculate same. Also, identifiable high-mass particles left over from the universe's beginning before phase transitions precluded their further creation may be discovered, but they will have mostly been absorbed by primordial black holes. There is no dark matter nor stand-alone dark energy as used by most cosmologies extant at the time of writing this. To repeat for clarity, this Concept Of Gravity paper itself argues that gravity also is not an actual, real, stand alone attractive force.

This Concept of Gravity is a description of the large-scale impacts that the universe's ubiquitous Zero-Point Energy sources have upon all other forces throughout the universe. This Concept of Gravity describes how what is called Zero-Point Energy (vacuum energy) manifests itself into universe-wide features such as gravitational lensing and apparent mass attraction. The energies of the Field described by this Concept of Gravity embodies communal, supportive and additive features where local variability, like entanglement, aggregates into regional fluctuations culminating in universe-wide totals.

Zero-Point (vacuum) Energy is manifested in our universe by what this Concept of Gravity calls a Twistor. These tornado-like-origin-points of primordial energy are best described by likening them to Roger Penrose's Twistor Theory descriptions, if not showing them functionally to be one and the same. Twistors embody, control and direct all of the energy in our Universe in quanta. Twistors can manifest into not just anything, but rather every thing. This includes all particles and force carriers, quasi or otherwise, and every state of matter including the new Chiral Bose-Liquid reported in news the same week this paper was finished.

Twistors are contiguous throughout the universe and are part of an interacting Field, the Twistor Field. More details on this field having nine dimensions of freedom is given later. The field's density is not static at any location. Ripples, surges and all other forms of fluid dynamics definable interactions occur. One layer of influence on our reality this Twistor Field energy provides for is already identified and referred to as the Higgs Field.

Twistors power the existence of matter/mass by manifesting all particles including quarks and power the ubiquitous effect called a quantum-jump and therefor underpin the very creation and continued existence of what we call mass reality. An example is that the communal, supportive and additive features of the Twistor Field explains how quark gluons, who are powered by the Twistors, have a nearly unlimited energy budget made available to them. When further describing how a Twistor provides energy to enable something like a gluon to keep a nucleus together, an analogy involving classical weather tornado twistors with energy pouring out of a cone shaped vortex will aid in understanding. It will be found that a variable number of Twistors are required to fulfill a Gluon's needs. This requires surrounding Twistors to also variably share the load by giving their support to meet the changing local-mass needs.

As energy demands become more localized and dense, this communal effort extends to committing Twistors beyond the local-mass related area. In dense masses, this call to action can involve Twistors contributing for great distances resulting in planetary orbit effects as one major by-product. This means that Twistors thousands of miles distant from the masses are supporting the energy needs that exceed the ability of Twistors close to the local mass to fulfill. These more distant “Twistor cones” are turned and directing energy towards the local-mass density even if only by slight and variable degrees in order to fulfill the energy needs of the local-mass.

This focus toward the local-mass diminishes with distance. Ultimately, these cumulative interactions within multiple local-mass variable Twistor Field areas result in universe wide expansions and contractions creating pressures that affect the field all the way up to and past intergalactic influences to universe-wide effects. More details on how the interactions of the nine dimensions contributes to these effects is given later.

Twistors create the short lived particles in empty space as well as supporting the long lived atomic structures we call “stuff”. In order to maintain their existence, literally everything uses energy provided by Twistors continuously, bosons and fermions alike. It is important to acknowledge that this includes quasi-particles since our brains continuously traffic in these particles in addition to the atomic/molecular level particles. A continuous supply of energy provided by the Twistor Field that suffuses the entire universe is required for our reality to be actualized and sustained requiring the Twistor Field to remain contiguous as masses traverse within its background. This implies that what we call mass is supplied a continuous supply of energy from Twistors in its path by “bow wave” collection. After passage, the Field returns to a relatively undisturbed state except for some “eddy-dragging” effects that settle down after the locally remaining Twistors re-orient themselves to supporting the local mass’s needs as their single focus. Since everything in the universe is in motion, contemplating a truly stationary example is not considered except to illustrate a point.

The speed of light is regulated by the Twistor Field’s ability to sustain the existence of all manifestations of “stuff” we have discovered. Whether a single photon of energy, or a black hole, all parts of the universe feed at the same trough and obey the same speed limit. Gravity waves are the heavyweight champion of force transmission, but photons are the more influential mobile unit of Twistor energy in the Universe because photons are also the ultimate long distance stand-alone force transmitter.

A photon’s wavelength, or its variable energy level, is accounted for by its level of Twistor quanta energy support. This makes Twistor Field energy the definitive factor to quantify a photon’s ability to trigger a quantum jump. These jumps facilitate the very creation of what we call reality and how we perceive it. Life as we know it from photosynthesis to cellular energy transport depends upon quantum jumps. Mass is also defined by this and is exemplified by a photon’s refraction vs absorption as it travels through glass. Photons lacking sufficient energy do not trigger the electrons in glass to demand more Twistor energy in order to do a quantum jump leaving glass transparent rather than absorbing the photons energy as do opaque materials like metals. These effects and manifestations are ubiquitous. Our mass reality and perception of same depends upon quantum jumps at every stage of creation and evolution as well as the facilitation of all atomic interactions.

A comparison of a textbook-perfect deep-space example versus a local-mass space could also be helpful for understanding. Since the Twistor Field is a near perfectly smooth energy-availability-field in open deep-space, masses traveling through this high energy pressure area have their energy budgets fulfilled without favoring any particular directional vector.

However, slight energy availability variations of an unimaginable number of Twistors surrounding a local mass, each with less than average energy availability decreasing with proximity to the local mass makes the local Twistor Field surrounding the local mass no longer a homogenous, neutral or omnidirectional field. A mass traveling through this local space is affected by this relatively lower energy pressure area.

The specific case of a Traveling-mass trajectory that passes through the Twistor “space” surrounding a local-mass explains planetary orbit effects. The traveling-mass is able to access less overall energy from the Twistors “facing” toward the local-mass and the traveller finds the energy availability even less per unit of “space” the closer it moves to the local mass. To maintain their prior straight-line velocity, the traveling-mass has to accelerate in order to obtain its needed energy from this desert. Within the asymmetrical energy availability space traveling-masses are moving through when near a local mass, they must sacrifice mass (accelerate) to maintain speed in a straight line trajectory or accept that they remain trapped at the speed in orbit around the local-mass dictated by what they require to fulfill their Twistor energy needs.

A fictional case of two adjacent planets, created with no acceleration relative to each other explains what we currently call “attraction”. Each planet, like a falling apple, will appear to accelerate through the energy desert existing between them attempting to sustain their needed energy within that lower-pressure desert they find “underneath” themselves. The mere availability of Twistor energy offered by the outer-clouds do not overcome the lack of energy inwards. Twistors do not pull. The aggregate of multitudes of “outside” Twistors is an energy field that is at a higher energy pressure than the energy desert between the bodies. Fluid dynamics is the more relevant language to describe the interaction. Fluid dynamics dictates that equilibrium is always the preferred state. The Twistor Field obeys this dictum. So, the most stable energy field configuration is realized when the two bodies are “pushed” through the energy desert to combine (collide).

The special case of a black hole is explained by realizing that, at the event horizon, no more energy is left available to outside “stuff” because, from the horizon inward, Twistors supporting mass are 100% committed inward to support the black hole mass. A black hole sized mass exceeds the limits of support the “fabric” or “association of Twistors” called the Twistor Field can provide. The mass involved inside a black hole is not a singularity. The mass of a black hole is only the mass conversion equivalent to the total energy wielded by the number of fermion related Twistors contained inside the event horizon plus boson related Twistors directly supporting those fermions while the Background energy remains just that: background. More detail is provided later. Future theories may capitalize on black hole mass calculations to define the Fields’ energy ranges. At the horizon, the Twistor Field is functionally “torn” as it relates to supporting the continued existence of mass objects, but it is not actually/physically rent asunder. The horizon area can be thought of in super-fluid terms. It is a zone where the Twistor Field has no specific directional influence or intent to interact. A traveling mass can still easily make a shallow traverse inside the horizon obliquely by having sufficient velocity where momentum drags the energy from a sufficient number of Twistors with it to delay capture long enough to decelerate but still travel back out. Alternately, it could start with less velocity and then shed mass (accelerate) with a force equal to the percentage of energy lost by the Twistor energy it now finds unavailable to it.

The related white-hole concept is also explained by the Twistor Field even though Twistors themselves never suck energy. It is the Twistor Field Background’s multidimensional vibrations/oscillations that perform as the ubiquitous receptor for reclaiming unfocused energy released from all quantum processes. The Field Background is figuratively the “negative to the Twistors’ positive”.

Supernovas, magnetars and pulsar bursts etc. define the upper limits of Twistor Field support before being “torn” and entering a super-fluid state at their boundaries.

A description of how the Twistor Field came to be at the beginning of our Universe must start with pure energy since Twistors are themselves pure energy. The homogenous pure energy field at the beginning of the Universe broke into bubbles via phase-transitions. Each one contained lesser fractions of the primordial energy and manifested heavier versions of matter. This greatly expanded the extent of the universe and generated copious numbers of primordial black holes. Using an analogy to boiling water simmering down in temperature from a roiling boil, these bubbles themselves disintegrated into smaller divisions in more phase-transition stages furthering the expansion of the universe until the smallest, most stable and lowest temperature variation came to inhabit the entirety of the Universe in the form of the Twistor Field. We humans therefore came to exist in the coldest, most stable and longest lasting epoch of our Universe.

A general note is that any formal, ultimate mathematical description of this concept should not rely upon a single fixed value for a Twistor over history. The Twistor Field has evolved subsequent to its creation and was thereafter locally influenced. Rather than assuming a specific, unchanging, energy budget over time, a variable energy scale over the history of the Universe should be identified that will also be variable at the various scales of the Universe from local to galactic and on to the cosmic web. The Field's energy budget at the beginning could vary within universes originating from starting conditions differing from our own and possibly, only a single one of many phase-change bubbles may have become our Universe.

More details about the Field's nine dimensions was promised earlier. When describing the nine dimensions of the Twistor Field, implications of the concept of odd-vs-even must be coupled to the concept of non-zero. These concepts dictate the ranges, forces and hierarchy of the dimensions. Our known reality of inhabiting a matter-universe instead of one composed of anti-matter logically dismisses any even number of dimensions because everything would cancel out. So an even ten dimension universe is disallowed and logic also disallows any dimension combination that includes a zero since, well, zero. String Theory Maths “tamed” or focused by Twistor Maths should be able to represent this nine quantum-level-triad interacting Field. The complexity of our Universe is enabled by the Field's ultimate randomness.

There are three dimensions to the background of the Twistor Field, three to sustain fermions including the Higgs' range, and three for the force carriers. This Concept refers to them as the Background Triad, the Fermion Triad and the Boson Triad. The low to high energy frequency hierarchy is in that order. Synergy via harmonic inter-Triad interactions of reinforcement and cancellation with similar intra-Triad relationships allows for dynamic energy flow between them all. None are static. No single dimension or triad can be considered a stand alone entity. The Fine Structure Constant should be a mathematical theme repeated/echoed throughout the description of the Field. The Constant should be an interwoven, recurring and reinforcing driver of interactions both inter-triad and intra-triad.

The Background Triad's energy equals the total energy of the other six dimensions combined plus one quantum of energy more. The Boson Triad commands almost as much energy as the Background Triad. The middle Fermion Triad remains in flux with a more variable total of energy due to fluctuations of matter's demands for fermion support and mass related boson involvement. Being caught between two heavyweight triads of energy vibrations means the Fermion Triad boundaries are dictated to it. Only a few percent of the entire field's energy is commanded by the Fermion Triad on average. The absolute floor of the Fermion Triad is hard, being located at the upper Background Triad junction. It can never be lower than the frequency defining the upper end of half of the total energy contained in the whole Field commanded by the Background Triad.

The upper limit to the Fermion Triad is what the more dominant Boson Triad allows it to populate at its bottom energy frequency. This boundary is the only flexible interaction point in the Field since the top of the Boson Triad is dictated by the odd vs even dictum and both ends of the Background Triad are dictated by being non-zero and giving equal support to the other half of the overall energy of the entire Field.

Plotting the Field's energy distribution on a bar graph of superstring-like frequencies representing energy potential increase from left to right shows the low frequency Background Triad's range to cover the graph almost entirely even though it only commands half of the Universe's energy. The Fermion Triad's tiny sliver to the right of the Background represents a few percent and the Boson Triad's sliver represents forty-plus percent of the Universe's total energy because of the exponential increase of energy commanded as frequencies climb.

Calculations of these energy dimensions must be allowed the freedom to be bounded only by being non-zero at the bottom and not being "even" in frequency harmonics at the top.

This means that the Background Triad's frequency range of freedom must be calculated down to within a quantum of energy above zero; and, the Boson Triad's frequency range must be allowed a figurative range up to 9.9999.... to within a superstring energy quantum of vibrating like an even "tenth" dimension. However, logic suggests the practical limits to the dimensions of our actual reality may average much, much more than a single quantum experimentally and may have varied over the universe's evolution.

The top six dimensions' frequency relationships are embedded and actualized within the Background Triad. The Background of the Field can be likened to the ocean where small perturbations can reinforce each other to manifest rogue waves. But, in the case of the Background, it cannot quite actually pop out a monster wave. The Background is frustrated and constantly on a knife's edge wanting to "bust out". Virtual particles popping in and out of existence are the manifestations of this boiling potential "chomping at the bit". Proposed "Axions" may be one description of the Background's long wavelengths.

It is up to the Fermion and Boson Triads to manifest for the Background. The Background Triad is like a trampoline with the Fermion Triad being a bowling ball bounced up by it. The Boson Triad then can be likened to a golf ball rebounding off the bowling ball resulting in the explosive acceleration of the golf ball. The Fermion Triad thus acts as a trigger to release Boson energies by actualizing the latent "trigger-happy" Background energy.

A few examples will help to further describe how the Field Triads interact: What is currently referred to as black hole "time dimension frame dragging" is the Field's evolving response to the energy requests from masses within a rapidly spinning event horizon. These effects affect reality to galactic distances. There is also a vortex of the Fermion Triad above and below a spinning black hole currently referred to as the "galactic bulge". The Boson Triad reacts more mildly to this situation while the Background Triad is even less affected and gives a very slow response. Galactic mass spin dynamics are explained by this and universe-wide Field pressures ultimately are affected.

A more detailed review of the simple mass-related black hole example given earlier shows that the black hole contains a density of energy consisting of the mass-related force carriers required to sustain the outside mass prior to it being absorbed into the black hole. This includes the energy/mass conversion of the Fermion Triad's energy and the portion of the Boson Triad's energy contributions to the mass's existence. The Background Triad remains a background but does contract inside, and to a lesser degree outside of the horizon and so is a contributor to the black hole mass calculations of in versus out. Importantly, Universe wide effects are actualized by these Background contractions and rotational torques.

Having now provided a verbose introduction and overview of this Concept of Gravity, this presentation now offers only streamlined bullet-point-style summaries of many physics phenomena and related areas of study that are either explained by this Concept of Gravity or give suggestions for researching new avenues of theoretical development:

- Penrose Conformal Cyclic Cosmology's maths may help to project what the Twistor Field would look like in a far distant future where the stretching of the Twistor Field brings the entire Universe to a breaking/turnover/conformal point with a superfluid-like phase change.
- "Handedness" of our universe is explained by the odd dimensions' interactions.
- Casimir Effect is explained by the Twistor Field's local energy pressure imbalance.
- The famous two-slit experiment's bow-wave explanation now has its medium.
- LIGO related gravity waves are given a medium that facilitates their quasi-particle-like wave propagation as well as providing a framework for calculating the Field's dissipation rate etc.
- Descending weights of short lived three generations of matter are explained by their sustained energy support restriction by Twistors' supply-chain and speed of light restrictions.
- Strange Metals' non-electron energy flow is supported by the more fundamental Twistor Field's ability to manifest all of the many, different phases of matter.
- Quark-Gluon Plasma Hadronization with its extremely large energy changes where scalar gluon distribution extends way beyond the electrodynamic proton radius may exemplify the "outside" Twistors supporting the gluons and help to assign Twistor energy ranges.
- The Logan-Wolynes Theory on random/erratic vibrations may be an experimental path to show how Twistors facilitate quantum jumps.
- Luminous Fast Blue Optical Transients powered by feeding neutron stars may be frequent and consistent enough to help quantify the upper ranges of Twistor Field energy contributions to the highly stressed neutron quark gluons.
- Neutrino flavor/mass research is provided a new opportunity. While a neutrino is magnetically neutral, it is only nearly perfect in its lack of spin. A spin that is incredibly slow/low energy would pass through near countless Twistors before snagging enough tiny bits of energy to exhibit as a mass only to shed it again through more Twistor Field passage. This could be an avenue to posit values for Twistors' energy and matter/antimatter asymmetry theories.
- The speed of light is a given property of the Twistor Field but a door remains open to "tear" the Field with energy jets in advance of object where the superfluid-like interface at black hole horizons may be replicated at a bow wave and along the boundaries using directed energies similar to quasar-like objects' relativistic jets.
- Since quasi-particles like Fractons are also Twistor based amplifications, an opportunity within this Concept of Gravity is to excite or unite portions of the Field into coordinated harmonic motions that can propagate quasi-particles throughout the universe technically faster than the speed of light. Think of them as quasi-particle "hypervelocity quasar jets" surfing on the Background waves.
- Nanoscale magnetic whirlpools called Hopfions are also manifested by Twistors. Discovery of how to generate Hopfions that tap into the Twistor Field energies could pave the way to theories that support the creation and control of synthetic, independently acting agents of change that could ultimately assemble a "synthetic" mass entirely composed by quasi-particles.
- Penrose's Objective Reduction concepts are explained by his Twistors being supported by a tangible, real, nine dimension field and not just fictional "space". Also, the micro-tubular brain structures described by Hameroff and Penrose may also be literally in-tune with the universe via the Twistor Field in the form of quasi-particles like phonons etc. whose existence depends upon Twistor connections. Interconnections and manipulations of our brains via these quasi-particles, with possibilities to enhance our perceptions and thinking prowess, is only far fetched currently. Evolution crafted our brain to dominate our environment in order to survive and our brain design became so robust that we wake up each day with a quantum computational juggernaut in our heads that is so unchallenged by our mere earthly survival that we now consider the entire universe as our survival arena.

This concludes a basic exploration of this Concept of Gravity. For those choosing to explore experimental proofs in pursuit of formal theories inspired by this Concept of Gravity, primacy should be given to the observation that Twistors composing the Twistor Field are purely quantum and that all of our universe's mass reality is ultimately quantum at both the time it became manifested, and each time it interacts with anything, so only quantum computations should form the formal proofs of the basis of our reality.

Ultimately, at the bottom of an apparently/emergent, proverbial "stack of turtles" explaining reality, there are no classical forces that have any causal or effective place in scientific formulae explaining the basis for reality as we experience it in our Universe. Therefore, using maths similar to Relativity in further research efforts will be counter productive since Einstein's space/time maths are needlessly complicating. Solving Causal Dynamic Triangulation type theories without the complications of time could be an example.

By appearing to reject the relevance of the Theory of Relativity so cavalierly, this author imagines many readers are figuratively "howling at the moon" over this dismissal of Einstein. But, the brutal logic promised by this Concept of Gravity exposes the undeniable fact that attempting to mathematically or formally reconcile Relativity with the Quantum is no longer a productive proposition. So, does this paper actually reject Einstein? No. Emphatically no! Einstein's $E=MC^2$ alone makes this Concept paper possible by singularly providing the foundation to build our universe upon. Also, Einstein's multiple concepts relating to space/time have allowed humans world wide to be able to visualize the cosmos and contemplate reality like never before in our species history. This paper included! Arguably, Einstein has provided the most powerful set of conceptual reasonings ever offered. As a final note, even Einstein himself was not totally averse to considering time as only a concept. He was reported as saying shortly before his death "The distinction between past, present and future is only a stubbornly persistent illusion". This Concept agrees and argues that only action at the quantum-jump level actually represents reality.

A final, general summary is that research proposals should focus on quantum descriptions that have 9 dimensions of freedom since they have to explain the Twistors' support for both Bosons and Fermions as well as maintain 3 dimensional relationships with fellow Twistors in the universe-wide Twistor Field. This leads to suggestions for exploring possible theoretical proofs starting with the beginning of our universe where 27 dimensions may be required to accommodate super-symmetric particles before phase transitions precluded their further creation along with commensurate reductions in dimensions. The maths should produce Penrose Twistors as the agents of change with overall research made under the practical umbrella of Fluid Dynamics while employing String Theory Maths tamed by Twistor Maths who in turn provide the language to help develop the origin story's Contact Geometry (covering only odd number sphere maths) with focus on its subset relating to Contact Manifolds.

A footnote and autobiographical notes follow.

FOOTNOTE ON SPACE/TIME

This author's innate skepticism of time's relevance to calculating reality was crystalized when I learned about the Amplituhedron's creation ten years ago. An Amplituhedron is a geometric concept that shows how to calculate quantum particle physics by considering that space, time, locality and unitary concepts are emergent, not basic, nor required to quantify-the-quanta that is the basis of our reality. Notably, this was inspired by Penrose's (Hodges) Twistor maths.

So, this proposal on the Concept of Gravity invokes the concepts of space and time (Relativity) as explanatory conventions, but does not rely upon any references to mathematical or actual participation of space or time as causal agents in any shape or form. The concepts of space and time are not stand alone, real, or physical properties directly impacting our universe. An example of this would be to consider a photon that travels millions of light years over gazillions of miles before it strikes a leaf of a plant on Earth. Time/space does not exist for the photon. The photon "knows" only two things upon impact. It knows what net energy it carries upon arrival and that it gave that energy to the plant to trigger photosynthesis. It then ceased to exist. Counting the number of miles of space it traversed or any perception of how much time it took to get to the plant are truly irrelevant and immaterial to our reality.

Our species of life on Earth was allowed to come into existence because of actions (oxygen generation) caused by the quantum-jump-based photosynthesis effect in which the photon played its part. How "old" that photon was or how many "frequent flyer miles" it possessed are the silly extensions we are led to discuss if we persist in forcing classical space/time calculations into a reality that is purely quantum-based. The concepts of space and time are only approximations for coarsely defining reality.

Action and reaction, or cause and effect, or more specifically, energy flow via quantum interactions (jumps) is the basis of reality. In this reality, Space/time is irrelevant to quantum calculations.

The specific argument that the wavelength energy of the photon lowers while traveling through space/time is indeed a useful tool to predict what a fictional photon will probably be able to do in such situations. But the stretching of a photon's wavelength and its lowered energy is due to countless interactions at the quantum level during its transmission. What/how it specifically interacted with at the quantum energy level is what affects reality at the leaf. Was its energy affected by lensing around a galaxy or a gazillion almost imperceptible interactions with energy carriers in the cosmos it traversed? Each and every quantum interaction the photon was affected by counted toward what became matter-reality at the leaf strike. And, each and every one of these quantum interactions was a separate event unswayed, caused or affected by either time or space. The total time/space calculated before our photon triggered photosynthesis via inducing a quantum jump only provide useful estimations on the aggregate for our consideration and discussion.

A short review of this Concept's position is that space/time does not actively or actually, unto or by itself, "do" a single thing to create, modify or destroy anything in our reality.

This being said, the concepts of space and time each must remain in use as useful tools. They were invented by humans to enable us, collectively, to be able to plan when to plant crops as well as to describe and discuss concepts like Gravity. In fact, the most powerful time/space conceptual paper ever created is the Theory of Relativity whose incredible complexity and multitude of applications are legend. The longevity and flexibility of the concepts of time and space over human history highlight the powers of prediction they offer. Space and time will remain powerful concepts in discussions about all physics both classical and quantum, including this proposal. They are very important concepts to guide development of proofs that can validate scientific proposals by documenting trends and sizing changes, along with making other projections that lend support to our understanding.

A summary of concerns for including space/time in research is simply the observation that forcing mathematical representations of space, time and attraction gravity into final proofs or to somehow consider them active or causal agents in theories will only cloud and complicate those efforts.

It follows that should this Concept of Gravity be supported by any number of possible variations of formal theories attempting to explain our quantum reality, space/time will not be represented in the most elegant calculations and formulae, nor presented in any way as empowered, active or causal agents.

AUTOBIOGRAPHICAL NOTES BY THE AUTHOR STEVE HARRIS HUBBARD

At the time of writing this paper I am 72 years old. The love of my life, Janet Louise, has been my partner in life for over fifty years. Our two sons Rory and Adam, along with our grandson Cooper, provide us happiness and fulfillment in our waning years.

I worked 33 years as a professional firefighter with the USA State of California agency known as CalFire. I held positions throughout the state. I promoted six times up through the ranks from chopping brush and squirting water as a Seasonal Forest Firefighter to achieving the rank of Division Chief commanding forces spanning multiple counties. I performed every service a firefighter is called to do. I did it all.

I worked on every kind of major disaster from chemical spills and plane crashes to earthquakes and floods. The 15 years spent as an Air Attack Officer at the Battalion Chief level managing an Airbase was most fulfilling. Flying with professional pilots and actually being paid to fly over the coastal redwood forests of northern California almost daily was surreal at times.

I attended a California Community College for two years but do not have a college degree. In the 1970s, my profession was not yet an accredited "four-year" major unto itself and was subsumed within the Registered Professional Forester curriculum. In the late 1980s, after completing instructor training, I did acquire a Lifetime Limited Service Teaching Credential from the California Community College system allowing me to teach Fire Science in general and more specifically, Wildfire Management.

I have no competency in mathematics. High school algebra has a fleeting, tenuous foothold in my memory. The same can be said for formal education on all hard sciences. My interest in physics, and more specifically the Quantum Field Theory, came in retirement. I have chosen to read many layperson focused physics books only because I found the subjects interesting. I have been able to read these books because, unlike almost all of my professional peers, I am still alive. Most of my peers have died from various cancers. We were allowed to retire in our fifties in recognition of these statistics. So, even though I lost multiple years of mental capacity due to various medical challenges, over the last two decades I have been able to absorb a lot. Also, I subscribe to Physics news websites and have set up news feed options to curate physics related news.

Now, I will finally address the subject of me writing this Quantum Physics paper. Why?.... Because I am too stupid to know how wrong I could be, nor do I care what fall-out comes from publishing this. I realize that sounds rather flippant. It is true nevertheless. I cannot suffer professional embarrassment since the subject matter is self-admittedly not my profession and I admit to having no formal education on the subjects. What professional physicist in his right mind would consider my denigration to be a feather in his cap?

Even if being immediately dismissed as a quack by most physicists is my fate, odds are that I will be dead before peer-reviewed and proven theories can *formally* expose me as an idiot. Disparaging comments by lone actors on the short-term are likewise no threat to me. I have looked death in the eyes nine times in my life, checked out convicted felons to work on fires, and have witnessed the human condition in every possible variation of injury, despair and death. So, a university hack coming after me verbally would not even be mildly amusing.

Seriously now, I say that I trust the professionals to let me down gently and I thank the reader in advance for giving me their time. It is a gift I appreciate.

Steve Harris Hubbard, Eureka California USA, November 26, 2023

Addendum 1, December 3, 2023

This addendum explores in more detail how the Concept Of Gravity allows us to think differently about quantum entanglement and decoherence theories extant at the time of writing this by ridding us of having to accommodate the emergent concept of time in our considerations and calculations. This is summarized by the Concept's sentence: "The energies of the Field described by this Concept of Gravity embodies communal, supportive and additive features where local variability, like entanglement, aggregates into regional fluctuations culminating in universe-wide totals". This includes how we experience reality and our seemingly out-of-sequence perceptions of same. Harmonics of the nine-dimensions of interrelated Triads echo with reinforcements and cancellations within the energy fields supporting the very existence of every thing, continuously, down to a quantum bit of energy. The clouds-of-uncertainty areas around energy/mass locations and the near instantaneous collapse of states of matter are the result of the Field's harmonic evolution/devolution in its relentless drive to follow the most probable paths to achieve equilibrium.

How we "witness" or "experience" or "sense" or "anticipate" or more accurately, react to gaining knowledge of these reinforcements and cancellations is the explanation for how we experience reality. Hameroff/Penrose micro-tubular brain structures are the focus, or vehicle, for understanding how we sense and react to quantum reality.

Penrose's Objective Reduction concepts are explained by his Twistors being supported by a tangible, real, nine dimension field that is dimensionally interactive. The micro-tubular brain structures described by Hameroff and Penrose are literally in-tune with the universe via the Twistor Field in the form of sensing quasi-particles/waves generated by Twistor Field interactions. Popular reviews that balked at accepting the "jumping back in time" inferred by descriptions of Objective Reductions have no basis for continued objections within this Concept Of Gravity where time truly does not exist. The particle/thing we used to say was decided upon as reality by regressing in "time" was merely the "winner" of the Field's harmonic evolution/devolution process in its attempt to achieve equilibrium. All possible variations of that particle/thing that could be supported by the Twistor Field did exist until the harmonic evolution/devolution settled upon what we call reality. No "time continuum violations" occurred. What seemed to be "in front of" or "appeared after" what became stable reality were only lesser probable possibilities explored by the wave function harmonics' evolution/devolution process. The "losers" merely coalesced into the stable "winner". Nobody jumped anywhere in fictional time.

Therefor this Concept implies that Hameroff/Penrose micro-tubular structures are not just the vehicle to sustain our quantum calculating/functioning brain, but also are the portal into which the echos of the Field's harmonic evolution/devolution processes are sensed by our quantum computational brain structures. The harmonics we sense are created by the energy Twistors and their supporting energy field dimensions as they consolidate or coalesce entanglements (decoherence) into local equilibriums that result into what we see as reality evolving before us.

Skepticism of the awareness of quantum consciousness is still expected. So, a reminder is given here to finally put the question to bed. "Old" brain science restricts itself to the brain's specialized pattern recognition/memory functions via neuron/electric synapse descriptions. The error of omission committed by that mindset is that it does not recognize or allow for the existence of quantum based consciousness. It is past the time to move on now since the claim that the "electrical brain" is the basis of consciousness/awareness was driven into the proverbial ditch decades ago by the micro-tubular brain structure supported, brutal logic of the simple amoeba v electric-human-brain comparison presented by Penrose.

Addendum 2, December 4, 2023

Four subjects in the news at the end of 2023 are covered in this addendum: decoherence limits, apparent attraction gravity via classical maths, cosmic web formation and mini-black-holes.

A Weller-Davies' referenced headline "wobbles of weight in spacetime" could also easily describe how experiments could identify an example of the variable and continuous Twistor Field support for a test weight's gluons etc. Finding such weight fluctuations would be dramatic since the variability may have to be measured by relatively small numbers of quanta energy units. However, if so proved, it would confirm that the Twistor Field's continuous entanglement/decoherence are never finite in their resolution confirming that true, absolute, static equilibrium can never be achieved. The frequencies of the Universe and its constituent parts can never be resolved as being even/zero in parts or in total.

Almost simultaneous to the "wobbles" headline, an Oppenheim referenced headline states "New theory unites Einstein's gravity with quantum mechanics". Seemingly covering the mass fluctuation also, but more specifically, his theory appears to feature fluid-dynamics-describing-the-quantum to explain our witnessing gravity's effects. His use of classical maths to generally describe what this concept calls the Twistor's quantum field harmonics explains the confusion and doesn't devalue either of these new theories for future developments including theories supporting this Concept Of Gravity.

Observations have supported Hannes Alfvénand's plasma based cosmology. This is a widespread phenomena that we see in our Universe. These electrically conducting gases, are ubiquitous when inventorying cosmic features. The Twistor Field manifests these concentrations of magnetically based rivers of energy. It is expected that the Twistor Field's String Theory maths will support this type of cosmology. As the Twistor Field expands, contracts and assumes asymmetric concentrations of energy it will prescribe energy-dense cosmic web features including magnetic plasmas that are accompanied by commensurately low-energy deserts between them in what we call voids. The voids' energy content will consist primarily of the Background Triad's portion with the other Triads being underrepresented. The Background will be stretched as well and represent less than average energy density within the void. The Hubble "tension" discrepancy will also be explained in this manner.

Mini black holes created in laboratories are indicating that minute volumes of the Universe can enter a black hole state without accumulating the typical amount of mass required to form a horizon. Quasar jets' boundary zones etc. also represent this condition as described in the concept earlier. Smaller, even more temporary, or transient versions also can be created by concentrating or confining enough Twistor Field energy in a mixture to locally overwhelm the ability of the Field to individually support the mixture's constituent particles' components like gluons etc. When ultimately acting as pure energy, this mixture supports a black hole like state. It can be sustained so long as the extreme energy supply lasts. A long lived, mass supported, black hole does not result. Evaporation/decoherence/reconnection to the Twistor supply chain occurs after the excessive energy supply ceases.

Addendum 3, December 5, 2023

A recent experiment created antimatter hydrogen that was then released. It did indeed drop/fall and was annihilated. This shows that both the handedness preference of the Twistor Field's harmonics is intrinsic and that the "traditional effects of gravity" are not transmitted via particles with any form of parity/charge etc. The Concept Of Gravity presented here demands this result and provides the replacement.

Addendum 4, December 7, 2023

This should be the last addendum to this paper.

The subject covered here can be called “The age old fable of the scientific age”. It involves two families. The Theory family and the Logic family. When Theory joined with Concept they had a child named Inference, a precocious girl. When Logic joined with Intuition they too had a child they also named Inference, who was no less precocious. The girls were indistinguishable and could fool each other’s parents as to who was who. Allegorically speaking, this paper was written by the two girls. The two have been equal writing partners for centuries. They have produced verdicts on scientific discrepancies from Galileo v Religion to Newton v Einstein. The bottom line is that “hindsight” will always be superior to any “current” vision.

The concept named Time (space/time) is ancient. It has served our species well indeed. The Theory of Relativity is truly married to this Concept. This Theory’s child, Inference, boldly stated there should be Black Holes. Many have worked diligently on this inference within the restrictions and prescriptions of this Concept Of Time and by using the maths of Einstein’s Theory. Schwarzschild, Penrose, Kerr et al then heard the Inference Girls start arguing back and forth about singularities. They developed theories of black holes and how they behaved inside to address what the Inference girls were talking about. Penrose’s theory, inspired by Schwarzschild, is indeed perfect and unassailable when constrained within the Concept Of Time and Einstein’s maths. The “Theory family tradition” stands tall with it and their girl was satisfied. But, what did the Logics’ girl have to say? Kerr heard the Logics’ girl and developed another solution to the singularity challenge that is a “tour de force” as well.

This is where this paper comes back into our discussion. This paper argues that when there is a tie between the Inference girls, the Logic Family’s girl should be given precedence over Theory’s, no matter how “settled” the theory appeared to be. Penrose is famously on Logic’s side too. His simple “Amoeba Logic” dismantling of all 1990’s brain theories could be the poster child supporting this supremacy.

This paper proposes that over a century of experimental efforts have informed Logic’s Inference to suggest that attraction/particle gravity should be dismissed and disallows any resolution of mass where it is completely static/unchanging and references many other causal connections. Find the mythical Graviton and you can put this paper through the shredder. Find proof that decoherence is time based and finite in resolution instead of continuously attempting to achieve an even more perfect equilibrium, then shred this.

This concept’s inspiration is the Logic girl. Please listen to her if only for a little while.