

*This preface was added 12/24/2021 as I upload to our new blog. This was the first rough draft of what evolved into the final volume 1 that became our you tube playlist. You can see most all the same core ideas presented but with a bit more detail than the eventual single slide approach taken in the final draft.*

The following propositions lead up to what I believe could be a much more logical catalyst behind our big bang than a singularity as well as a very likely source for the mysterious dark energy that is causing our visible universe to expand at what seems to be an increasing rate. I believe you will find there is sufficient empirical evidence provided to warrant taking these theories into serious consideration even if the style chosen to present this work may be a little unorthodox.

I thank you for your time and consideration and ask you to step back for a moment and contemplate what an infinite Universe might look like if we do happen to live in an infinite and eternal and unbounded cosmos. I feel it is an intrinsic known truth that is unavoidable to deny any longer and the moment that science embraces this truth we find so many questions now have very logical answers. Over 40 years of study in a wide range of sciences has led me to a set of conclusions that I believe you may agree make more sense than any other possible options if you approach these propositions with an open mind.

## Proposition 1

**There can be no span of time without a span of time preceding it. No span of time can be considered the first span of time.**

**There can be no first second nor last second.**

**There is no largest measurement of time.**

**There is no smallest measurement of time.**

**All we can hope to ever measure as it relates to time are those measurements relative to the degree of scientific precision at the scale factor of the instruments being used to record the measurements.**

**Time is infinitely long and infinitely divisible.**

## Proposition 2

**Every object traverses its own unique line of time and has its own unique perception of the passage of time from inception until oblivion.**

**Nothing can be said to exist outside the line of time for even a one-dimensional line and a zero-dimensional point can only be said to exist if they traverse their own line of time.**

**An infinite span of time preceded the moment when the direct chain of cosmic events that created our visible universe began to occur.**

**An infinite span of time shall pass long after the last footprints we ever existed have faded away.**

### **Proposition 3**

**Time is the first dimension.**

### **Proposition 4**

**Time and space are interwoven and inextricably intertwined thus infinite time begets infinite space.**

**Space is infinite.**

**There can be no first meter or first mile or first inch nor can there be a last parsec or last light year.**

**There is no largest measurement of space or distance.**

**There is no smallest measurement of space or distance.**

**All we can hope to ever measure as it relates to space or distance are those measurements relative to the degree of scientific precision at the scale factor of the instruments being used to record the measurements.**

### **Proposition 5**

**SpaceTime is infinite.**

**In any direction you can travel in straight parallel lines and never hit the first mile or first meter. There is no end in any direction you travel whether you choose to go outwards into the vast cosmos or magnify inwards inside the smallest neutrinos.**

**Even if we found curvature to our localized area of space time and determined our known universe was not a flat universe it would still have to exist inside of a larger Euclidean space. It is not logical for a non-Euclidean pocket of spacetime to exist unless it was contained inside a large Euclidean Minkowski spacetime.**

**SpaceTime is infinitely long and infinitely divisible.**

### **Proposition 6**

**Infinite spacetime begets infinite energy. Just as we find it hard to conceive of a single planet with life out of trillions of planets it is more inconceivable to imagine an infinite vast spacetime with just our little portion of it being occupied by matter and energy.**

**There was no reason to assume it was required that our local universe be isotropic or homogenous so we should not be surprised to keep seeing different ways that it isn't. But there is also no reason to assume our entire Universe is not homogenous with matter and energy existing for as far as one wished to travel in any direction.**

**There is no largest measurement of energy.**

**There is no smallest measurement of energy.**

**All we can hope to ever measure as it relates to energy are those measurements relative to the degree of scientific precision at the scale factor of the instruments being used to record the measurements.**

### **Proposition 7**

**Infinite energy begets infinite mass. Mass and Energy are intertwined. Where one goes the other follows. Energy could be a form of fast-moving mass and mass could be a form of slowed down energy. Maybe the equivalence principle of mass as it relates to gravity is more intertwined with electromagnetism than we first realized.**

**There is no largest measurement of mass.**

**There is no smallest measurement of mass.**

**All we can hope to ever measure as it relates to mass are those measurements relative to the degree of scientific precision at the scale factor of the instruments being used to record the measurements.**

### **Proposition 8**

**SpaceTime MassEnergy is infinite. What we call the infinite Universe is an eternal amount of space and time and mass and energy that has always existed and has no beginning in any dimension at any scale factor. An infinite set of points in space and time with measurable dimensions that have meaning or value to some finite number of other vantage points.**

## **Proposition 9**

**Dimensions two, three, and four are length, width, and height respectively.**

**Four dimensional spacetime is the base units of measurement we can examine to partially qualify an object's existence.**

**Other higher dimensions may very well exist but not at the sacrifice of the word dimension. A new dimension becomes visible or possible when a new line intersects a prior dimension and an object from that prior dimension can be shown to be on two or more points on this new line of measurement. A dimension can scale infinitely outwards or inwards allowing for measurements at any scale. When you can define a line of measurement that intersects our four-dimensional existence and show how a 4D object can traverse that line then you can call that a higher dimension.**

## **Proposition 10**

**The plane of massenergy intersects 4D Minkowski space to produce objects inside 6D spacetime massenergy. We can see how different types of energy in many different states and forms including mass can exist for every object. We can predict how a 4D object will traverse the line of energy and the probabilities of it being represented at different points along that line as it travels the line of time.**

**Likewise, the mass of the object can be seen represented at different stages and predictions can be made as to where it will move along the line of mass. When we have measurements along an intersecting line of a prior dimension then (and only then) we can accurately refer to adding on a new dimension. A true dimension allows aggregation of its constituent bodies' measurements as the reference frame's scale factor increases.**

**A 3D object can be measured by volume whereas a 4D object is measure by life and the life of an object defines its 4D path from inception until oblivion. A 3D object need not be alive to have a life. A 6D object able to represent its mass and energy at different points in time and space could be measured as it as existence. When Volume 2 discusses quantum fields it becomes more evident that we already accept that we exist inside a dimension of energy, so this is not really anything new.**

## **Proposition 11**

**The faster you move through space the slower you move through time.**

**Objects sharing the same relative trajectory and relative velocity create a frame of reference and all objects sharing that same frame of reference perceive the passage of time at the same base rate.**

**A cohesive frame of reference sharing the same trajectory and velocity can be considered a 6D pocket of relative spacetime massenergy.**

### **Proposition 12**

**Every frame of reference requires a parent frame of reference to exist inside of.**

**Objects in nature always have a current frame of reference and that frame of reference always has a parent frame of reference and that parent frame of reference itself has its own parent frame of reference.**

**A parent frame of reference means all objects sharing that frame perceive the passage of time and space starting with the same base rate.**

**The individual motions of bodies or collection of bodies moving as one inside that parent frame of reference further define each object's unique perception as to the passage of time and space.**

### **Proposition 13**

**Infinite spacetime massenergy begets an infinite succession of nested pockets of relative spacetime massenergy.**

**Every pocket of spacetime acquires both its relative time and relative space based on the perception of space and time of its parent frame of reference.**

**Every pocket of spacetime passes on its perception of time and space to all children bodies sharing the same relative trajectory and relative velocity.**

**There is no largest pocket of relative spacetime massenergy.**

**There is no smallest pocket of relative spacetime massenergy.**

**You can go in any direction outwards into space or inwards into any atom and continue forever in a straight line and never hit the last nested frame of reference.**

**There is no such thing as a truly stationary frame of reference for every frame of reference is either in motion directly or one of its parent frames are in motion. There is no frame of reference that can be said to exist at absolute rest as every frame is hurling through space time either directly or indirectly. Every one of them is doing so inside a larger frame of reference also hurling through space time. All of it driven by the same laws of physics that drive all we see.**

**The scale factor of 10 to the power of minus 35m may be the smallest meaningful size that is relative to what we can see and how our known universe behaves but it is silly and ignorant to expect absolute nothingness at the scale of 10 to the power of minus 350 or minus 350,000 or minus 350 quadrillion.**

**These are valid scale factors and nothing we can see about the universe we are able to measure would lead me to any assumption that there could ever be a scale factor where matter and energy do not exist in some form at that scale factor. Not every point in space and time at every scale factor has measurable mass or energy present but mass and energy are present and will be measurable at that scale factor in many other points of spacetime.**

#### **Proposition 14**

**The effects of gravity on spacetime can cause time dilation no different than speed related time dilation. Most people reading this understand this fact of the natural state of nature even if we don't understand yet how or why. Others will read this and scoff at time dilation caused by gravity and some even scoff at time dilation caused by speed. If you are one of them let me put your mind to rest. Both are proven and are not in the realms of science fiction.**

**Inside any pocket of space time each child pocket's perception as to the passage of time is relative to the parent frame but then further dependent on the individual motion of each body and the gravitational fields acting upon it as it moves through spacetime inside the parent frame.**

**If the speed of the Milky way was to change 50-fold and was moving 50 times faster or 50 times slower through spacetime our perception of time would be different. If the speed of the Virgo Supercluster was 100 or 1000 times faster or slower we would perceive the passage of time differently relative to the parent frame of reference of the object whose speed changes. Inside all the subpockets of spacetime of the object whose speed changed there would not be any noticeable difference in the passage of time unless you were able to peer outwards and into the parent frame of reference of the object that had its speed changed. Only then could you make a comparison IF you are able to see any siblings of the object whose speed has changed.**

**Each pocket appears differently to every other pocket and if you traverse up high enough to the shared ancestor pocket you can provide a basis to compare against. If it makes logical sense to see how every pocket of space time is getting its perceptions of space and time from its parent then it can mean only one thing, and that is that our Universe is infinite and comprised from an infinite number of nested pockets of relative spacetime massenergy.**

#### **Proposition 15**

**An infinite succession of nested pockets of spacetime massenergy means that our known universe was born into and exists inside of a larger frame of reference.**

**Relative to the house I am in right now my velocity is zero. Considering the rotation of our planet and the orbit of our planet around the sun my relative velocity to say some**

arbitrary frame of reference like the Pluto formally known as planet is definitely not stationary.

Relative to the center of the milky way and thus taking into account the velocity of our sun my relative velocity doubles. Relative to the center of the Virgo Supercluster our velocity again nearly doubles. It is estimated that against the relative backdrop of the CMB we could be moving anywhere between 400-600 miles per second. In the time it took you to read this paragraph you have moved further through spacetime than the diameter of this shared rock we are all riding.

Relative to the parent frame of reference our visible universe exists inside of my relative speed would increase. Relative to that pocket of spacetime's parent our relative speed would again increase to that frame as a whole. This happens because each successive frame is in motion and thus aggregates our total velocity through spacetime.

Our speed is not changing just because we decrease magnification and zoom out. We were already going that fast. It is relative to the frame of reference we compare to that we see the relative speed increasing. So one could say that relative to each larger parent frame of reference the kinetic energy inside me and everything on our planet actual increases, albeit marginally.

#### **Proposition 16**

Infinite nested pockets of space time where each successive parent increases our relative speed means that relative to some larger parent pocket of spacetime massenergy our actual relative speed approaches the speed of light. It could be 500,000 nested parents deep or 500 billion nested levels deep but as you progress up into larger and larger frames of reference our relative speed would approach the speed of light.

At that level of nested parent pockets of space time where we take on the relative speed of light we would appear no different than energy. We could say that matter is really just energy that is moving slow enough relative to us to be seen as matter but at an increased vantage point where the aggregate relative velocity is not as slow, it could appear as energy.

#### **Proposition 17**

A collision between two bodies can release energy and heat and the objects themselves can break into smaller pieces or merge into larger pieces. All four actions can all take place during a collision but not all four actions may take place in every collision.

The relative speed of the collision correlates to the amount of kinetic energy that can be released. Two objects that collide slowly relative to each other release little heat and little energy but as the relative speed of the collision increases the energy released increases as does the heat.

## **Proposition 18**

**The natural state of nature dictates an infinite number of collisions had already occurred between pockets of relative spacetime massenergy before our visible universe came into being.**

**Collisions occur between frames of all different size relative scales.**

**The larger removed the two frames of reference are from our scale the faster the relative speed of that collision would appear to us.**

**There are times where the relative speed of the collisions between two pockets of spacetime can see each frame at our scale moving relative to the other approaching 2C. Actually, because the relative speed exceeds the speed of light if it was moving towards us, we could never see it until it decimated us. This does not violate the laws related to adding to the speed of light because that only holds true inside a single parent reference frame. When you introduce a second larger separate reference frame that law no longer holds true relative to the objects inside at our scale factors and an entire separate branch of superluminal physics awaits us someday.**

**The additive property of the speed of light does not permit for 2C because 1C is the cap for the actual speed any object with mass can move inside its largest measurable reference frame. It is moving even faster relative to some much larger unmeasurable reference frame but at those scales we would appear as energy not mass and only measurable up to some degree of scientific precision at that scale factor.**

**When 2 frames of reference each with many bodies of all different sizes collide at speeds approaching or surpassing 1C let alone approaching 2C we can see a release of energy and heat on nearly unimaginable scales. We may not need  $10^{32}$  Kelvin and 380,000 years of cooling if instead of a singularity we had a field of collisions that pulverized matter into plasma that cooled for maybe decades, not hundreds of thousands of years.**

## **Proposition 19**

**I propose we can replace the catalyst for our big bang because it was not a singularity that contained all the mass and energy of the universe inside a tiny, constricted space. I postulate that instead there was a succession of collisions at incredibly high speeds and the kinetic energy involved at those speeds is capable of vaporizing matter into a hot plasma cloud of nuclei and electrons.**

**Sure, it could have been two large black holes smashing into each other at relative speeds approaching 2C and then we have the source of our singularity and even that makes more sense than the current paradigm but if instead there were multiple rapid collisions over a short period of weeks or months possibly years there are some logical**



reasons to give this strong consideration based on a handful of observations we have already documented.

I theorize that successive collision theory has merits that can help better explain the nature and structure of our universe's creation over what we might expect from a singularity. I am certain once you've taken a moment to weigh the evidence you will agree there is some very strong plausible reasons to consider the implications that would stem from acceptance of successive collision theory, the most notable would be that we must in fact be living inside an infinite and eternal Universe.

Many if not most bodies inside a frame of reference unless exceptionally dense would miss each other when two frames collide. Depending on the relative speeds would dictate if objects would begin forming new orbits and the pockets then merge or their relative speeds are too great, and they mostly pass through each other.

There will still be many collisions and after the two pockets either pass through each other or "bounce" off each other, one or more child frames of reference can be created. Most likely more than one frame of reference or pocket of relative space time mass energy would be created when two universes at our scale factors collided at superluminal speeds.

Gravity and magnetism both come into play as the huge cloud of hot plasma energy begins to cool. Separate spinning clouds of plasma energy too hot to form atoms and too hot to allow any waves of the electromagnetic spectrum to propagate all following the laws of physics based on the relative velocity and relative mass and relative angle of impact and degree of impact.

The current model has an expected size of the CMB where we can say the temperature of the early pocket of spacetime finally cooled down enough for electrons to begin to maintain stable orbits and the first atoms formed and electromagnetic radiation was able to propagate. To obtain that size when it finally cooled enough based on the premise of a singularity as the source, the current model predicts initial temperatures of  $10^{32}$  kelvin that took 380,000 years to cool down enough for atoms to form.

Successive Collision Theory, SCT, would predict a much lower starting temperature would be needed and the size of the initial pocket created may have been much closer to the relative size of the initial CMB. So we might only need  $10^6$  or  $10^8$  kelvin if the cooling time was not 380,000 years but instead or 380,000 hours or days. This resolves the burning question (pun intended) how any natural phenomenon could create  $10^{32}$  kelvin from a single infinitesimal point.

SCT would predict that two frames of reference would impact with a specific approximate relative angle of inclination and degrees of impact. The largest majority of objects would collide at the same approximate angle of impact and same approximate speed of impact. This would produce multiple separate clouds of hot spinning plasma each with a similar axis of rotation. As those clouds cooled the conservation of angular momentum would see accretion creating the first galaxies where due to their

**initial angular momentum and axis of rotation would produce galactic planes that are somewhat harmonic in the relative inclinations.**

**The study of our universe has shown a very large number of galaxies share the same relative axis of rotation and relative inclination of their galactic planes. A large number of separate black holes also appear to share a similar axis of rotation. If all matter in our visible universe was expelled outwards from a singularity, then the average galactic planes would look more like a pizza pie. The galaxies would be expected to generally follow the path taken away from the center and it would be very difficult to explain the large number of galaxies and blackholes that share the same relative axis of rotations using a singularity. It is a prediction of SCT to have exactly what we are observing.**

**The energy released would have the same approximate temperatures generated and the clouds that merged together to form our initial pocket would seek equilibrium of temperature while they cooled so the fact that we have the roughly homogeneous nature of the CMB might not require a faster than light inflationary period. There is some period of time following a succession of collisions at these speeds where the hot energy clouds would have had time to intermix and cool and it would be a prediction of SCT that there would exist multiple different models of multiple different types of collisions at multiple different relative speeds producing multiple different amounts of heat and energy. I would predict multiple models could develop to explain the mass and energy and initial size and initial temperature that corresponds directly to our observations without needing a faster than light inflationary period or 380,000 years of cooling.**

**SCT is a theory that defines our big bang and the frames of reference that collided could very well have been similar to our visible universe. There would be black holes smashing into neutron stars and moons crashing into planets and two massive black holes possibly colliding at speeds faster than the speed of light. The number of different possible types of collisions that could occur would predict diversity. It would predict different types of galaxies and different types of clusters could form. Another validated prediction.**

**SCT would predict large areas of empty space between galaxies and large voids of empty space where nearly zero galaxies exist. This again matches our observations and harder to explain from a singularity how we could have supervoids the size of what we observe if all the matter started from a singularity.**

**Inside each frame the galaxies themselves are moving as are the stars and planets and even black holes. Most in some type of orbit and so some collisions will have slightly different angular momentum. There would be some galaxies with oddball axis of rotation so although we would expect most galaxies to have a similar axis there will still be plenty of exceptions. This is seen across our universe.**

**SCT would predict that because collisions would occur between objects of different sizes colliding at different angles of impact there would be differences in the resulting spinning cloud of hot plasma and the galaxies that in turn form would take on**

properties associated with the amount of mass and heat and angle of impact so we could in theory produce mathematical formulas to define how our galaxy was created. And someday produce a series of mathematical formulas that explain each separate cosmic structure and the relative velocity and angle of impact of two masses and their approximate starting mass and potentially be able to classify the two types of celestial objects that created specific structures inside our universe.

SCT would predict that if our visible universe was created from successive collisions then three primary predictions would be true. The first prediction is that some collisions would hit head on. When that happens the majority of the kinetic energy involved would convert to heat and energy and much less of it would be retained inside the angular momentum of the resulting plasma cloud. When two large black holes collide nearly head on SCT predicts the result would be a massive cloud of energy with a nearly non-existent rotation. This theory again is validated by observation where we see superclusters of dense pockets of stars and galaxies that in general as a whole have a nearly non-existent rotation but much higher density.

To understand the other two predictions where the objects do not hit head on let's call the colliding frames pocket A and pocket B. There will be times where the object from pocket A hits the left side of object B and there would be times where the object from pocket A hits the right side of object B. SCT predicts that would be a fairly equal number of times of each and would predict a close balance in the galaxies that spin clockwise and those that spin counterclockwise. Again, this is another prediction of SCT that is validated by observation. We see a roughly equal balance in direction of rotation but not in patterns that would be associated with expelling outwards from a singularity.

It is possible to have objects from two different frames of reference have a relative speed to each greater than the speed of light. To any third-party observer neither object itself is travelling faster than the speed of light but relative to each other they would be. Therefore, another prediction of SCT is that there will be times where a foreign body enters our pocket of space time, and that foreign body would move through our pocket of space time at faster than light speeds. When this happens, the object might appear invisible, moving so fast it's light cannot register and it could pass right through our entire universe and never hit anything. But that is a lot of space to cover without hitting anything so some things it could hit might be a star or a planet or a black hole or a nebula as possible examples.

SCT would predict then we would expect to locate at least one or more out of the trillions of galaxies where the black hole that we know should be at the center is gone. Any collisions of an object that originated from inside our universe that hit a black hole would be absorbed by the black hole. It would take an object moving faster than the speed of light to decimate a black hole and there is at least one example we have found where this is true. A FFTLO (foreign faster than light object) could explain the missing black hole and also the missing stars that seem to have disappeared. The VASCO project is actively tracking historical pictures of the universe looking for the instances

where stars just vanish. These are predictions of SCT validated by observation that are currently difficult to otherwise explain.

If instead of colliding with a celestial object it passed through a nebula, we might expect the friction and energy transfer to ignite pockets of the nebula that could become very hot and very bright for a short period of time until it burned itself out. When that happens, it could be a single bright pocket but more than likely we might expect hundreds or even thousands of small bright spots to appear and then disappear a short time later. Again, the VASCO project has found examples of this prediction where about 100 red transients or unknown bright sources all appeared across a patch of sky but were gone the next time they looked. Red transients are yet another prediction of SCT that is validated by observation.

The relative kinetic energy involved in collisions of objects with mass at speeds approaching  $2C$  can produce sufficient energy that then cools into more matter than the amount of matter involved in the initial collision. Two objects that collide fast enough could produce a plasma energy cloud that cools to contain greater mass than the initial starting mass of the two objects.

In my humble opinion our universe did not form from a single singularity but there very well may have been hundreds if not thousands of separate singularities involved.

**Prediction:** As mentioned, I predict a set of mathematical formulas will develop and tweak over the next 30-50 years where an attempt will be made to give each pair of objects involved their respective names and their source pocket, approximate relative velocity, angle of impact, degree of impact, coefficient of restitution, and approximate range of masses and each equation will be tied to the celestial structures they created. We will see energy converted to heat, energy converted to sound even if it had nowhere to go, energy converted to light, and energy converted to other forms of electromagnetic radiation.

Someday we will produce an elaborate set of equations validated by using computer simulations and computer models to weigh the different variables and their expected resulting energy, mass, and temperature outputs. I won't be able to take credit for the math or the number of different formulas we are talking about, but I am certain people with the resources to crunch the data will be able to produce an exact set of equations and exact computer simulation to show us what the big bang most likely looked like within some acceptable margins of error for all the unknowns.

**Prediction:** If this theory is sound then SCT predicts the potential to someday locate one or more objects that were not created during the cosmic collisions that created our point in time and space. I predict we will someday locate objects that could be 20 or 30 or 50 billion years old because not every frame of reference is moving at close to  $2C$  relative to us.

Plenty of frames of reference could be moving slow enough relative to us that a foreign object entering our space time could take orbit or crash into something and if someday we are well spread out into the cosmos, then we could someday locate something that unequivocally proves the existence of a universe before ours and once we know for absolute certain (I already am but for everyone else's sake) then we know the Universe itself must be infinite. We can have one pocket or an infinite number of pockets, but we can't have two. Any object we find older than 20 billion years I feel can only lead to a single conclusion and that being the entire Universe must be infinite.

Likewise, then if we accept SCT as a viable option and two separate universes collided at high speeds to create our universe there can be no other interpretation in my eyes other than there must exist an infinite number of separate pockets of relative spacetime massenergy. One could accept the likelihood of an infinite number of separate pockets without fully accepting the probability of an infinite number of nested pockets but when one tries to fathom the likely structure of the Universe outside of our visible universe, I think infinite nested pockets of spacetime massenergy to me is the most likely logical structure we could expect to find if we accept there are an infinite number of pockets of relative space time cohabitating our infinite Universe.

## Proposition 20

Far too many people do not appreciate there is a distinction between our universe and The Universe. You may have picked up on the fact that I capitalize universe differently and so the lower-case universe would be our visible pocket of space time and the Universe with a capital U is the infinite and eternal spacetime that has always existed, was never created, and extends infinitely outwards in all directions and infinitely inwards in all directions. Rather than constantly re-using the phrase pocket of relative spacetime massenergy I coined the term "post" short for pocket of spacetime. Porstme just does not have the same ring as post and so a post is every pocket of space time.

Every cohesive frame of reference sharing the same relative velocity and relative trajectory would be a post. Some with many children objects and some that might only have one.

There will be times where I may capitalize Post. That Post is the largest measurable cohesive frame of reference created by our big bang sharing the same relative trajectory and relative velocity. So universe with a lowercase u is the same as Post with an uppercase P.

Our Post has velocity. The point in spacetime where our cosmic collisions took place is hundreds of billions of light years away, maybe trillions assuming the expansion of space time taking place between where it happened and where we have since moved to.

Our Post has an approximate axis of rotation and speed of rotation.

**Our Post likely has an orbital period and is orbiting a denser or larger post with greater mass and there are likely other siblings also in orbit. All the collisions that took place within a specific localized area would create a cohesive pocket of space time for us and likely whole other pockets of spacetime masse energy that could be smaller or much larger or it could be sparser or denser but there would likely be many of them all created from the same cosmic event that created our universe.**

**Together they share one or more frames of reference and move through space time sharing the same approximate trajectory and velocity as our universe. Our Post's parent pocket of spacetime also has a parent and that parent has a parent. We will likely Never know how many siblings we have or how many nested levels of separate pockets of space time were created during the set of collisions that also created us.**

**If we were to someday make it to the edge of our Post it would be surreal. We are used to seeing a night sky full of stars but there are planets in our universe that can border the outer edge of our Post and they would have a much different evolution. Where we have made it to this point in civilization to finally begin to understand the natural state of nature those civilizations would have figured out much earlier than us what the true structure must look like.**

**So those different spots if we peered out into the expanse, the dark starless sky, I predict it might not be starless. Instead, I predict with strong enough telescopes that we would find faint lights that might look like a tiny star but if we had the ability to magnify that star, we would see it is a Post like our own.**

**If there were multiple sibling posts visible, we could measure our approximate axis of rotation and rate of rotation. Only a tiny tiny portion of civilizations survive long enough and grow large enough to be able to measure the orbital period of their Post. But some pockets of space time do see civilizations that reach that level of understanding and evolution. Whether we get to that point is up to the collective decisions, we all choose to make from this point forward.**

### **Proposition 21**

**We are each a pocket of space time to every cell, atom, and microbe that share our same relative velocity and relative trajectory.**

**Every cell and microbe and atom in turn is their own frame of reference for everything that makes them up.**

### **Proposition 22**

**Every pocket of spacetime massenergy has its own sphere of influence. A set of multiple spherical waves that emanate outwards. One for an electric field. One for a magnetic field. One for a gravitational field. One for its luminosity (including light that**

is reflected). One for its temperature and possibly others. Sometimes even more than one type of spherical electromagnetic wave could emanate outwards.

These waves emanate outwards for a certain distance and fade away, but the amplitudes will hit the limit of our scientific precision long before they completely dissipate.

Not every post will have a measurable wave for each measurable dimension. A rubber ball might not have any magnetic field at all but could still emanate gravity, heat, or reflect light.

In order for the spherical wave to propagate and continue to grow in diameter there needs to be a transfer of energy. Since the amplitude of the wave defines the strength of the wave and the energy carried by the wave, the transfer of energy happens steadily as energy released or removed from the wave's amplitude is converted into all the new points on the wave that did not exist when the diameter of the wave was one wavelength smaller. Each additional wavelength added to the sphere of influence creates gaps in between the prior wave points and so in a sense the wave slowly flattens out as it expands outwards as the energy carried by the wave is transferred into its own propagation.

### **Proposition 23**

We can measure things like electrostatic attraction, gravitational attraction, and other interactions using Cartesian visualizations. Formulas based on those visualizations tend to work very well on average but that is not what is really happening behind the scenes. I propose it is in fact spheres of influence that are interacting not just single lines of attraction between two masses.

The spheres of influence of two objects intersect at hundreds, thousands, and millions of different points depending on the strength of the separate fields at all the different points those spheres intersect.

We already see how waves in phase can increase in amplitude and completely out of phase can cancel each other out but there are many other ways two spherical waves intersect that are neither completely in phase nor completely out of phase.

### **Proposition 24**

The behaviors of specific types of waves when they intersect in partial phase can cause different degrees of attraction or repulsion. The aggregation of those behaviors is why we see the effects of magnetism and gravity since each wave could have alternating electric and magnetic components.

When there is an attraction, it can be partially based on the magnetic properties inherent in every form of electromagnetic radiation or it could be based on the electrical

properties, but it can also be based on how the waves pass each other in partial phase. When there is any type of tug or pull between two waves because of charge or phase that tug can reverberate back along the wave producing an attractive or repulsive force at the source. I see that as how gravity and magnetism are working behind the scenes. Gravity warps spacetime and causes time dilation but it is a force, and it is carried by waves because all energy in the universe moves in waves and all forces involve energy in one way or another.

Every point of intersection between the spheres of influence creates a triangle between that point and the two sources and when the area of those triangles where the force is attractive outweigh the area of those that are neutral or repulsive then there is a total aggregate attraction. The reverse is true for repulsion. Since there is no way to measure all those different triangles, we can accept that some formula using integrals and derivatives will arrive us to the inverse square laws we are already all well familiar with.

There are quintillions of separate celestial objects in our speck of cosmic dust we call our visible universe and every one of them has a sphere of influence.

#### **Proposition 25**

A cohesive group of objects sharing the same velocity and same trajectory can see their spheres of influence act together. As a whole they can emanate a larger single sphere. They each have their own influences inside the frame but because they are a single post their waves will be in a type of phase that allows them to extend over greater distances than any of them could do alone.

At different points on each sphere there can be a measurable direction, velocity, strength, and possibly charge. We could pick any point in space and see billions of separate intersecting spheres of influence and to visualize the interactions we could treat the point from each separate wave as a tensor. Like a vector but with just a little bit more information. One could then say that permeating all of the space inside our visible universe is a tensor mesh of intersecting spheres of influence.

Imagine you had a thousand flashlights all tied together and pointing at you from two miles away across an empty field on a dark night. Your accomplice could begin to turn them on one at a time and you would not immediately see them but as they continued you would at some point see it start as a faint light and then see it get brighter and brighter. That is how a pocket of spacetime can aggregate the different wave strengths but let's also use this visualization to pretend we could see gravity.

One way to try to visualize the tensor mesh is to pretend that gravity gave off light. Every dense object would have a bright halo starting on the edge of each object emanating outwards slowly getting dimmer and dimmer the further away you got. Eventually hitting a point where it became so dim you could no longer see it. Still traveling further but at such a tiny amplitude it's not readily visible.



Tensor mesh produced by the strongest objects or pockets would be the brightest and look like a backbone of light connecting all the nearby objects. But all the objects and pockets of less mass or from objects much further away would be much dimmer. However, when billions of dim waves all intersect, they if they were visible would produce a stronger light so the intersecting points also get brighter due to aggregation of waves. This is just a visualization to try to picture in your head what the tensor mesh of our universe looks like. I hear there are teams already mapping this out and we may begin to see our first glimpses of our tensor mesh in the not too distant future.

Every post has an internal tensor mesh spread out across all the objects inside the pocket and that tensor mesh aggregates as it extends outwards inside its own parent pocket of spacetime. Our universe would have this immense tensor mesh spread across our universe and it would be strongest where there is lots of gravity and weakest where there is less gravity.

I predict that we will find time dilation occurs at the points where the tensor mesh of intersecting gravitational spheres of influence are the strongest. If we could set a couple hundred synchronized chronometers into specific paths around our solar system and move them there at speeds slow enough not to induce any speed based time dilation if we send some to areas we expect to see the strongest tensor strength and also in areas we predict the tensor mesh to be weakest I predict we will find time itself moves is different inside different areas of our universe and the implications of this at both the macroscopic and microscopic levels could have wide ranging implications.

### **Proposition 26**

Every orbit has a finite amount of mass contained within the perimeter of the orbit and an infinite amount of mass contained outside the perimeter of the orbit. For this reason, all attraction is only transient. What joins together will eventually pull apart and every orbit will decay sometimes first inwards but eventually outwards.

It is the natural state of nature for every tensor mesh to degrade and dissipate. Every tensor mesh loses strength as the objects themselves lose mass and the diameters of their orbits slowly get larger. As this happens the size of the tensor mesh increases. As all orbits slowly get larger and larger all tensor meshes naturally grow in size. We see the moon slowly moving away from our planet and the planets themselves slowly moving away from the sun and we see systems inside of galaxies slowly drifting outwards because all orbits eventually decay and although some get sucked inwards, they all will eventually drift apart. No orbit has infinite energy and all orbits slowly lose energy.

### **Proposition 27**

**We already see that gravitational attraction offsets the expansion of our universe so we know that the binding of massenergy to spacetime can keep the expansion at bay albeit only temporarily.**

**The effects that have been attributed to dark energy has a name. It is the dissipating tensor mesh strength of successive parent pockets of spacetime massenergy. Our local universe's spacetime is obtained from its parent pocket and in turn from its grandpocket so as the tensor mesh of their spacetimes dissipates and spreads out, it would appear to us if the very fabric of our spacetime was being torn apart. Our spacetime is but a section of our Post's parent pocket which in turn is just a section of its parent pocket. As each successive parent pocket's own tensor mesh strength dissipates its space time expands so each child pocket's spacetime would expand with it.**

**Inside each pocket of spacetime there is an ongoing battle between the tensor mesh inside the frame and the tensor meshes the frame resides inside of. In the areas of the local spacetime inside each pocket where the local tensor mesh is stronger there will be little to no expansion of spacetime. In the areas where the interior tensor mesh is not strong enough, the dissipation of the parents spacetime wins and we see expansion take place.**

**We will find the expansion of our Post is not uniform. We will find the baking raisin bread analogy insufficient to accurately describe how the expansion of our universe is taking place. Variable rates based on the areas of weakest tensor mesh strength.**

**As a tensor mesh begins to dissipate and its cohesion to spacetime weakens the degree with which it remains able to bind to spacetime will lessen. The effect of the weakening of successive parent tensor meshes would look like to us inside our frame that the rate of expansion inside would slowly increase over time in the areas where the local tensor mesh was insufficient to defend itself.**

**Prediction: The current estimates of the cosmological constant and Hubble constant will turn out to be variables and will be found to be tied to the gravitational tensor mesh strength that binds the mass energy inside our Post to the space time of our Post.**

## **In Summary**

**Volume one defines what I see as the natural state of nature as it relates to the structure of our universe and The Universe. Accepting an infinite Universe need not happen to accept the possibility of Successive Nested Pockets Of SpaceTime MassEnergy, Spheres Of Influence, Successive Collision Theory, and Dissipating Nested Tensor Mesh Strengths.**

**These volumes are the collections of ideas and research based on over 40 years of study in a diverse range of sciences and I am unequivocally certain that time and space and**

mass and energy are all infinite dimensions of which there exists no largest scale factor or smallest scale factor and in later volumes I touch further on gravity and dark matter and other topics that become much simpler to explain once we accept that scientific precision dictates how we can quantize the natural state of nature at the microscopic levels so we can try to finally shed our last shred of Earthcentricity.

We first felt the Earth must be the center of the Universe and then that the Earth must be the center of our solar system and both times our instincts were proven wrong. To expect our planet is the only planet with sentient life is foolish. To expect our visible pocket of mass and energy to be the only pocket of mass and energy in an infinite void of space is foolish. To even consider any type of bounded Universe that does not extend infinite in all directions both inwards and outwards is foolish. To think that this scale of matter and scale of energy and scale of time is any more important than any other scale that is magnitudes larger or magnitudes smaller is foolish. If you understand relativity of reference frames, then it is foolish to expect our largest measurable one to have any special place in the grand scheme of an infinite Universe.

To think that this time right now or this place right now is special in any way is foolish because an infinite amount of time has passed prior to this moment in time and an infinite amount of time shall pass after you finish this sentence.

Our Post is special to us and we give this planet a purpose and meaning and value but in the grand scheme of the entire Universe we are nothing but a point in time and space. If we can learn to shed our Earthcentricity in favor of our planet actually being a point in time and space maybe we can stop being foolish and begin to try to work together to salvage what is left and begin to turn things around and try to be one of those civilizations that is actually able to measure the orbital period of their Post.

So how could one ever hope to understand what an infinite spacetime might look like if our only frame of reference is a point in time and space? Because if in fact a point was timeless and massless then nothing we see or feel could really be seen or felt. All of calculus and trigonometry rest on the steadfast laurels of geometry and the very heart of geometry is the timeless massless point and so I postulate that if a point is the building block of everything then everything, we need to know about what is outside our point we can tell by observing what is happening inside our point.

Thank you again for your time and consideration.