A proposition to leverage the Flamingo project, two changes to the field equations that make up the general theory of relativity, AI analysis of cosmological "Big Data", red transients, a fleet of synchronized space chronometers, and a better choice than an assumption made over a century ago, that all combined can help us visualize the probable source of dark energy, the potential source of the kinetic energy responsible for our big bang, and a possible source of dark matter.

Preface:

Our current Lambda-CDM model has been consistently challenged each time our technologies improve. A number of separate mysteries that we already had trouble explaining plagued our best simulations long before the recent images from JWST were released. Now, early mature galaxies and early massive black holes further complicate the best simulations we are able build.

I propose that we are on the precipice of a paradigm shift that challenges the assumption made a century ago that our universe started from a hot dense center. We know fairly well what happened following recombination, but the hot dense center was in fact an assumption that was extrapolated from the expansion of the universe.

If we change that starting condition from a hot dense center to the intersection of two successively nested comoving frames of reference far removed from our scale factor the potential for collisions occurring with the kinetic energy approaching or probably even surpassing twice the speed of light would offer the means to explain most all of the mysteries that our current models fail to adequately address.

I feel we can leverage the Flamingo project with certain core changes and be able to replicate conditions that would explain dark energy, dark matter, the horizon problem, the cause of our big bang, why we have super voids and gigantic cosmic structures, the source of slowly rotating cosmic filaments and strands, how early mature galaxies and early super massive black holes formed, where the antimatter went, why we have a CMB that is not 100 percent isotropic, a potential reason for red transients and certain fast optical blue transients, why there is no crisis in cosmology, and simple answers to many of the other mysteries that stem from trying to stuff square pegs into round holes for a century.

Before dismissing this as another Dunning-Kruger manic rant let me mention that I am a high IQ polymath that understands the field equations of the general theory of relativity and have put over forty years of research into trying to explain as many of the different mysteries that our current Lambda-CDM model struggles with as possible. I expect nothing less than skepticism about the claims made here, but those who read to the end with an open mind will likely end up with an entirely new view as to the true natural state of nature.

I predict that a few changes to the Flamingo project, or another simulation that already understands how the field equations of general relativity work, would allow it to show us the cause of dark energy, replicate big bangs, and with AI and big data potentially locate the elusive source of dark matter. All we need to do is follow the rules of general relativity and special relativity and start the simulation with all the data we have collected over the last 25 years or so instead of billions of years ago.

Apply general relativity recursively through larger and larger parent comoving frames of reference and a clear reason for dark energy emerges. My ideas about dark matter could be off base, but I am one hundred percent certain that I can explain the culprit behind dark energy clearly using simple classical relativistic equations we already understand.

Instead of starting billions of years ago, we can adjust the simulation to as accurately as possible play back the last few decades and apply a model that lets us zoom out and fast forward and see how a random distribution of mass and energy would look like as we continue to zoom out. Rather than trying to keep fitting a broken model into a specific mold we can make the program much less specific and far more general just by starting with a premise of eternal time and infinite space. With random recursion of mass in all different states we can see how accretions let galaxies and star systems and even black holes evolve while always moving through some frame of reference that itself is always moving.

I feel science as a whole for the most part has ignored the implications of what happens when we apply the general theory of relativity and the special theory of relativity against eternally infinite 4D Minkowski spacetime. We know that the faster you move through space the slower you move through time so that tells us that every collection of bodies sharing the same relative trajectory and relative velocity would share the same base perception of space and time. Every comoving frame of reference creates a pocket of spacetime for all bodies sharing that same relative trajectory and relative velocity.

General relativity applied against infinite spacetime shows that comoving frames of reference naturally occur in a nested succession. Inside of every frame of reference each body or gravitationally bound group of bodies will start with a base perception of space and time acquired from their most direct parent frame of reference.

Then their own velocities inside that frame and all gravitational fields acting upon them further refine the perception of time and space that they each pass on to all their children. We see this succession right now as celestial bodies following the laws of general relativity create larger and larger comoving frames of reference, a nested succession of pockets of spacetime all constantly playing an eternal game of follow the leader(s).

We already know that gravitational fields, electric fields, and magnetic fields, the governing forces of the universe, are both scale invariant and scale independent and there is no reason to suspect they do not work the same way as we continue to decrease magnification and visualize a larger and larger nested succession of comoving frames of reference.

Our current best guess readily admits it can only explain 5% of the visible universe and it starts with eternal time and infinite space as a speculation. We should not find it surprising then that when we toggle that core assumption to a starting premise we can now explain

100% of reality. Join me now for a brief gedankenexperiment as we explore what general relativity and special relativity tells us we should expect to see if time is eternal and space is infinite and how to leverage computer simulations to shows us the source of both dark energy and possibly dark matter. Both of which are misunderstood or missing parameters in the field equations of general relativity.

Our Earth creates a pocket of spacetime as it hurls through space and time in orbit around Sol. Our planet, the moon, everything nearby, all share the same relative trajectory and relative velocity and same base perception of spacetime. The differences from one frame to its children are often negligible and barely measurable but the aggregated succession of them truly defines the natural flow of time. Our sun, all its planets and their moons and everything inside our heliosphere are part of a larger pocket of spacetime as they orbit the black hole at the center of our galaxy with the same relative inherited speed and same relative inherited trajectory.

Sagittarius A*, our solar system, all the other star systems in our galaxy, nebulous gas, and rouge bodies, and even dwarf galaxies orbiting us all create the next parent pocket of spacetime as they orbit a barycenter inside the local group and the local group is in orbit inside an even larger comoving frame of reference.

We indirectly either orbit the Great attractor which in turn orbits the Shapely attractor or we orbit the barycenter of the two. They in turn are in orbit as well and this succession of nested pockets of spacetime would continue outwards as we decrease magnification. That is what general relativity tells us to predict if mass and energy continue in all directions, not inflating bubble universe forged from inflating hot dense centers of quantum fluctuating cold dark matter.

We treat these separate pockets often times as inertial but since most orbits are elliptical there will be periods of acceleration and deceleration that would also have negligible transient effects on the perceptions of time and space. I have not yet seen anywhere that indicates we properly integrate those tiny effects into our Lorentz transformations nor have fully vetted the impacts that could be coming into play as it relates to redshift between separate nested successions of pockets of spacetime.

It could be another thousand years of data capture before we are able to determine the period of the revolution of the Local Group around the Great Attractor, the period of orbit of the Virgo Supercluster around the center of Laniakea, and if the Great Attractor is orbiting the Shapely Attractor or a shared barycenter between them.

If we tweak the Flamingo project instead of starting with a hot dense center to start with the year 2000 and use all the data we have acquired in the last quarter of a century and fast forward using recursion to build random successions of parent pockets of spacetime then I predict dark energy would manifest if we have an accurate succession of nested pockets of spacetime as long as one part of the physics is not overlooked. The key part is the simulation must be able to also properly approximate average orbital mechanics that occur as the gravitational centers loose mass over time.

No orbit has infinite energy and over time all orbits will decay. Some inwards to collide in the center but at larger scales eventually all slowly seeing the diameter of their orbits increasing marginally over time. Our moon is slowly moving away from our planet. All the planets are slowly moving away from the sun. All the arms of the milky way are slowly spreading apart. This dissipation in the mass energy cohesion to spacetime is a natural state of nature. With another thousand years of data collection, we would see our local group's diameter is increasing as is the diameter of its orbit.

When we apply this natural state of nature to a succession of parent pockets of spacetime where all of them are seeing a dissipation of mass energy cohesion across their relative spacetime, at our scale factor that would look like the very fabric of our spacetime would be ripping apart and that is exactly what we see.

A prediction of this natural cause for dark energy is that we should expect to see it increase exponentially over time if there was a dissipation of massenergy cohesion to spacetime across an increasing succession of parent pockets of spacetime. If we can measure the rate reliably over the next 100-200 years the exponential growth rate of cosmic inflation will be proven.

It is not only exponential, but it is counteracted by the overlapping gravity wells inside our visible pocket and in the areas the overlapping gravitational attractions are the strongest the effects of dark energy are the most negligible. Where local gravity is weaker the effects of dark energy are stronger.

Dark energy is a constant battle between our localized relative overlapping gravity wells and the succession of far larger overlapping gravity wells across a nested succession of parent comoving frames of reference where each parent sees a slow dissipation of massenergy cohesion to relative spacetime. A succession of parent comoving frames of reference that statistically must exist if time is eternal, and space is infinite.

A rate of expansion that is not constant but variable across the universe wherever localized gravity wells are the weakest. The cosmological "constant" is not constant but a ratio between the aggregate strength of all the relative overlapping gravity wells in any area of space weighed against the aggregated dissipation of parent massenergy cohesion of all the related successive slowly dissipating gravity wells from all the comoving frames above it.

All we need to use to fix our best simulations is general relativity, special relativity, simulated eternal time, simulated infinite space, simulated infinite energy, simulated infinite mass, and the known laws of motion in particular orbital mechanics as it relates to decaying orbits due to decreasing mass as we see happening to stars and galactic centers as well as orbits loosing energy due to all the gravity outside every orbit tugging on the mass in every orbit.

Apply that model to a succession of parent comoving frames of reference all gravitationally bound and as the number of parent frames increases the effects we call dark energy should manifest naturally. When tweaked to approximate working parameters taken from the astronomical big data that JWST, Hubble, Gaia, Euclid, and others we are able to aggregate, we should be able to play the simulation backwards or forwards and consistently see most of the current issues in our best simulations pretty much all disappear.

I also predict big bangs would eventually be seen if we can fast forward if could zoom out to scale factors then of thousands of nested levels deep, and eventually hundreds or even millions of nested levels deep, and then try to see what the simulation tells us the collisions are like and as we go higher and higher up the chain of parent frames of reference I predict we would see a slowly increasing total relative speed of the bodies moving within that parent frame thus the kinetic energies of the collisions that occur when pockets pass through each other could regularly exceed twice the speed of light. At some far larger scale factor in the ancestry of our parent comoving frames of reference there is an intersection of trajectories and then a succession of smaller frames collide all the way down to our elements, molecules, and compounds.

The farther the simulation can zoom out the better our chances of seeing collisions first occurring at twice the speed of light but when we are able to zoom out even further I predict we could in theory someday even see collisions with relative speeds higher than twice the speed of light and if that happens then who knows what the limits of the relative kinetic energy could be. Twice the speed of light may be a cap but if not, then it can likely grow much higher.

That is a variable in all this that I do not know yet. Can the total kinetic energy of the collisions involved surpass twice the speed of light or is the relative limit within any two relative pockets that share some far far-removed larger parent frame of reference capped with the kinetic energy of collisions never exceeding twice the speed of light.

Instinctively I think we can have collisions between two stellar nurseys with equivalent kinetic energies from collisions four or eight or even forty-two times the speed of light. In particular if we include the expansion of relative spacetime inside each pocket and the apparent aggregate impacts we see in the motions of galaxies far from each other already.

If we already see relative expansion speeds approaching and breaking the speed of light between disparate galaxies and those galaxies share the same parent frame of reference then the implications of that internal relative motion on top of the relative energy of separate larger pockets colliding themselves could greatly amplify the total kinetic energy of the resulting collisions.

This is one area where I believe we can improve our model using the data we have collected all these years to leverage AI to help figure out possible likely nested successions we might be inside of that might produce similarly increasing dark energy. That would allow us to tweak the field equations of general relativity to better represent lambda as a fraction between the strengths of our gravity wells against those of all our ancestors.

Our entire visible universe is either in orbit, being orbited, or both. Our visible universe, our largest measurable pocket of spacetime, our largest measurable comoving frame of reference, likely has siblings created during the same intersection of much larger pockets of spacetime about 13.8 billion years ago.

That parent frame of reference with siblings likely has its own siblings in a larger comoving frame of reference and so our visible universe would most often have both siblings and cousins. This would be dictated by the relative diameter of overlap across each pocket

during the intersection of their trajectories and the relative density of massenergy cohesion among the areas in the impact zones.

Our pocket, of which our visible universe is inside of, has an approximate axis of rotation, rate of rotation, center of mass, and either directly or indirectly a period of revolution. The number of siblings we may have and where they are is something we likely will never be able to determine but that does not mean they are not there!

Once the Flamingo project is running huge simulations at magnifications levels far far far above our scale factor I predict that if we scale upwards and outwards the simulation will begin replicating big bangs as collisions occur between pockets that are tens of thousands or hundreds of thousands of nested pockets higher than us. That is what happens when you apply general relativity against eternal time and infinite space. We get a succession of pockets of spacetime, not inflating bubbles. An infinite number of separate successions of nested relative "pressurized" pockets of relative spacetime massenergy heatradiation.

I propose that SCT, Successive Collision Theory, offers far more observational evidence than our current best guess. When we examine the predictions of two large pockets of spacetime passing through each other at relative speeds approaching or exceeding twice the speed of light there are many predictions that are made that are validated by observations. It would predict first that an overwhelming majority of the constituents of both of the intersecting pockets would completely miss each other.

But if we had two dense stellar nurseries with supermassive quasars at their center all making initial collisions with the kinetic energy equivalent to happening at eight times the speed of light or faster, then there would be many different types of initial and secondary collisions occurring and the similarity in the properties of many of those collisions would explain the evolution of our universe with far greater accuracy than any other model we have tried so far.

Head on collisions would have the greatest transfer of kinetic energy into heat and radiation while more elastic collisions that glance off each other would leave spiraling eddies of hot plasma with greater leftover angular momentum.

When two pockets intersect, regardless of how far removed their nested succession of parent comoving frames of reference are, there will always be a smallest shared parent frame of reference. The number of nested levels between that parent frame of reference and the actual bodies that end up colliding could vary by magnitudes, and it would be highly unlikely for both pockets to have the same relative velocity within that smallest shared parent frame of reference.

One of the pockets was likely moving faster than the other pocket relative to their shared parent and that faster pocket would direct the overall momentum of the collisions that occur. In particular those that take place nearly head-on would be the most inelastic and see the greatest conversion of mass into heat and plasma with the least conversion of energy into retained angular momentum.

We would expect to see long strands of slowly rotating cosmic filaments that have branches and tentacles at the different junctures where hot dense energy moving through spacetime hit certain thresholds. If the collisions occur at relative speeds in excess of 2C then there could be multiple thresholds otherwise 2C is a threshold where spinning eddies of hot plasma might branch off and then C is another point where spinning eddies of hot plasma might again branch off.

However, there need not be any fixed thresholds and branching could occur anytime the fast-moving eddies of energy pick up either a magnetic or electric field because as soon as there are attractions and repulsions then the eternal game of follow the leader begins anew.

It is those initial attractive and repulsive forces inside eddies of hot plasma energy that cause pockets to slow down below the speed of light, acquire mass by doing so, and branch off because it slowed down. The hotter energy continues further, and new strands branch off each time any collection of energy and/or mass cools and decelerates. This branching is further obscured by all the secondary and third collisions that can occur. Many "bright" collections in large cosmic structures could be spots where secondary collisions occurred.

The wider and more massive the largest filaments are would be a property of the starting mass of the two bodies that collided. The relative length of the primary filament would be a property of the difference in the relative velocities at time of impact within that larger shared parent frame of reference.

If Laniakea is an example of an average supercluster then we can model how the results of multiple successive collisions at superluminal speeds could behave by trying to locate similarities to the results of particle colliders with what Laniakea looks like and then get creative with the physics at multiples of C.

We need to apply general relativity against all bodies and cohesive groups of bodies and use special relativity to dictate how the relative speeds between these different nested successions of massenergy cohesion can impact each other. The speed limit of special relativity dictates how far and where the effects of general relativity can reach.

Another prediction would be that an overwhelming majority of the initial collisions would have had a very similar amount of kinetic energy involved in the initial and even secondary collisions. The similar energy transfers from mass to heat would be predicted to generate the same starting temperatures across vast areas of spacetime and instead of needing 380,00 years of cooling with a hot dense center, we may have only had 380,00 weeks or even 380,000 days of cooling across a much larger swath of relative initial spacetime.

This model includes a realistic starting temperature, realistic starting size, and a science-based catalyst to explain where the mass and energy came from and how it got so hot. Our initial assumption of a hot dense center created the horizon problem, and we need no inflaton field or inflation to explain the roughly isotropic temperature of our first visible light.

Long before the soup of high energy hot photons and gluons and quarks and leptons cooled enough for atoms to start forming and a CMB to be released, general relativity and

electromagnetism would have already begun forming the first nested successions of comoving frames of reference as mass would begin to coalesce and accrete.

Stars and black holes are not made of atoms. Stars are made of atomic nuclei and black holes are made of a dense quark soup and neither would be hampered by stray leptons like early high energy photons were. But that alone only explains a small part of the answer. Kind of like how little of an atom's mass the Higgs field actually provides.

The other part is that it would predict less than 100% decimation of all mass into hot high energy photons. Some leftover chunks would be predicted and inside a hot dense plasma soup could be the seeds of the super massive primordial black holes and the reason for early mature galaxies. If someday we ever left our star system and ventured out into our arm of the Milky Way I predict that we may someday come across an object of unexplainable age. It could be a moon, or an asteroid, or meteorite on some foreign planet, but if someday we found an object verified to be older than 20 billion years it would be further validation for SCT.

I believe someday the physics of superluminal collisions will show that when two dense galactic nurseries intersect at 2 or 4 or 8 times the speed of light, then head on collisions have the potential to create so much energy that the mass that eventually cools down is greater than the starting mass of the two objects that collided. A hot stream of high energy photons moving faster than light but cooling into neutrinos and gluons and leptons and then quarks and bosons. All moving in waves of spinning eddies with lots of left-over angular momentum from the multiple collisions.

The same approximate relative starting kinetic energy for the bodies that glance off each other would cause spiraling eddies of hot plasma with subeddies and pockets of spacetime forming with a very similar starting energy and starting angular momentum. What we know of frame dragging should have pointed us towards part of the reason for dark matter long ago, but we seem to overlook the implications of frame dragging around massive black holes because that same physics exists across all the overlapping gravity wells of our universe and could be part of the reason galaxies hold together when we think they should fly apart.

We would also predict many galaxies should have a similar period of rotation if the leftover angular momentum started with approximately the same kinetic energies and seeing galaxies of different sizes with the same one billion year rotation (if true) would validate them starting with the same relative angular momentum.

We would also predict the distribution of clockwise and counterclockwise galactic rotations to be spread out roughly 50/50 in all three spatial dimensions because the angles of impacts of all the bodies that do make contact would occur at all sorts of random contact points between the two objects.

The overwhelming majority of mass of the two intersecting pockets passed through each other easily. They continued on their way and depending on the relative difference in their velocities at the scale factor of their shared parent frame of reference they could end up circling each other and eventually merging or they may have continued along barely impacted by the graze.

We could never collect the data to gauge if our predictions are accurate but if we make the right kind of corrections to our simulations we should be able to tweak the superluminal inelastic collisions to create a cosmic web with supervoids and with the right type of random variables distributed at different densities could see this happen over and over again with different properties and evolutions and those that most closely match what we see in our visible universe could help provide a base set of possible starting conditions that were similar and someday maybe we could derive out of the simulations the actual equations that define exactly what happened during the events we call our big bang. There exists a set of equations, the big bang equations, that dictate all the first collisions that took place and with enough time we might be able to put them down on paper someday.

The two pockets passed through each other leaving us, their spawn, to play follow the leaders with our new siblings and cousins. At some larger point, our new succession of pockets of spacetime is likely orbiting one of its parents or it could be set to collide again with one or both of its parents. In particular if its in the middle of where they end up circling each other and the difference in their relative velocity was below the escape velocity of the stronger gravity well.

One computer program able to simulate big bangs and show us dark energy would then let us leverage AI to calculate the missing parameter in Einstein's field equations that better defines how gravity works because dark matter is not a particle but a predicted side effect of pockets of spacetime. This is due to wave mechanics because when one increases the amplitude of a wave the energy carried by the wave increases exponentially, not linearly.

When we combine the light of a thousand flashlights the intensity of the light increases. The amplitude increases as waves in phase aggregate together. When we combine a thousand candles together the heat increases. If gravity uses waves to let mass tell space how and where to warp then pockets of spacetime where bodies share the same relative trajectory and relative velocity could produce an aggregate attraction. Waves in phase increasing in amplitude causing a larger gravity well then just the mass alone would have been able to do.

AI analysis of big data with the goal of trying to convert the attractive force of combined masses sharing overlapping gravity wells in phase could define most of the properties we attribute to dark matter as it helps us tweak the field equations to fix what was missing. The missing parameter of Einstein field equations that indicates how bodies in phase can behave is something that I predict a well coded AI would be able to produce if it has enough accurate data to work with. There are no macho wimps and AI should be able to show us how the amplitude in the strength of gravitational waves in phase changes based on the relative momentum of the objects in phase against the frame of reference the impacts are being felt on top of.

When we try to put 4D spacetime into visual references in 2D we do not do reality any justice because there is almost nowhere in our localized spacetime that is not filled with tens of thousands of overlapping gravity wells we could measure if we knew how to measure gravity wells and hundreds of thousands that would be beyond our measurements. If waves of energy are in some way responsible for gravity and as I discuss in my essay, On The Natural State Of Nature, there is a subquantum realm responsible for virtual particles, vacuum

energy, quantum fields, a probabilistic wave function, and the ability of mass to warp spacetime , then it would follow that gravitational waves would continue past the measurable wavelengths of our best instruments and continue down into the subquantum wavelengths before eventually fading away completely.

We think about the primary mass of our solar system being Sol and Jupiter but don't really grasp how all the different bodies in our solar system all have overlapping gravity wells throughout our local pocket and create a gravitational tensor mesh of overlapping geodesics that holds the whole heliosphere together. Every 3 object has what I call a sphere of influence. A multitude of different waves that emanate outwards in all 3 spatial directions. Visible light, infrared heat, electric fields, magnetic fields, gravitational fields, and others sometimes, all emanating outwards in spherical waves from a center. Gravity can be approximated as an attraction across the line between the two centers of mass but that is just an approximation. Gravity is an attraction between every two bodies that occurs at many different points in spacetime and it is the aggregation of all those different points where the two spheres of influence intersect that manifests as the field equations of general relativity.

I suggest more experimentation is done with overlapping gravity wells of multiple objects moving together with the most sensitive gravitational detectors we can make. I think if we better understand how overlapping gravity wells work, paying particular attention to frame dragging, we can explain the movement of galaxies and certain gravitational lenses without macho wimps. How the amplitude of waves of gravitational attraction change due to the shared momentum of mass can be calculated using big data and AI once we can better model dark energy.

I believe a few small changes to our best computer simulation could in theory fix Einstein's field equations to properly explain the cause for lambda without any crisis in cosmology and properly explain the cause of dark matter and in doing so offer the most logical cause for our big bang. If there was ever going to be an application that might benefit from a quantum computer, something like this would be where I would put my money.

To wrap up I offer another method of trying to better understand dark matter. If we could populate our solar system with tens of thousands of extremely precise synchronized chronometers that talk to each other we could try to investigate where we predict there to be overlapping gravity wells from heavy bodies sharing the same frame and see what kind of effects those bodies have on different areas of spacetime. Since gravitational effects can cause time dilation we can leverage precise atomic clocks and specialized coding that captures packets from multiple other drones in different areas to better gauge where tiny variations in time dilation can be occurring throughout our solar system and then again using AI we could try to extrapolate the way gravitational waves in phase aggregates to cause that increase in amplitude that we have been calling dark matter. Apply that new information back into the simulation so it better understands how dark matter works and dark energy works and then play it forward from 2000 to 2100 or so and if we think its spot on, then rewind it back to relative T0.

One thing that will be lacking is proper understanding of the physics of elastic and inelastic collisions occurring at 1.9 , 2.05, 5.02, or maybe 9.1 times the speed of light. When we grasp that our cosmic speed limit is localized to our succession of comoving frames of reference and thus other separate pockets of space time that could intersect are not breaking the laws of physics by introducing collisions occurring with the kinetic energy expected from twice the speed of light or higher. My essay, "On The Natural State Of Nature" explains why we would predict to be able to fix our simulations to see clear answers to all of these current questions:

Mature early galaxies, mature massive early black holes, the axis of evil CMB anomalies, why we have a CMB, the cause for dark energy, a potential cause for dark matter, what came before our big bang, what caused our big bang, an answer to the horizon problem with a need for inflation, the baryon asymmetry problem, satellite galaxy distribution, small scale structure, extreme cosmic structures, cosmic supervoids, slowly rotating cosmic filaments, large quasar groups, the approximate 50/50 directions of rotations of spiral galaxies across all three dimensions, harmonic inclination of quasar axes, harmonic inclination of galactic planes, fast blue optical transients, red transients, CMB cold spots, a logical starting size, a logical starting temperature, and potentially how a galaxy could loose its central black hole.

Of all the mysteries that are answered when we don't start with a hot dense center, the one I think deserves the most attention would be our hunt for red transients. While our current big bang guess that explains 5% of what we can see has no direct way to prove itself, SCT, Successive Collision Theory actually offers a method of validation. One prediction of SCT is that there would be time where a foreign body would enter our largest visible pocket of spacetime and could have originated from a source frame of reference far far far removed from our parent structure and move through our visible universe at speeds far in excess the speed of light. When such a FFTLO passed through a large nebula we would predict the friction could ignite pockets of gas that burn bright shortly and then die out. Being able to catch this happening in succession and being able to accurately gauge their distance apart could someday show us more than one instance of red transients igniting in a line at 2 or 4 times the speed of light. That would validate the theories presented here. It would also explain fast blue optical transients when that FFTLO collides directly with a celestial body instead of a large nebulous gas cloud.

We are each a pocket of spacetime. Our relative trajectory and relative velocity at any moment dictates the base perception of time and space that is felt by the trillions of cells that join us daily on our journey that have our same DNA and the far larger number of cells that joins us daily on our journey that do not share our DNA.

Thank you for your time. Please keep an eye out for my first essay to be published soon, "On The Natural State Of Nature" or you can listen to my podcast of the same title available on Amazon, Spotify and IHeartRadio.

Live Long And Prosper
May The Force Be With You

DR JM NIPOK

#thenaturalstateofnature

https://thenaturalstateofnature.org/	LAMBDA-CDM BIG BANG MODEL	SUCCESSIVE COLLISION MODEL
Baryon Asymmetry / Matter instead of Antimatter	Unexplained	Predicted
The Horizon Problem	Possible FTL Inflation	Predicted
The Nature Of Dark Energy	Unexplained	Predicted
Superfilaments and Supervoids	Unexplained	Predicted
"Axis Of Evil / CMB Anomalies"	Unexplained	Predicted
Early Mature Galaxies	Unexplained	Predicted
Early Massive Black Holes	Unexplained	Predicted
Cosmic Microwave Background	Predicted	Predicted
Hubble Tension / Crisis In Cosmology	Unexplained	Predicted
Small Scale Structure / Satellite Galaxy Distribution	Unexplained	Predicted
Shape and Size of The Universe	Unknown	Explained
What caused the big bang and what came before it	Unknown	Explained
The Lithium Problem	Unexplained	Predicted
Slowly Rotating Filaments / Cosmic Web Structure	Unexplained	Predicted
Large Quasar Groups / Giant Arc / Super Structures	Unexplained	Predicted
Magnetogenesis	Unexplained	Predicted
50/50 Clockwise & Counterclockwise rotations across all 3 spatial dimensions	Unexplained	Predicted
Harmonic Galactic Inclinations and Quasar Inclinations	Unexplained	Predicted
Blue Transients and Red Transients	Possible Explanations	Predicted
Harmonic Galactic Rotational Periods	Unexplained	Predicted
Missing Galactic Black Holes	Unexplained	Predicted
Dark Matter / Cusp Core - Cuspy Halo Problem	Unexplained	Predicted
Globular Cluster Age	Unexplained	Predicted
The Great Attractor and Shapely Attractor	Unknown	Predicted
All the Mass Of The Visible Universe 10^82+ atoms	Started Smaller Than A Golf Ball	Started At About 50-75% the size of the CMB 13.8 Billion Years Ago
Starting Temperature	Unfathomable 10^35K	Realistic 10^15K - 10^25K
CMB Cold Spot(s)	Unknown	Predicted
Cosmic Ray Anisotropy	Unexplained	Predicted
Working Computer Simulations	Not Yet and Not Getting Closer	Not Yet But Could Be Right Around The Corner
Ultra Diffuse Galaxies and Missing Dark Matter Galaxies	Unexplained	Predicted
Fine Tuning Problem / Fine Structure Constant	Unexplained	Explained
Eternal Time, Infinite Space, An Infinite Multiverse	Unknown	Predicted
Coalescing Mass Before Recombination	Unknown	Predicted
Explains The Universe	Explains 5% of what we see	Explains 100% of what we see
Caused By	Quantum Fluctuations Inside Inflating Space Time	The Intersection Of Two Immense Pockets Of Space Time At Relative Speeds Approaching Or Exceeding Twice The Speed Of Light

The answer does not lie with modifying Newtonian dynamics.
The answer lies with modified general relativity.

Ricci Tensor — Ricci Scalar — Metric Tensor — Metric Tensor — Newton's Constant

$$R_{\mu\nu} - \frac{1}{2} R\, g_{\mu\nu} + \frac{\Lambda}{\lambda} g_{\mu\nu} = \sum \Phi \left(\frac{8\pi G}{c^4} T_{\mu\nu} \right)$$

Revised Cosmological Constant — Tensor Mesh Phase Aggregator — Speed Of Light — Energy Momentum Tensor

The effects of dark energy are due to the natural dissipation of massenergy cohesion to relative spacetime across our successive parent comoving frames of reference. The localized strength of overlapping gravity wells in any area of spacetime is in direct competition against the decreasing strength of the succession of overlapping gravity wells in all the relative parent comoving frames of reference that our visible universe is part of.

The effects of dark matter might be due to the nature of wave mechanics where waves in phase cause constructive interference which increases the amplitude of gravitational waves if waves of attraction tell space where and when and by how much to bend and warp. When the amplitude of waves increases the energy carried by those waves increases exponentially, not linearly and the aggregation of waves of gravitational attraction, the overlapping of gravity wells, is why we will never find any macho wimps.