The Theory of Time-Enforced Quantum Space

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In the distant past, an inexplicable change in a steady Primary state of existence required the construction of two distinct geometries and the universe was born of two geometric elements, the elements of vacuous volume or void; and density volume or mass.

Mass is a strict three-dimensional Euclidean construction. It has density because it is composed of a continuum of points in each and every direction within its volume.

Vacuous space is composed by a strict Euclidean plane which is intersected by quantum distances from a point laying outside the plane's surface. The Euclidean plane and the quantum lines produce quantum volume. Quantum volume is defined as "quantum planes separated by 'some' distance." The volume is only the the space of separation between quantum planes; between a curved quantum plane and a linear quantum plane. Vacuous volume is only two dimensional Euclidean and therefore has no density. The volume is completely void. It is only the empty space between planes which are themselves made from lines of empty distance.

Time Origins of the Universe

The inexplicable change in the steady Primary state was an anomaly in time. It consisted of time acquiring a potential energy component. Time split into potential and kinetic energy. The Big Bang occurred as the result of time acquiring this potential energy component. The construction of vacuous volume and dense volume preserved the potential time-energy thus acquired.

Potential time energy is *conserved* time energy(retained or stored time energy). Potential time energy is the absent energy from an existing time flow or, alternatively, the reserved energy from an existing time flow.

For time energy to be reserved, there must be two separate time values existing simultaneously.

Potential time energy is created when a second "stalled" time value is introduced which initiates a time variance between itself and the original time value. The variance between the two offset time values reserves time energy. The "stalled" time value conserves the time-energy normally expressed by the flow of time. Time-energy builds up behind the stalled time value.

The introduction of potential time energy to a time flow is the introduction of this stalled component to that time flow. The stalled component reserves increasing amounts of time energy. This "stored" time energy increases in direct proportion to the increasing time variance between the stalled component and the moving or flowing component. This paper intends to supply the mathematics for this conception and to demonstrate that those mathematics are a superior model of geometric reality.

With the introduction of a potential energy component, two different time values try to occupy the same time position. This creates the aforementioned anomaly which requires resolution. The energy differential forces a rupture between the two components.

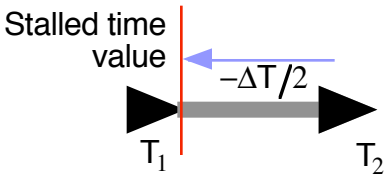
As the kinetic component moves forward in time, there is an increasing time differential between it and the "stalled" potential component. There is also an increasing energy differential between the two. The time differential and the energy differential are not the

same thing, however. The energy differential between the two points is in direct proportion to the time differential (although the proportion is not one-to-one).

The energy differential is the difference between expressed kinetic energy (+ value) and unexpressed potential energy (– value): [(+1) – (–1) = 2]. Time differential is the difference between expressed time by the kinetic component and the expressed time of the potential component: [(+1) – (0)= 1]. The energy differential increases twice as fast as the time differential. time differential=(1/2) (energy differential) :

Let energy differential = ΔT ; time differential = $\Delta T/2$
Let the time-value at the moment time acquires a potential component = T_1;
Let the time-value of the moving component = T_2; Let the time differential= $\Delta T/2$.

$$T_2 = T_1 + \Delta T/2$$
$$-\Delta T/2 = T_1 - T_2.$$



The energy differential, however, is the following:

$$\text{Energy expressed by } T_2 = \Delta T/2$$
$$\text{Energy conserved by } T_1 = -\Delta T/2$$
$$\Delta\text{Energy} = \text{Energy}(T_2) - \text{Energy}(T_1)$$
$$\Delta\text{Energy} = \Delta T/2 - (-\Delta T/2) = 2\Delta T/2 = \Delta T$$

Therefore, the time differential=$-\Delta T/2$, but the energy differential=ΔT. The energy differential increases twice as fast as the time time differential between the two values.

Let us assume that a single time position has a restricted capacity to sustain an energy differential caused by diverging time values. The increasing energy differential is a pressure building within the time position.

The energy differential is a force expressed against the two time positions. It is a “negative vacuum pressure,” an absence which repels. The advancing time point cannot be “sucked back” to the stalled time position without reversing time. The stalled time point cannot be “sucked forward” towards the kinetic time point without accelerating the rate of time, thus creating an anomalous dual time rate.

The only possible solution is a “separation” such that the disparate time values are not trying to define time for the same position. The “time force” thus “invents” spacial distance to separate the time values. The definition of time force is the following:

F_t = time force ; D = distance of separation

$$\Delta\text{Energy} = \Delta T = F_t(D)$$
$$F_t = \frac{\Delta T}{D}$$

The postulated time force is non-Newtonian in character. It is not "mass *times* acceleration." It is a proposed force component of the Einsteinian "cosmological constant," that is, the force component of "nonzero vacuum energy" — or the energy value for quantum volume. Einstein proposed that space itself —devoid of matter— has an energy value which he deemed the "cosmological constant.[1] "

Very briefly, a few points about Einstein's cosmological constant need to be made before proceeding with the analysis of time force. Einstein postulated an energy with an associated force which was attached to space itself and which stabilized the universe. He abandoned the concept under pressure from the expanding universe theory and in the face of Edwin Hubble's red-shift data from the far universe. The red-shift, explained as Doppler Effect, seemed to confirm the expanding universe idea and Einstein renounced the cosmological constant.

However, quantum geometry provides an alternative explanation for the red shift and a stable universe model which is not only compatible with the cosmological constant, but actually requires it.

The quantum model identifies red shift as due to the stretching of light waves by dimensional distortion. If the dimension in the direction of wave travel is stretched relative to the other two dimensions, the frequency will be shifted downward. It is the principle used by the slide of a trombone.

The straight line of any Euclidean distance is a curved line in quantum space. The straight line on the Euclidean planar component of quantum volume is forced into a curved line upon the Euclidean plane by the construction of quantum volume. The straight Euclidean line is systematically curved by quantum volume.

Light from the far universe is shifted downward in frequency because the light which reaches us has had to travel the arc of the quantum to transverse the linear distance between us and the source of the light. The greater the distance, the more the curvature and the greater the frequencies shift downward towards the red. Amount of red shift is related to distance just as Hubble discovered it to be.

We don't live in an expanding universe, we live in a stable quantum universe. Einstein's cosmological constant is correct

The formula for time energy fits the universal equation which relate force and energy:

$$\text{Energy} = (\text{Force})(\text{distance}) \quad ; \quad E_t = F_t(D)$$

When the differential limit for time energy is reached, the associated time force establishes a distance of separation.

This forcing of a second time position brings dimensional space into existence. Two differentiated time values become geometrically defined as points separated by the potential time-energy established by their differentiation($-\Delta T$).

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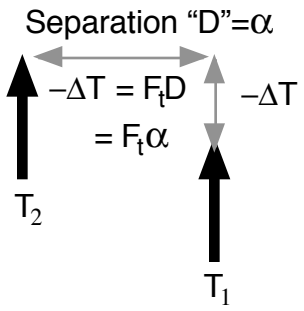
[1] "The cosmological constant has the same effect as an intrinsic energy density of the vacuum, ρ_{vac} (and an associated pressure)."; *Source: Wikipedia*. Time force (pressure) is a substitute for density in quantum volume. Einstein's concept anticipated this necessity.

Potential time-energy is conserved as the variance between differentiated time values located in quantum points. That potential energy sustains spacial separation between the quantum points.	

Time-Force *times* Alpha Space is the Primary Quantum

A quantum is defined as the separation of two points by unstructured space. It is contrasted with an "Euclidean length" the end points of which are separated by a continuum of points. For the quantum, there are no geometric points within the space of separation. Elsewhere I have given mathematical proof that our physical geometry cannot be measured without the existence of a fourth "quantum dimension" *(See my paper "Dawson's Theorem.....")*.

The Alpha Space (α) is the primary quantum of this fourth dimension. The "unstructured space" separating differentiated time points is sustained by the potential time energy generated by this differentiation. A quantum dimension can only exist because force sustains separation between two points;..

The conversion of energy ($-\Delta T = F_t\alpha$) result in a potential energy differential between time points($PE = -\Delta T$).

The geometric space constructed by time-energy conversion is not actually linear distance.

Area is constructed by a field of energy ($-\Delta T^2/2$). The linear force separating actual time-points is the derivative of the field:

$$D(-\Delta T^2/2) = 2(-\Delta T)/2 = -\Delta T = F_t\alpha$$

The total energy available for conversion to geometric separation of the components is the energy differential (ΔT) *times* the potential energy possessed by the stalled time component ($-\Delta T/2$):

$$E_t = (\Delta T)\left(-\frac{\Delta T}{2}\right) = -\frac{\Delta T^2}{2}$$

$$= \frac{F_t^2\alpha^2}{2}\ ;\ \alpha = \text{separation required by time force}$$

$$Q^2 = F_t^2\alpha^2$$

$$\frac{Q^2}{2} = \frac{F_t^2\alpha^2}{2}$$

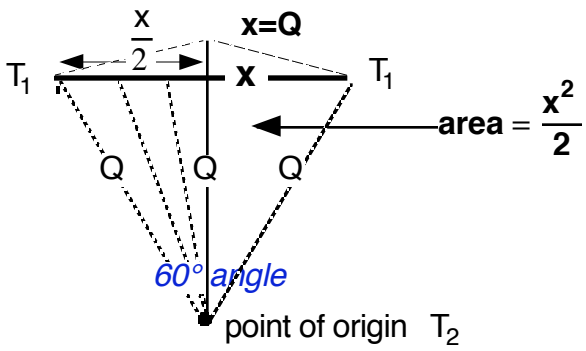
Time force *times* the space of separation (Alpha) equals the quantum. The two quantum points are time values and the space separating the quantum points is produced and sustained by the force of time. Mathematically, the space separating any two quantum

points is unstructured space and must be sustained by a force. Time force is that force sustaining the quantum.

The time force *times "α"* establishes the quantum squared. Therefore, the initial space generated by the time differential is the quantum squared divided by "2."

A unit of area defined from a single point and equal to a strict Euclidean value (rather than a quantum value) does exist for "$Q^2/2 = x^2/2$; x=Euclidean value of Q."

Euclidean Defined Area for $x^2/2$



The Euclidean area for one of the back-to-back triangles in the figure above is the following:

$$\text{area of one triangle} = \frac{1}{2}\text{base} \times \text{height} \; ; \quad \text{height} = \frac{1}{2}x \; ; \quad \text{base} = x$$

$$= \left(\frac{1}{2}\right)\left(\frac{1}{2}x\right)x = \frac{x^2}{4}$$

The area for the whole figure is twice the area of one of the back-to-back triangles:

$$2\left(x^2/4\right) = x^2/2$$

However, time force cannot construct an Euclidean unit of area. It must be a quantum unit of area. The quantum unit of area does not equal the Euclidean unit of area:

$$\frac{Q^2}{2} \neq \frac{x^2}{2}$$

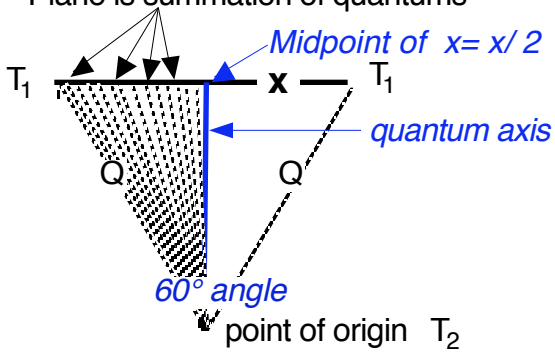
The Euclidean unit of area is composed of a lines which are themselves composed of a continuum of points —that is, the plane is composed of Euclidean lines in any and all directions.

In contrast to the Euclidean line, the quantum line is composed of only two points separated by a geometrically undefined distance. The force of time structures the quantum distance and the two points separated by this force are alien time values.

The surface area of any plane composed by quantums contains no points within that surface area. The only lines are quantums composed of the point of origin and points along an Euclidean line which does not intersect the point of origin. The summation or "integration" of these quantum lines determines the plane surface:

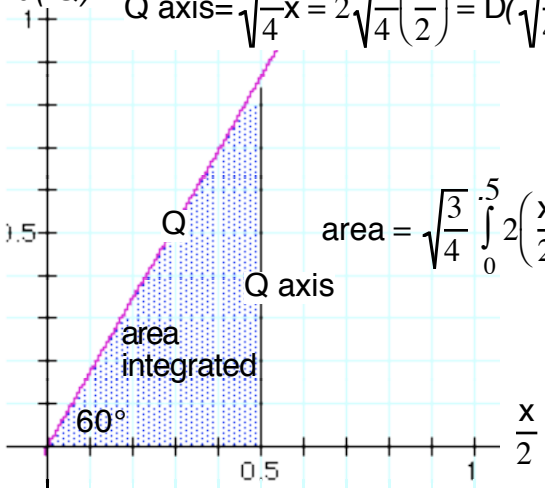
A Proposed Quantum Plane

Plane is summation of quantums



Such a plane could be constructed by integration of the shortest quantum which is indicated as the "quantum axis" in the above illustration. If this quantum axis is the derivative of a function of the midpoint subdivision "x/ 2," the integral produces 1/ 2 the area:

y=d(Q) Q axis= $\sqrt{\frac{3}{4}}x = 2\sqrt{\frac{3}{4}}\left(\frac{x}{2}\right) = D\left(\sqrt{\frac{3}{4}}\left(\frac{x}{2}\right)^2\right)$



$$\text{area} = \sqrt{\frac{3}{4}}\int_0^{.5} 2\left(\frac{x}{2}\right) d(x/2) = \sqrt{\frac{3}{4}}\left(\frac{x}{2}\right)^2$$

The area so determined is 1/ 2 the area of the whole quantum plane. To determine the area for the whole of the quantum plane, we multiply the above area resolution by "2":

$$2\sqrt{\frac{3}{4}}\left(\frac{x}{2}\right)^2 = \sqrt{\frac{3}{4}}\frac{x^2}{2} = \sqrt{\frac{3}{4}}\left(\frac{Q^2}{2}\right)$$

Euclidean determined area ≠ quantum determined area.

$$\sqrt{\frac{3}{4}}\left(\frac{Q^2}{2}\right) \neq \frac{(x=Q)^2}{2}$$

Even though this proposed quantum plane is achieved by the integration of a quantum across the x axis and thus is an area composed of "quantum space," it still cannot be the quantum plane. The quantum distances between the point of origin and the points along the x axis do not resolve the time variance correctly.

With the exception of end points, all quantums intersecting the x axis are partials of the "α space." It is only the full quantum distance "α" which can resolve the time variance. There needs to be a full "α space" of separation to locate the time point "T_1" along the x axis.

The continuum of points along the x axis do not define an "α space" of separation with the point of origin and cannot locate "T_1" along the x axis. This linear x axis cannot be the Euclidean line which establishes the actual quantum plane. The x axis is only the quantum

differential of the true Euclidean line which establishes the real quantum plane.

A quantum unit of measure must be differentiated by the *negation* of subdivision rather than by subdivision. This is the fundamental mathematical distinction between quantum and Euclidean units of measure. For the quantum squared, differentiation by the *negation* of subdivision is the following:

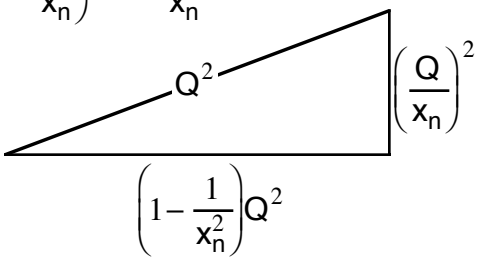
$$d(Q^2_{x_n}) = \left(1 - \frac{1}{x_n^2}\right)Q^2 \quad ; "x_n = n + \text{all possible partials of } 1"$$

$$\text{as } "x_n" \xrightarrow{\text{approaches}} \infty, \quad Q^2 \xrightarrow{\text{approaches}} 1$$

$$\text{as } "x_n" \xrightarrow{\text{approaches}} 1, \quad Q^2 \xrightarrow{\text{approaches}} 0$$

While the principle of the negation of subdivision is clear for the linear quantum, it is less obvious for the quantum squared. It is actually an application of the Pythagorean Theorem to a quantum/Euclidean interface. The Pythagorean Theorem holds that the square of the hypotenuse of a right triangle is equal to the sum of the square of the sides. The perfect square of the quantum hypotenuse is equal to the square of the Euclidean subdivision *plus* the square of the quantum negation of subdivision:

$$\left(1 - \frac{1}{x_n^2}\right)Q^2 + \frac{Q^2}{x_n^2} = Q^2$$

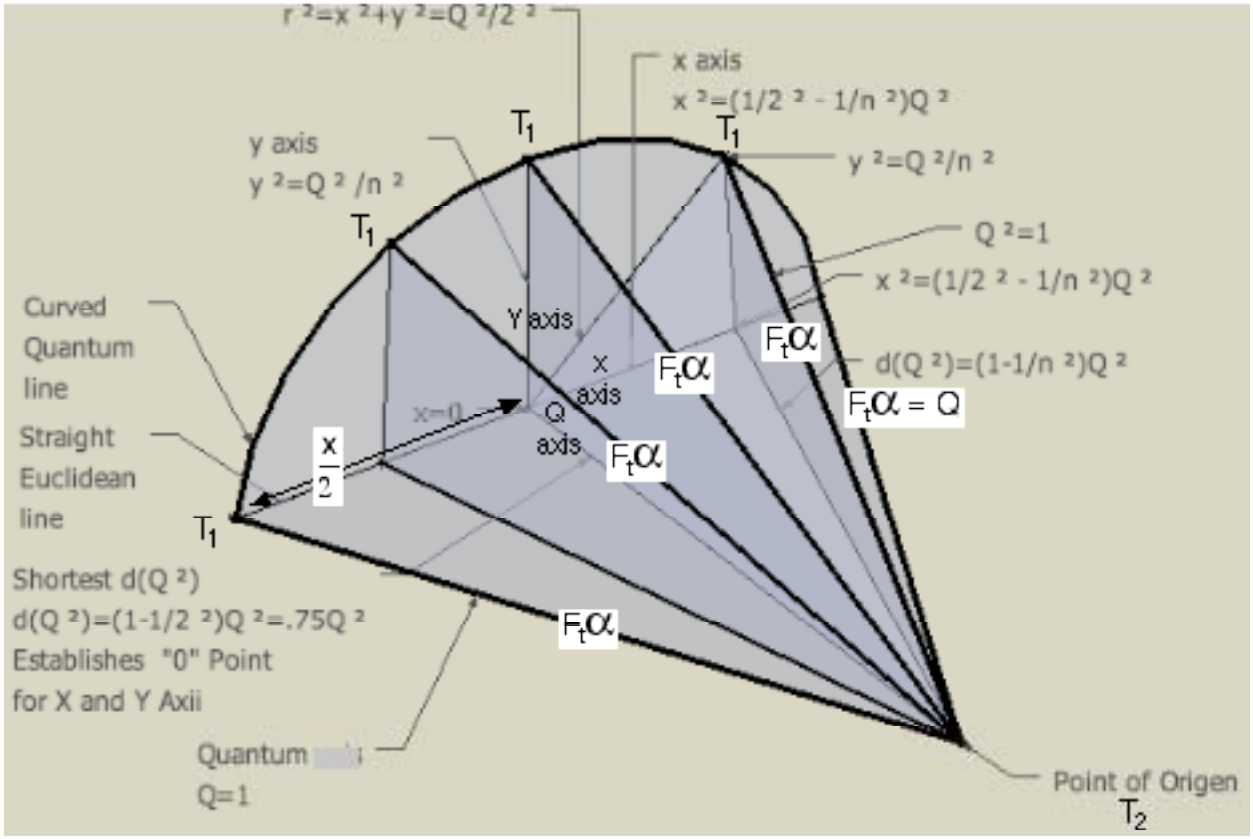


The Pythagorean Theorem produces a right triangle in which the square of the linear quantum is equal to an Euclidean subdivisional value (the subdivision squared) plus an equivalent quantum value (the negation of that subdivision squared).

If all the quantums intersecting the "x axis" were *negations* of subdivision for the quantum squared[2], then they would be missing an equivalent Euclidean "subdivision squared" in order to equal the quantum squared. The quantum force must construct a "y axis" and a resultant Euclidean plane. It must do this in order to provide the missing Euclidean subdivision squared to add to the *negation* of subdivision. The geometric form so constructed would be the following:

[2] The linear quantum would be the square root of the negation of subdivision: $\sqrt{\left(1 - 1/x_n^2\right)Q^2}$

The Construction of the Actual Quantum Plane



The quantum plane is the conical surface curved above the linear plane made by the x axis and the point of origin. The Euclidean line which the quantum intersects is the circumference of a circle with a radius “r=x/2” and a center at “x/2.”

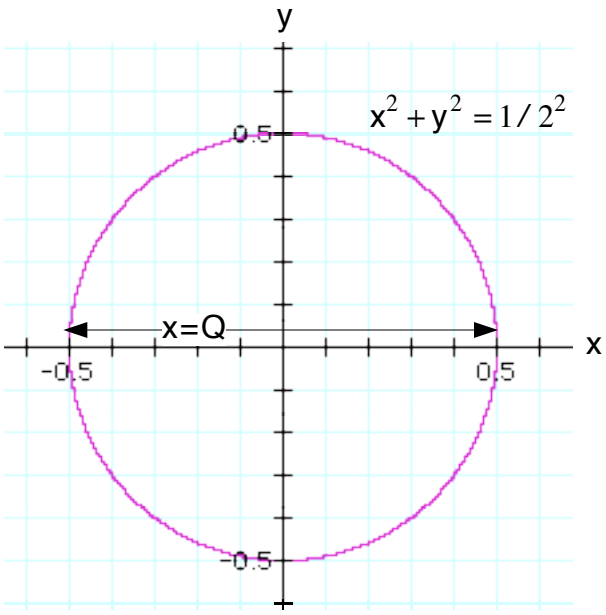
This is proven in the following manner. Any quantum intersecting the x axis is a *negation* of subdivision for the quantum squared. The value on the y axis is the subdivision squared. This also provides a value for the x axis because a second right triangle is produced by the quantum axis and the *negation* of subdivision upon the x axis plane:

$$(\text{Q axis})^2 = \left(1-1/2^2\right)Q^2 \qquad \left(1-1/n^2\right)Q^2 = (\text{Q axis})^2 + x^2 = \left(1-1/2^2\right)Q^2 + x^2$$

$$x^2 + y^2 = (Q/2)^2 \qquad x^2 = \left(1-1/n^2\right)Q^2 - \left(1-1/2^2\right)Q^2 = \left(Q^2/2^2 - Q^2/n^2\right)$$

The Euclidean line which the quantums intersect is now the circumference of the circle made by “$x^2 + y^2 = (Q/2)^2$.”

This formula graphs a circle with radius= x/ 2 ; x=Q. The graph is presented below for “Q=1”



The actual quantum plane is the surface of the cone made by the circle on the "x,y" axis and the point of origin.

The formula for the surface area of a cone is:

r = radius of base = x / 2 = Q / 2 ; l = slant height = Q

$$\text{surface area} = (\pi\, r\, l) + \left(\pi\, r^2\right) = \frac{\pi Q}{2} Q + \pi\left(\frac{Q}{2}\right)^2 = \frac{\pi Q^2}{2} + \frac{\pi Q^2}{2^2}$$

$$\frac{\pi Q}{2} Q + \pi\left(\frac{Q}{2}\right) = \left(1 + \frac{1}{2}\right)\frac{\pi Q^2}{2} = \frac{3}{2}\pi\left(\frac{Q^2}{2}\right) = \mathbf{1.5}\,\pi\left(\frac{\mathbf{Q^2}}{\mathbf{2}}\right)$$

The Euclidean dimensions expand or "distort" the quantum plane "$Q^2 / 2$" by a factor of "1.5π." This is 3 *times* the area of the Euclidean circle:

$$\text{quantum area} = 3\pi r^2 = 3\pi\left(\frac{x}{2}\right)^2 \quad ; \qquad r = \frac{x}{2}$$

$$D\left(3\pi\left(\frac{x}{2}\right)^2\right) = (3)\left(2\,\frac{x}{2}\right)\pi \quad ; \qquad \left(2\,\frac{x}{2}\right)\pi = \textit{cirumference of circle}$$

The derivative of quantum area is three *times* the circumference of the "x,y" circle. Therefore, quantum area equals 3 *times* the integral of circumference by the radius "x/ 2":

$$3\pi\left(\frac{x}{2}\right)^2 = 3\int (\text{circumference})\; d(r) = 3\int_0^{.5} 2\pi\left(\frac{x}{2}\right) d\left(\frac{x}{2}\right) = 1.5\pi\left(\frac{Q^2}{2}\right)$$

The integration of circumference by the radius is the expansion of circular area from the point at which the quantum axis intersects the x axis at "x/ 2." The circular area is expanded as the radius changes from "x/ 2=0; area=$0^2\pi$" to "x/ 2=x/ 2; area= $(x/2)^2\pi$."

In contrast, the integration of the "x/ 2" subdivision for *the quantum axis length* produced the linear quantum area subscribed by the quantum axis and the quantum.

The integration of the "x/ 2" subdivision from the *point of quantum axis intersection* to the *point of quantum intersection* produces the area of the "x,y" circle.

The quantum points established by quantum intersections *are the only quantum information which the Euclidean x axis possesses*. The Euclidean x axis has no informational access to the lengths of quantum intersections. Those lengths are non-Euclidean and only composed of two points.

It is only quantum "points of entry" and "distance between quantum points of entry" to which a Euclidean dimensional axis has access. Area is expanded by integration of circumferences. Area is established by integration of the circumferences for all circular values between "r=0" (quantum axis entry point) and "r=x/ 2" (end quantum entry point) . The quantum/Euclidean point for the quantum axis is expanded to a circle using quantum information.

The area of the curved quantum plane is three times the circular area determined by the integration of circumferences from the quantum axis point:

$$3\int_0^{.5} 2\pi\left(\frac{x}{2}\right) d\left(\frac{x}{2}\right) = 3\left(x^2/4\right)\pi = 1.5\pi\left(x^2/2\right)$$

$$\int_0^{.5} 2\pi\left(\frac{x}{2}\right) d\left(\frac{x}{2}\right) = \text{ area determined by integration of circumferences}$$

The area of the curved quantum plane (surface of cone) is exactly 3 times the area of the Euclidean plane which constructs it.

The surface area of the cone is also a function of the quantum axis squared. Specifically, it is π *times* the quantum axis squared:

$$(\text{Q axis})^2 = d(Q^2_{n=2}) = \left(1-\frac{1}{2^2}\right)Q^2 = \frac{3}{4}Q^2$$

$$\text{surface area} = \pi(\text{Q axis})^2 = d(Q^2_{n=2})\pi = \frac{3}{4}Q^2\pi = 1.5\pi\frac{Q^2}{2}$$

$d(Q^2_{n=2})$" is the negation of subdivision for the quantum squared at the quantum axis

The area of the quantum plane is exactly equal to the area of a circle with the quantum axis as radius. Such a circle, however, could not be constructed by the initial time force:

$1.5\pi\left(Q^2/2\right) \neq Q^2/2$ *Construction of quantum area requires Euclidean intervention.*

Quantum Space Must Be Expanded by Euclidean Space

Quantum space is expanded by Euclidean intervention upon that quantum space. This intervention takes the form of the addition of another dimension. Thus the linear quantum which begins as the equivalent of an Euclidean length (x=Q) becomes a curved line:

Q=πx/ 2

In the conical construction of quantum area, the quantum cannot acquire Euclidean definition

along the x axis. Even though "linear x=linear Q," all the quantum values defined by the continuum of points along the x axis are differentials without sufficient length to position the time point along the x axis. They must be pushed upward along a second Euclidean "y axis" to gain sufficient length. The x axis must become curved circumference. The one dimensional x axis expands to two dimensions to position the quantums.

The situation is similar for the quantum plane. The linear quantum plane composed by the x axis and the point of origin is pushed upward to become the curved conical surface. The two-dimensional plane is expanded by distortion into three-dimensional volume.

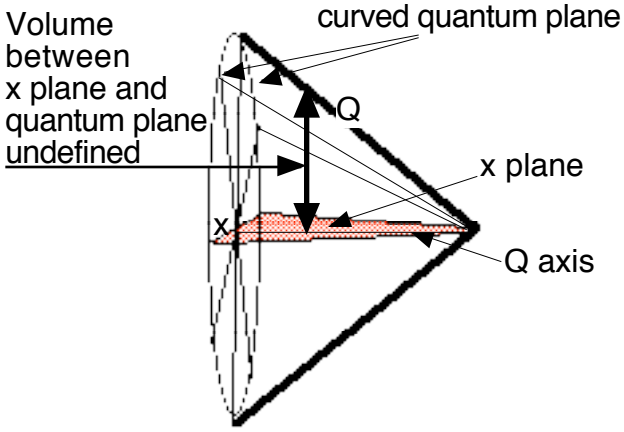
A quantum plane cannot exist without the intersection of an Euclidean line. That Euclidean line of intersection is distorted along the Euclidean plane. The distortion expands the quantum plane into a form of volume.

The quantum squared is the *forced* separation of two time points into a multidimensional space of separation:

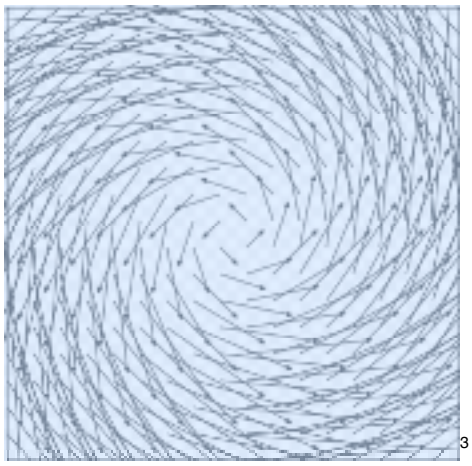
$$Q^2 = F_t^2 \alpha^2$$

On the surface, it appears that the square of time-force acting upon the square of the alpha space— has produced a conventional three dimensional cone. This is deceptive, however, and a dangerous assumption to make.

The quantum cone cannot define volume in the sense we are use to thinking about volume. The volume of the quantum cone is constructed by vectors of force and these vectors are two-dimensional, not three dimensional. The time force is vectored along three planes: the linear plane made by the x axis and the point of origin; the curved quantum plane of the conical surface; and the base "xy" plane. The force vectors would become three dimensional if the linear x plane were spun around the Q axis to form the cone, but this is not how the quantum cone is constructed.



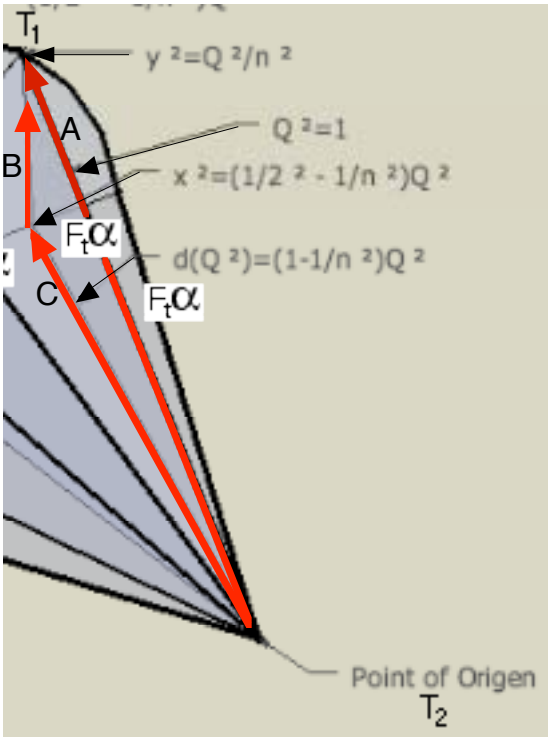
The magnetic -force vectors which are illustrated below, demonstrate that three dimensional force is produced by the rotation of a plane around an axis contained upon that plane.


[3]

Magnetic Force Vectored Around a Polarity Axis

In contrast to the magnetic field which vectors force into volume by rotation around the polar axis of a plane containing that force, the vectors of time force are restricted to immovable planes. Those planes are: the "x plane;" the "x,y plane;" and the "curved quantum plane." The planes are locked into position relative to one another and there is no external geometric referent within which the whole structure could rotate.

Vectors of force are restricted to the sides of the triangle illustrated below. There are no vectors of force within the area subscribed by that triangle. Therefore, there are no vectors of force within the volume of the cone.



$$A^2 = B^2 + C^2$$

$$A^2 = Q^2 = F_t^2\alpha^2 \quad ; \quad x_n \geq 2$$

$$B^2 = \frac{F_t^2\alpha^2}{x_n^2}$$

$$C^2 = \left(1 - \frac{1}{x_n^2}\right)F_t^2\alpha^2$$

The line labeled "C" lies on the linear "x" plane. Mathematically, it is the differential of the quantum squared for "n= x_n."

The quantum is defined as a length composed only of two points which cannot be

[3] Source: Wikipedia

differentiated by subdivision but must be differentiated by the negation of subdivision.

"C" is the negation of subdivision for "$n= x_n$." As a quantum differential , the line "C" is shorter than the quantum space of separation required to locate a time point at its intersection with the "x" axis. "C" is always a function of the quantum *minus* a fraction.

Therefore, between the quantum end points for the x axis, all intersecting quantum differentials are shorter than the required space of separation. The linear quantum plane as defined by the x axis is composed of quantum differentials which do not provide enough space of separation to locate time points along the x axis.

The force of separation which composes the "C" quantum differential can only be a vectored partial of the total squared force:

$$C^2 = \left(1 - \frac{1}{x_n^2}\right) Q^2 = \left(1 - \frac{1}{x_n^2}\right) F_t^2 \alpha^2 \qquad ; Q^2 = F_t^2 \alpha^2$$

The line labeled "B" lies on the Euclidean "x,y" plane or base of the cone. As an Euclidean length it is subject to differentiation by subdivision. "B^2" is the subdivisional value which has been subtracted from the quantum squared differential "C^2." It composes the vectored partial of the total squared force which must be added to "C^2."

$$B^2 = \frac{Q^2}{x_n^2} = \frac{F_t^2 \alpha^2}{x_n^2} \qquad ; Q^2 = F_t^2 \alpha^2$$

"B" represents the amount of squared time force which must be vectored off the x axis to located the time point. This is proven by the Pythagorean Theorem "$A^2 = B^2 + C^2$. " Therefor:

$$F_t^2 \alpha^2 = \left(1 - \frac{1}{x_n^2}\right) F_t^2 \alpha^2 + \frac{F_t^2 \alpha^2}{x_n^2} \qquad ; \; Q^2 = F_t^2 \alpha^2$$

These vectors of squared time force can only lie upon two planes; the linear x axis plane and the "x,y plane" (the base of the cone). The required equality would not hold for any other vector lines located within the "A,B,C" triangle. The area subscribed by that triangle is not defined by time force. By extension, neither is the whole of the volume between the x plane and the curved quantum plane.

The volume is undefined geometrically and is devoid of all time value. By definition, it is a complete "vacuum" or void. It is devoid not only of matter but of geometric definition and even of time. it is "nothingness" since "existence" requires time.

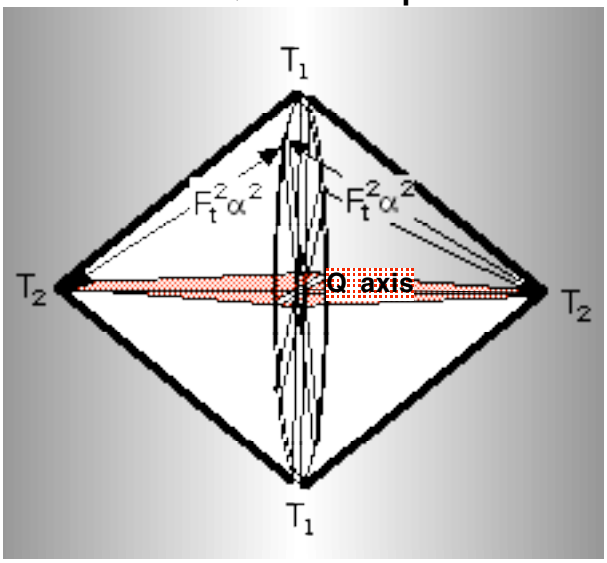
This complete vacuum or "nothingness" is only a mathematical variance between the curved quantum plane as defined by the surface of the cone and the linear quantum plane as defined by the x axis and the time point of origin.

The variance explains that, for any Euclidean line intersected by a quantum, the force of time must curve the Euclidean line relative to the quantum dimension. The points along any Euclidean line do not provide adequate spacial separation needed by the different time values. Any point identified by quantum intersection of the x axis must be forcibly vectored at 90° and acquire a position off the x axis which does provide adequate separation.

The Force of Time Explains Light as Waveform Energy

If we assume that any linear distance in space is composed of back-to-back multiples of the quantum-squared cone, then we are provided with a model which can identify light as wave form energy. Multiples of these quantum squared units also multiply the quantum time force.

Back-to-Back Quantum Squared Cones



A "pulse" can be sent down a line of back-to-back cones by pressing upon "T_2."

If an external force should press upon "T_2" and thereby shorten the Q axis, the radius of the "T_1" circle must expand. Time force is vectored along the Q axis and the radius. The square of the Q axis plus the square of the circle's radius equals the the quantum squared (time force squared). If the Q axis is shortened, the circle's radius must be lengthened by an equivalent amount to keep the equality.

In physics, a wave which exchanges length for height in a motion 90° to the motion of the wave is known as a "transverse wave." The most common example of the transverse wave is the water wave.

Geometrically, the length containing water from the trough is "shortened" increasing the height of the crest. It is a dimensional exchange which translated into an up and down motion of the water at 90° to the motion of the wave. Light is also a transverse wave. The Q axis is shortened which increases the height of the circular radius. The motion of this exchange is 90° to the motion of the wave.

In this manner, an energy wave may be sent down the line of back-to-back cones. If "T_2" is compressed, the radius of "T_1" is forcibly expanded. The expanded radius can only forcibly require its original position by forcibly expanding the next Q axis. The forcible expansion of the second Q axis forcibly contracts the Q axis in the next set of back-to-back cones— and so forth.

Both the frequency and amplitude of the wave thus generated is controlled by the originating external force. Amplitude is the amount the Q axis is compressed. Frequency is amplitude over time or the rate at which the amplitude is acquired:

$$f = \text{amplitude} / \text{t} = (\text{compression Q axis}) / \text{t}$$

If the Q axis is compressed by 1/4 and it takes 1/10 of second to reach this compression, the frequency is 10 hertz. This frequency, however, is communicated at the speed of light. The changes in amplitude will pass any point down the chain at the speed of light. In the same manner, changes in amplitude for a constant-frequency sound wave will pass any point in its path at the speed of sound.

The transference of force across the Q axis and up the "x,y" radius cannot exceed the time variance between "T_2" and "T_1." Time would not exist for "T_1" at a faster transfer rate. This restricts force transference to the speed of light which is defined as "$\alpha / \Delta T$."

This waveform transference of force down a chain of back-to-back quantum-squared cones is obviously light energy. Time structured quantum space is the long sought after medium which explains light as a wave with amplitude and frequency.

Science may now desert the near insanity of the "electromagnetic wave." "Light as an electromagnetic wave" is incessantly repeated by science. This is believed despite the fact that— if light were a wave conducted by the intersection of an electric field and a magnetic field as Maxwell[4] proposed— then such fields must always be co-present with light. Yet, they never are.

The "light as pulsed time-force" thesis, however, requires something in the material world which is capable of "pushing" the quantum axis. The electron is this link.

Elsewhere I have shown that the electron is a quantum particle which acquires mass by attachment to a Euclidean particle. The electron/proton bond is a string which exchanges energy the nucleus. The string itself is a replication — in the material world — of quantum-squared space. As such, it can interact with quantum space readily.

The Proof of Quantum Curvature; The Shape of Galaxies

A three-dimensional vacuum or "void" is created by the enforced curvature of the quantum plane by its intersection with Euclidean space. That vacuum defines the two dimensional quantum or the "quantum squared."

The linear quantum is two points separated by "some" distance. The two dimensional quantum is two plains separated by "some" distance. This space of separation is the variance between the curved quantum plane (cone surface) and the linear quantum plane (x axis plane). The variance or "space of separation" is generated by a quantum-squared expansion of a single quantum point.

Vacuum, or more accurately, the volume of vacuous space, is the space of separation between two dimensional quantums. What happens, however, when this space of separation is imposed upon by Euclidean volume?

Usually there is a clear separation between the material solids which compose Euclidean volume and the "vacuum" composed by quantum planes. After all, volume which is completely devoid of matter is the definition of "vacuum." Vacuum can't exist unless it is absent of all Euclidean matter.

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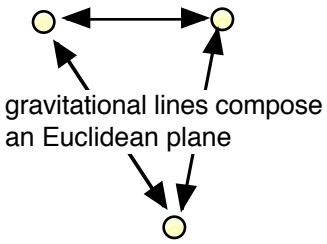
[4] Maxwell, James Clerk proposed the theory in 1864. When electromagnetic fields were later used to *induce* radiation such as radio, it was supposed that this proved that light itself was *conducted* by electromagnetism. The distinction between "induction" and "conduction" became permanently confused.

There is one exception to this however. Clusters of stars attempt to impose Euclidean definition upon quantum space.

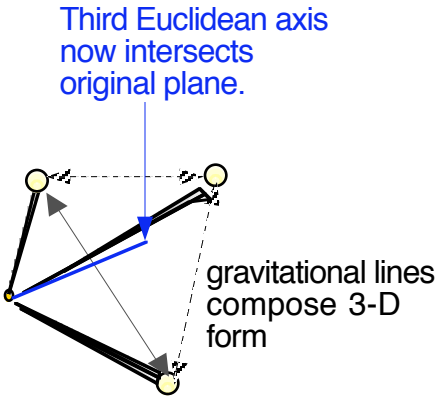
The line of opposition between any two stellar bodies is the gravitational line. The gravitational line is and must be completely Euclidean. Gravity is the compelling force attempting to unify matter into one geometric solid. In quantum geometry, gravity is the force of Euclidean unification and is an element of the Euclidean geometric definition of both bodies. In essence, they are already geometrically "unified" by the force of gravity.

The gravitational lines between any three stellar bodies define an Euclidean plane:



Such an Euclidean plane establishes vacuous space as the separation between quantum planes. The Euclidean plane produces the curvature variance between the linear quantum plane (x axis plane) and the curved quantum plane (surface of cone). The volume of space is this curvature variance as established by our Euclidean plane.

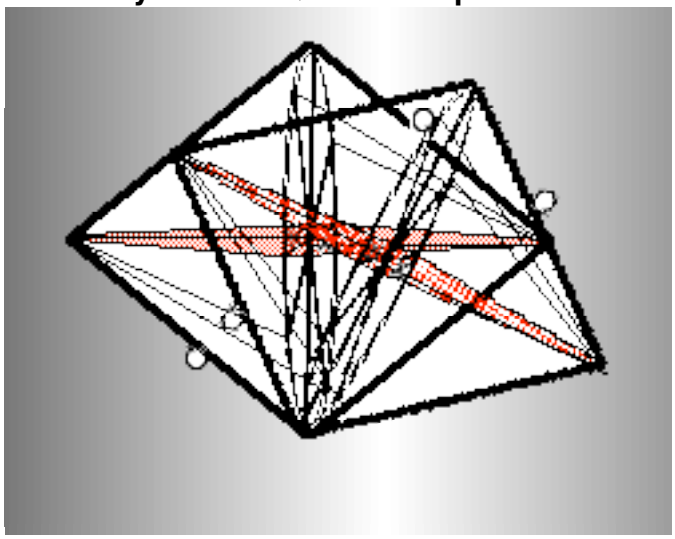
However, when you introduce a fourth stellar body located outside the plane, the new Euclidean formation establishes competitive spacial definition. The gravitational lines established by the fourth stellar body define a three dimensional Euclidean form competitive with quantum curvature definition of that same space.



Quantum volume and Euclidean volume now define the same space. Volume is defined along the third Euclidean axis by both quantum and Euclidean calculation. The original stellar plane defines quantum volume as curvature above the new Euclidean axis. Euclidean volume is defined by that same axis.

The fourth star establishes four intersecting Euclidean planes where there had been one. Each one of these intersecting planes now locate a competitive quantum curvature variance as the definition of volume. Intersecting Euclidean planes produce quantum curvatures which try to expand the same volume.

Multiple Intersecting Euclidean Planes Seriously Distort Quantum Space



The end result of these competitive quantum curvatures is the “bulging” of volume. Since curvature is a function of time force, such “bulging” contracts back. The only possible resolution is to force the intersecting Euclidean planes into the same plane.

In the above illustration, the circles represent intersecting Euclidean planes. If the angle of aperture between them were eliminated, they would become the same plane and the distortion of quantum volume would be eliminated. Quantum space contracts upon stellar masses pressuring the lines of gravitation between stellar objects into a single plane. Vacuous space can only be two-dimensional Euclidean. It cannot be three. The shapes of the stellar masses in a common gravitational field known as galaxies prove that this is true.

With the exception of gaseous masses surrounding a few heavy “blue stars,” all galaxies fall into two categories. They are either “elliptical” or “spiral.”

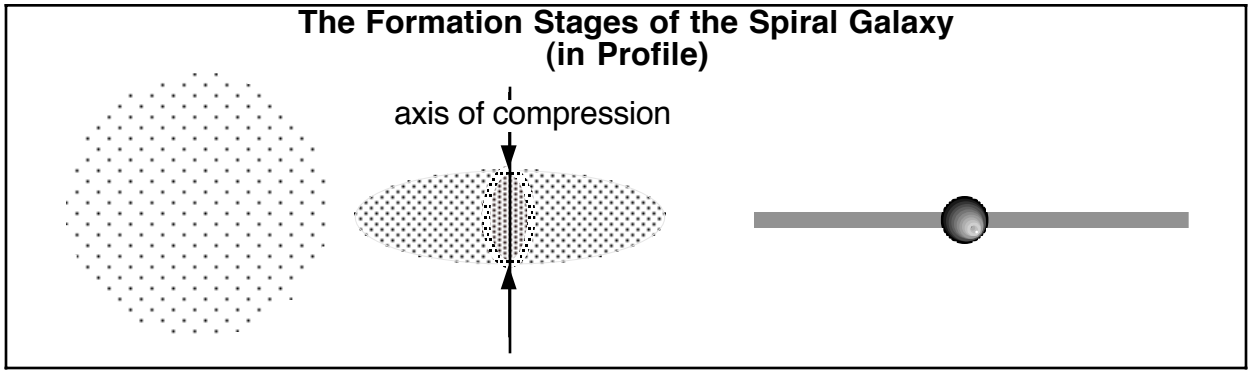
A Spiral Galaxy

What astronomers have failed to recognize, primarily because they lack four-dimensional quantum geometry, is that the elliptical galaxies are in the process of becoming spiral galaxies.

The force of quantum space is contracting back upon these stellar masses pressuring them into a single plane. This tendency is seen in its completed form as the “spiral galaxy.”

The spiral galaxy is flat. The motion of the stars contained within the plane to which it has flattened have a new vector of motion defined by increased gravity. That is, they orbit around a denser center in a plane extending from the center’s equator at 90° to the axis of rotation.

Spiral galaxies were spherical formations of stars which were compressed by quantum space into a plane around a denser center of gravity. The stars in the plane were forced into orbital motion in order to compensate for the gravitation pull created by the compression of the center.



In the above illustration, it can be seen that the “flattening” of the galaxy increases density of stars in the center over the density of stars in the periphery. There are more stars along the axis of compression than along peripheral axii.

The new star system constitutes a more refined Euclidean formation. The “flattening” of the system has made it more coherent with the two dimensional Euclidean definition of vacuum. Becoming “more” Euclidean has unified separate and distinct lines of gravitation into a common field. As the result of flattening, stars are brought into a stronger gravitational field relative to the center and this stronger field requires orbital motion along the Euclidean plane in order to compensate.

Stage 1 elliptical galaxy

The stage one elliptical galaxy shows the thickening of the center relative to the periphery. While there is evidence that the plane is beginning to form, the center is not yet advanced enough to constitute a unified gravitational force. There is not yet evidence of orbital motion.

Stage 2 elliptical galaxy

The “stage two” elliptical galaxy has advanced the “stage one.” The center has now thickened to the point that it is displaying unification characteristics. It has contracted to form clearer edges and has increased in brightness in comparison to the poorly formed “stage one” center. While the two-dimensional plane is not completely formed, it is closer than the “stage one.” Further, evidence of orbital characteristics have begun to appear in ring-like lines in the most advanced areas of the plane.

For comparison’s sake, let us review the well formed spiral galaxy. The center has completely contracted. Both plane and orbital motion are all well formed.

Final Stage

In nearly spherical clusters of stars with a low elliptical eccentricity, the motion of individual stars is random and disassociated. As the galaxy approaches the spiral stage, however, with a well defined center of gravity, that motion becomes orbital. When a spherical

collection of stars begins to acquire a center of gravity, the gravity becomes a system which begins to influence the motion of all stars contained within the system.

While astronomers have catalogued galaxies as “spiral and elliptical”, few would accept the assertion that the elliptical galaxy is a stage in the formation of the spiral galaxy. It simply wouldn’t fit what they believe they know about gravity. Gravity must pull toward the center of the formation, not towards a two dimensional plane.

What scientists are missing is the fact that the oppositional lines of gravitation between stars are also geometric definitions. They do not recognize what vacuous space actually is; that it is composed by the force of time; that volume is only the variance between linear and curved quantum planes. They do not understand that the geometry of gravitational lines can disturb and distort this forced curvature; that space is composed by force, a force which can be applied to shape the very space in which the stars themselves swim.