Inverse Square Parametric of Curved Space vs. Square Space ALEXANDER; CEO SAND BOX GEOMETRY LLC

Inverse Connections
Between Two Infinities of our Being

11/19/23

I believe two separate descriptive events occur when utilizing Gfield inverse square analytics. One being linear for square space, and one being a degree(2) happening for curved space. The linear experience of square space will be the basic relative (two-point) connection of radius (macro-space) with curvature (micro-space). The degree two happening for curved space is the construction of a degree(2) Mechanical Energy curve fixing its lattice rectum cord as M2's average energy (orbit) diameter centered with M1 potential, creating a sustainable period time curve for Sir Isaac Newton's displacement integer on the accretion domain of (F).

Parametric
Unification of Spin, Potential, and
Displacement

Pages 12 and words 2080

Let's start with a map of Sir Isaac Newton's S\&T2. Let this map be a parametric construction of mechanical energy curves for a displacement integer(2) with respect to the spin axis of $\left(M_{1}\right)$.


Figure 1: System potential belongs to $\left(M_{1}\right)$ and period time curve is owned by $\left(M_{2}\right)$. [MA22x'overs;S\&TGfieldfalltoM!]

I use three index solution curves, as tools, to construct mechanical geography of gravity and nuclear central force fields. These index solution tools are:

$$
\left(n^{\frac{1}{0}}, \text { reste; potential }\right)
$$

Rest Energy $\left(M_{1}\right)$ : a parametric resultant produced and extended across two infinities linking Sir Isaac Newton's macro-space displacement radii on a central force domain metered against the micro-space range of central force spin, mirroring two infinities; square space and its inversed curved space, consumating central force mechanical energy properties between spin and orbit. These two points (fig1, points $A \& B$ ) have specific curved space coordinate registration found by SandBoxGeometry Crossover Triangle Parametrics.
$\operatorname{POINT}(A)$ : this is the lynchpin of gravity. Always found as the relative unit(1) meter of space on the central force domain. Relative unit(1), the independent parameter of Point $(A)$, is source provenance of Galileo's First Second Tile defining the experience of Uniform Surface Acceleration parameters. The dependent coordinate will be the rest energy marked on the system range axis. $\left(1, \frac{1}{2}\right)$.
$\operatorname{POINT}(B)$ : is the other endpoint of extended Infinity. Point $(A)$, also in macro space, is that part of $\left(M_{1}\right)$ potential in control of $\left(M_{2}\right)$ 's Changing Acceleration period time curve $(b)$. ( $B$ ) carries the square root of displacement as independent term on the period time curve with $\left(M_{1}\right)$ rest energy as the dependent term. Curved space coordinate arrangement of (points $A \& B$ ):

$$
A:\left(1, \frac{t^{0}}{-2}+\frac{\text { displacement }}{2}\right) ; B:\left(\sqrt[2]{\text { displacement }}, \frac{t^{0}}{-2}+\frac{\text { displacement }}{2}\right)
$$

Rest Energy (weight on surface acceleration curves): presents a linear/normal intercept with spin giving a range only definition of a motive energy limit on $\left(M_{2}\right)$ 's period time curve. This linear/normal arrangement is parallel with the curved space directrix operating at the north spin axis in my construction. I've used the curved space directrix for 20 years as Conservator of system energy. The curved space directrix construction controlls sustainable energy distribution for all ( $M_{1} M_{2}$ ) closed gravity field systems. The CSD does so with basic curved space arithmetic. All $\left(M_{1} M_{2}\right)$ energy is a conserved arrangement. Magnitude of system focal radii $(r, f(r)$ ), working the period time curve, are a sum of potential(1unit) and two vector composition, motive energy (motion) and (orbit radius potential) a Frenet vector calculus assembly. This sum is realized/defined on the average energy diameter of ( $M_{1} M_{2}$ ) orbits. See appendix.

$$
\left(n^{\frac{1}{1}}, \text { registration }\right)
$$

This index solution curve will always pass through north and south $\left(M_{1}\right)$ spin axis. the North Pole will be a negative index solution curve and the South Pole will be a positive index solution curve. These curves register $\left(M_{2}\right)$ average energy diameter placement on the domain of $\mathbf{F}$ with $\left(M_{1}\right)$ spin diameter, how far out from $\left(M_{1}\right)$ we be for sustainable $\left(M_{1} M_{2}\right)$ period motion.

Readings from the SandBox

$$
\left(n^{\frac{1}{2}}, \text { potential }\right)
$$

I read mechanical action of these index solution curve happenings in the first and fourth quadrant. The first quadrant curve is a negative curve with vertex attached to the north spin pole. The quadrant four curve is a positive curve with vertex attached to the South spin pole. Both curves carry the potential of $\left(M_{1}\right)$ needed to control $\left(M_{2}\right)$. Both curves are planted firmly on the central force domain intercepting the abscissa identity for the square root of $\left(M_{2}\right)$ average energy diameter radius, Sir Isaac Newton's displacement term.


Figure 2: let this construction map mechanical energy of a Gfield displacement average energy curve 9units from spin.

$$
\begin{aligned}
& \left(\left(n^{\frac{1}{0}} \rightarrow \text { reste }\right) ;\left(n^{\frac{1}{1}} \rightarrow \text { registration }\right) ;\left(n^{\frac{1}{2}} \rightarrow \text { potential }\right)\right) \\
& j:\left(t, \frac{t^{0}}{-2}+\frac{9}{2}\right) \quad i:\left(t, \frac{t^{1}}{-2}+\frac{9}{2}\right) \quad f:\left(t, \frac{t^{2}}{-2}+\frac{9}{2}\right)
\end{aligned}
$$

PREMISES: Central Force Mechanical Energy Parametrics control potential and motion for Sir Isaac Newton's displacement integer(9) with respect to ( $M_{1}$ ) spin.

Index Solution Curves: rest energy( $j$ ). registration( $i$ ). system potential( $f$ ).
Fig(2) is from my MAA MathFest 2022 contributed poster session. I have chosen integer(9) on the central force domain number line as the candidate integer to suffer inverse exponent $\left(n^{\frac{1}{2}}\right)$ and exponent $\left(n^{2}\right)$ manipulation.

In figure(2), curve ( $e$ ) is the linear record of inverse (integer) connection. A direct linear hook between a displacement space(9units) and it's micro space identity curvature ( $c$ ), defined on the domain of $\mathbf{F}$.

Let curve $(h)$ give definition, also a domain happening, of $\left(M_{1}\right)$ potential, defined on system domain as curve $(f)$, controlling $\left(M_{2}\right)$ period time curve $(b)$, locking the latus rectum chord of $(b)$ as average orbit diameter with required proportional 'claim of space' as $(\sqrt[2]{9})$, both sides of spin, as required space claimed by potential for a sustainable average energy curve of orbit. Curved space inverse square inquiries by potential require a reciprocal imagery of two dynamic endpoints(happenings) to be a complete sustainable recurring period event. An inversed congruent end point happening operating within(curvedspace) and without(squarespace) linking both infinities. Reciprocal curved space happenings is akin to the image flip of the human eye so our brain can see what is. Space inside the eye is inversed, upside down. Space outside the eye is right side up. My perception of an inverse square Gfield construction across macro/micro infinities?

$$
\left(n^{\frac{1}{2}} \leftrightarrow n^{2}\right)
$$

The construction in figure(2) now becomes figure(3):
Galileo's $1^{\text {st }}$ second tile is labeled tile(1) holds curvature ID(c) of displacement radius(9) captured by tile(\#1). Let discovery curve $(a)$ provide ( $M_{1}$ ) parametric potential requirements, curve $(f)$, 'claim of space' providing $\left(M_{2}\right)$ motive energy for displacement(9; average orbit diameter) on period time curve $(b)$.

SandBox Geometry CrossOver Triangle(s) map parametric happenings for sustainable ( $M_{1} M_{2}$ ) events. Three index solution curves provide curved space coordinates of triangle ( $A B C$ )


Figure 3: parametric geometry $\left(9^{\frac{1}{0}}\right)$. Central Force rest energy $(j)$. let rest energy be lack of acceleration; positive or negative. 2022 MathFest. Curve $(f)$ is M1 potential controlling average energy diameter latus rectum chord of curve $(b)$.

Point ( $A$ ) Links Galileo's $1^{\text {st }}$ second tile with $\left(M_{1}\right)$ fingerprint $1^{\text {st }}$ second surface acceleration providing system potential abscissa(ID), for curve ( $f$ ).

Point(B) marks $(\sqrt[2]{\text { displacement }})$ as abscissa(ID) for placement of registration point(C).

The CrossOver completes the triumvirate Frenet vector collection of potential, motion, and registration of displacement with central force spin.

| Point <br> A | $\mathrm{A}=(1,4)$ | (Galileo's $1^{\text {st }} \mathrm{s}$ tile, rest energy $\left(M_{1}\right)$ potential $)$ |
| :--- | :--- | :--- |
| Point <br> B | $\mathrm{B}=(3,4)$ | $(\sqrt[2]{\operatorname{displacement}(9)})$, rest energy $\left(M_{1}\right)$ potent. $)$ |
| Point <br> C | $\mathrm{C}=\left(\sqrt{9}, \frac{n}{2}-\frac{\sqrt{n}}{2}\right)$ | $\left.\begin{array}{l}\text { Linear registration displacement. } \\ \left(\sqrt[2]{\operatorname{displacement}(9)}, \frac{9}{2}\right.\end{array}-\frac{\sqrt{9}}{2}\right)$ |

I use integer (9) to demonstrate a degree(2) exponent operation on a square space number line displacement. Also, an inverse of a degree(2) exponent operation on a micro Infinity term, our perception of curvature. A means to square curvature for Gfield inverse square law of Sir Isaac Newton using position and spin marked on the domain of our natural space. Let Radius and its curvature be the linear happening of two central force dynamic endpoints.

First dynamic is squaring of time curve 9 providing orbit curve(9) removed 9units from spin. To construct a Euclidean time square requires 81 Galilean S\&T1 spacetime tiles. We have completed square of time curve(9).

A balanced imagery of spacetime for ( $M_{1} M_{2}$ ) sustainable orbit not only requires the square of micro space curvature $\left(\frac{1}{\text { displacement. }}\right)$, but a physical square in both space, one for inverse square and one for degree(2) happemings on our natural numberline.

$$
\left(n^{\frac{1}{2}} \leftrightarrow n^{2}\right) \stackrel{\text { and }}{\longleftrightarrow}\left(9^{\frac{1}{2}} \leftrightarrow 9^{2}\right) .
$$

(9), a most unusual number. A curved space happening similar to the first set of consecutive rational integers forming a right triangle $(3,4,5)$. It is the only Euclidean Time Frame square space occurrence linking curvature, radius, square and square root of displacement using consecutive time curves(1,2, and3).

$$
\text { (timecurve } \left.1^{2}, \text { timecurve } 2^{2}, \text { timecurve } 3^{2}\right) .
$$

(timecurve $1^{2}$ add 1 unitS\&T, timecurve $2^{2}$ add 3unitsS\&T, timecurve $3^{2}+5$ unitsS\&T)
Time curve(1) has one Galilean S\&T unit time. Time curve(2), when squared, will add three more Galilean S\&T units. And time curve(3), when squared, adds five more S\&T giving us 9 Galilean tiles reaching the remote corner of time curve $\left(3^{2}\right)$ marking registration of displacement curve(9), CrossOver point( $C$ ).

The imagery is complete. I have squared curvature, found in Galileo's uniform acceleration tile(1) in the inverse world of curved space, producing a (9) unit time square proportionately relevant with the square of displacement curve(9) on our natural number line domain of a Central Force $\mathbf{F}$. Nine square units of space-time curve(3) and the square of displacement curve(9) with 81 square units of spacetime. A matched balanced system for curved space square space sustainable orbit motion.

We have the first consecutive 1,2,3 (time curves) ${ }^{2}$ giving us our degree3 cubic space. The up, the down, and around perception happening with living intellect. What about time? God's time will always be, with or without us.

Readings from the SandBox

The Beatles were right. (\#9 \#9 \#9...). I say the natural \#9 is the perfect number chosen by Nature, able to demonstrate inverse square Gfield connections as I imagine them to be. There is no other number in human imagination can do so.

ALIXAND 2 ; CEO SAND BOX GEOMETRY LLC
...or is there?

ALIXANDER; CEO SAND BOX GEOMETRY LLCCOPYRIGHT ORIGINAL GEOMETRY BY Sand Box Geometry LLC, a company dedicated to utility of Ancient Greek Geometry in pursuing exploration and discovery of Central Force Field Curves.


Using computer parametric geometry code to construct the focus of an Apollonian parabola section within a right cone.
"It is remarkable that the directrix does not appear at all in Apollonius great treatise on conics. The focal properties of the central conics are given by Apollonius, but the foci are obtained in a different way, without any reference to the directrix; the focus of the parabola does not appear at all... Sir
Thomas Heath: "A HISTORY OF GREEK MATHEMATICS" page 119, book II.
Utility of a Unit Circle and Construct Function Unit Parabola may not be used without written permission of my publishing company Sand Box Geometry LLC Alexander, CEO and copyright owner. alexander@sandboxgeometry.com

The computer is my sandbox, the unit circle my compass, and the focal radius of the unit parabola my straight edge. Armed with these as weapon and shield, I go hunting Curved Space Parametric Geometry.

ALIXAND $2 R ;$ CEO SAND BOX GEOMETRY LLC

## CAGE FREE THINKIN' FROM THE SAND BOX

The square space hypotenuse of Pythagoras is the secant connecting ( $\pi / 2$ ) spin radius $(0,1)$ with accretion point $(2,0)$. I will use the curved space hypotenuse, also connecting spin radius ( $\pi / 2$ ) with accretion point ( 2,0 ), to analyze G-field mechanical energy curves.


CSDA demonstration of a curved space hypotenuse and a square space hypotenuse together.

We have two curved space hypotenuses because the gravity field is a symmetrical central force and will have an energy curve at the $\mathbf{N}$ pole and one at the $\mathbf{S}$ pole of spin: just as a bar magnet. When exploring changing acceleration energy curves of $\mathrm{M}_{2}$ orbits, we will use the N curve as our planet group approaches high energy perihelion on the north time/energy curve.

## ALIXANDIR; CEO SAND BOX GEOMETRY LLC

The foundation of human mathematics is geometry. If one would take some time to look at the written works (they happen to be library available) of Newton, Kepler, and the time-tested Conic Treatise of Apollonius, you will be face-to-face with the stick art of human mathematics. However, unlike art, freedom of interpretation (STEAM..., history, cultures, and statues, concrete and legal) is NOT invited. Only a single path of rigorous logic leading to an irrefutable conclusion is proffered. Proofing still rules today, as the only way to structure an argument advancing human imagination to the next level.

For me, it is not important to understand the proofing used with exploratory Philosophical Geometry of the Masters for this can be as difficult to fathom as a triple integral proof, simply witness the incisive descriptive language, explaining methods used by these great geometers of our past, Huygens, Newton, and Kepler, to name a few, as they ponder Questions of Natural Phenomena of Being using descriptive mathematical relations between lines and curves with the unique irrefutable perspective of picture perfect Classic Geometry. Geometry after-all, is one tongue spoken, written, and understood by all humans.

## ALIXANDIR; CEO SAND BOX GEOMETRY LLC

## Sophist - Wikipedia

Sophists $21^{\text {st }}$ Century (woke)sophistication ain't cool!! No truth innit.

Readings from the SandBox

## Appemdix

Basic curved space energy distribution.
https://www.geogebra.org/u/apollonius

