Reading from the SandBox

A monograph exploring exponents and roots as never before. A 21st C update.

An elementary study of the roots and exponents; and a Computer Based Math mechanical contrivance to construct integer roots on a central force accretion plane. I begin the search for $\sqrt[0]{n}$; can we parametrically construct the inverse Parametric Geometry of $(n^0 \ \rightarrow 1)$ onto a Degree3 spin&rotation space time frame?

ALΣXANDΣR; CEO SAND BOX GEOMETRY LLC

Inversed Exponents of Squares Space and The Roots of Curved Space	November 7 2021

Been here before, but this stuff is outa-sight different from any previous exploration of exponents and roots. I intend to improve S&T2, leaving the 450 years old Inverse Square connector, linking square space (radius) with curved space (curvature) and find a congruent link I call the Inverse Cube Connection of Central Force spin&rotation of Solar G-field 3Space.

I explore two root indices (0) and (1). These two guys pave the way for exploring higher degree roots of Natural Curved Space.

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If we want to learn how to construct mechanical energy curves of central force fields, it is necessary to learn the shaping phenomena of exponents in square space and roots in curved space.

I use counting integer (2) as preferred base of Parametric Geometry view of spin&rotation roots. Base (2) counting brings sequential integers as indices of curved space operating on a square space radicand. Radicands are chosen to yield a continual base (2).

$$\left(\left(\sqrt[0]{2}\right), \sqrt[1]{2}\ \sqrt[2]{4}\ \sqrt[3]{8}, \sqrt[4]{16}, \sqrt[5]{32} \ldots \left(\sqrt[i+1]{n} = 2\right)\right)$$

Since indices are inverse exponents, I can fix my standard **CSDA** model of mechanical energy of Curved Space. A **CSDA** is my Theodolite for analyzing Parametric Geometry of Curved Space (page 19). No matter to what Degree(n) space I climb; I conduct analytics using Sir Isaac Newton's Universal Law, fixed here in Degree2 curved space, using counting integer (2), a well-worn traveler of inverse square exploration.

https://en.wikipedia.org/wiki/Inverse-square_law#History

French astronomer Ismaël Bullialdus (1605–1694)… As for the power by which the Sun seizes or holds the planets, and which, being corporeal, functions in the manner of hands, it is emitted in straight lines throughout the whole extent of the world, and like the species of the Sun, it turns with the body of the Sun; now, seeing that it is corporeal, it becomes weaker and attenuated at a greater distance or interval, and the ratio of its decrease in strength is the same as in the case of light, namely, the duplicate proportion, but inversely, of the distances [that is, $1/d^2$].

I submit inverse square law is best served as $\left(\frac{1}{r}\right)^2$ the square of curvature.

The latus rectum chord of a **CSDA** is my tripod survey tool. Its (± 2) end point is hybrid. Serves as counting integer (± 2), linear meter of square space and exponent of choice to display and construct parametric mechanical energy curves of a Central Force Field dynamics.

But I need to morph such construction views into a spinning rotating Degree3 Central Force Field, the source primitive of our curved space analytics.

I need to find Inverse Cube Space.

I use counting integer (2) as preferred base of curved space square space interchange to view spin&rotation. Base (2) brings registered focus of square space domain and range analytics to my Cubed Space exploration of God's Creation.

PREMISES

My construction methods for finding roots of counting integer is old hat. Won't explain it again. Check my (.info) Blog.

My own curiosity has caused a deeper review of two curved space aspects of inverse exponent operation. To begin, establish a long-time square space exponent performance.

$$(n^0 \rightarrow 1)\ and\ (n^1\ \rightarrow n)$$

Definitely square space entities. Now, check this out:

$$\left(\sqrt[0]{n}\right)\ \rightarrow indeterminate???\, and\ \left(\sqrt[1]{n}\ \rightarrow n\right)$$

$$\left(\sqrt[0]{2}, t\right) \text{ and } (t, \sqrt[0]{2})$$

We may not be able to find an abscissa definition for $(\sqrt[0]{2}, t)$ but a curved space parametric geometry will find an ordinate definition $(t, \sqrt[0]{2})$ using a basic parametric geometry solution curve template for finding roots of square space counting integers:

To find a curved space parametric solution intercept with abscissa ID of a square space integer root: $\sqrt[3]{8}$; $\sqrt[indice]{radicand}$

$$\left\{t, \frac{t^3}{\mp 2} \pm \frac{8}{2}\right\}$$

Let the ordinate (t) as (numerator1) carry the desired index as exponent. (Denominator1) is always (∓ 2). Add the radicand (numerator2) divided by (± 2) (denominator2) for 1st Quad root solution curves. I read all resulting solution curves with abscissa ID intercept of considered root happening @ Quad 1&4.

$$\text{ParametricPlot}[\{\{\left(\frac{8}{2}\right)\text{Cos}[t],\left(\frac{8}{2}\right)\text{Sin}[t]\},\{t,\frac{t^2}{\left(-4\left(\frac{8}{2}\right)\right)}+\frac{8}{2}\},\{t,\frac{t^3}{-2}+\left(\frac{8}{2}\right)\},$$

$$\{t,\frac{t^3}{+2}-\left(\frac{8}{2}\right)\},\{8^{\frac{1}{3}},t\}\},\{t,-3\pi,3\pi\},$$

$$\text{PlotRange}->\{\{-8,8\},\{-5,5\}\},\text{AxesOrigin}->\{0,0\}]$$

$$\left(\sqrt[3]{8}\right)$$

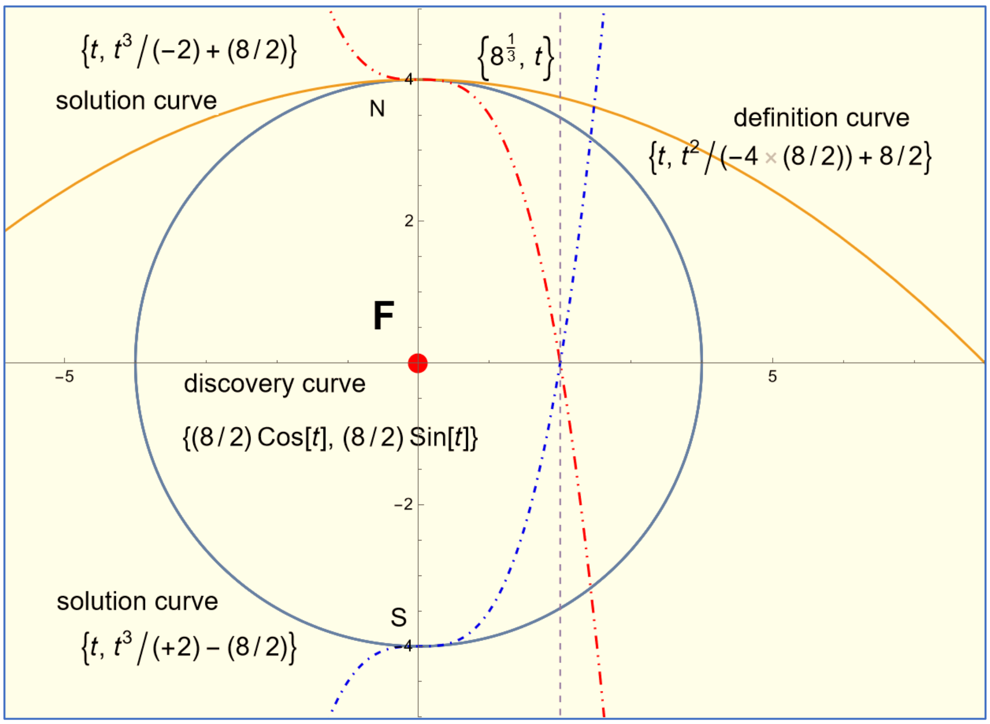

Figure 1: Basic CSDA parametric construction for $\sqrt[3]{8}$.

When using a SBG **CSDA** to discover integer roots of curved space I use different monikers.

Let the independent curve be the discovery curve and the dependent curve be integer definition curve.

I assign negative and positive slope to solution curves for identity. I base slope sign on pole entry and slope of solution curve intercept with square space abscissa ID of desired root. The $(-)$ solution curve enters the N pole, flatlines at spin vertex and dives to integer selected. The $(+)$ curve enters with the south pole, flatlines at spin vertex and climbs to $\sqrt[indice]{radicand}$.

The $(-)$ solution curve is (red), The $(+)$ curve is navy.

CURVED SPACE PARAMETRIC CONSTRUCTION FOR:

$$(2^0, t)\text{and}(t, \sqrt[0]{2})$$

I explore four inversed exponents of square space counting integer (2) to see what their parametrics look like. $(0\ and\ 1)$ are peculiar and $(2\ and\ 3)$ follow parametric shape of odd/even exponents. Here are four constructions.

$(2^0,\ 2^1, 2^2, 2^3)\ and\ their\ inverse\ \sqrt[0]{2}, \sqrt[1]{2}, \sqrt[2]{4}, \sqrt[3]{8}\ or\ 2^{\frac{1}{0}}???, 2^{\frac{1}{1}}, 4^{\frac{1}{2}}, 8^{\frac{1}{3}}.$

$$\text{ParametricPlot}[\{\{\text{Cos}[t], \text{Sin}[t]\}, \{t, \frac{t^2}{-4(1)} + 1\}, \{2^0, t\}, \{t, \frac{t^0}{-2} + \frac{0}{2}\}, \{t, \frac{t^0}{+2} - \frac{0}{2}\}, \{t, \left(\frac{t^0}{+2} - \frac{0}{2}\right)^{-1}\},$$
$$\{t, \left(\frac{t^0}{-2} + \frac{0}{2}\right)^{-1}\}\}, \{t, -\pi, \pi\}, \text{PlotRange} \to \{\{-4,4\}, \{\frac{-5}{2}, \frac{5}{2}\}\}]$$

$Main\ Body\ Solution\ Curve$ $(MBSC)$	$\{t, \frac{t^{(\text{index})}}{\mp 2} \pm \frac{\text{radicand}}{2}\}$	Curve N is negative. Curve S is positive.
$Main\ body\ solution\ curve^{-1}$ $(MBSC)^1$	$\left(\frac{t^{(\text{index})}}{\mp 2} \pm \frac{\text{radicand}}{2}\right)^{-1}$	• $2(\pm MBSC)^{-1}\ trapped\ between\ abscissa\ ID.$ • $Two\ spirtit\ curves\ for\ each\ (\pm MBSC)^{-1}$ $are\ asymptotic\ outside\ abscissa\ ID.$ $\pm\ alternating\ top\ and\ bottom\ of\ accretion.$
Integer $2^{(0,1,2,3)}$	Square space; exponent:	curved space: inverse exponent, dependent part of parametric; roots.
$2^0 \to 1$ $\sqrt[0]{2}\ indeterminate$	$2^{\frac{1}{0}}\ and\ \sqrt[0]{2}$ $\to indeterminate$	$\text{Solve}\left[\frac{t^0}{-2} + 1 == \frac{t^0}{2} - 1, t\right]$ $(\{no\ intercept\})$ 1st ordinate(s) of curved space: $\left(\frac{1}{2}\ and\ \frac{-1}{2}\right)$ (fig2)
2 $2^1 \to 2$	$2^{\frac{1}{1}}\ and\ \sqrt[1]{2} \to 2$	$\text{Solve}\left[\frac{t^1}{-2} + 1 == \frac{t^1}{2} - 1, t\right] \to 2$ Both solution curves intercept@$\sqrt[1]{2}$; (fig3)
$2^2 \to 4$ $\sqrt[2]{4} \to 2$	$4^{\frac{1}{2}}\ and\ \sqrt[2]{4} \to 2$ Even indices are parabolic Odd indices are not. Fig4; odd and fig1; odd	$\text{Solve}[\frac{t^2}{-2} + 2 == \frac{t^2}{2} - 2, t]$ $\{t \to -2\}, \{t \to 2\}$ Both solution curves intercept@$\sqrt[2]{4}$; (fig5)
$2^3 \to 8$ $\sqrt[3]{8} \to 8$	$8^{\frac{1}{3}}\ and \sqrt[3]{8} \to 2$	$\text{Solve}\left[\frac{t^3}{-2} + 4 == \frac{t^3}{2} - 4, t\right] \to$ Both curves intercept quad (1+4) (fig1)

$$\langle (2^0, t)\text{and}(\sqrt[0]{2})\rangle$$

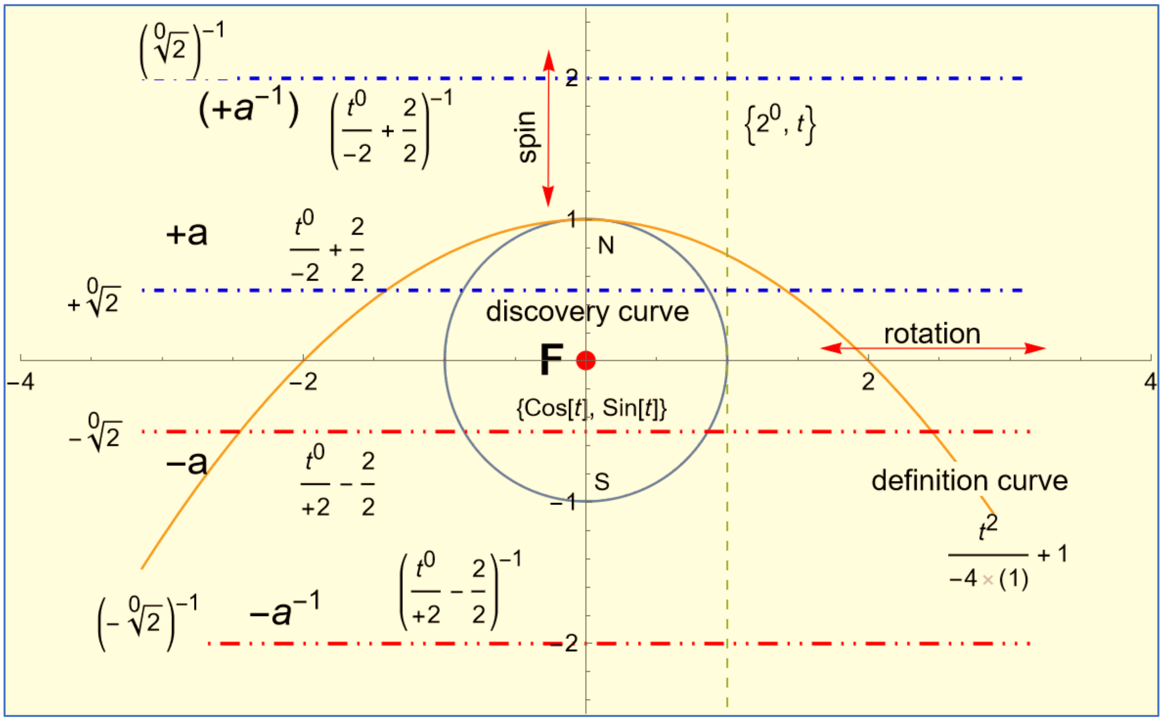

Figure 2: SBG **CSDA** parametric construction of (2^0) and $(\sqrt[0]{2})$

Notice I use square space counting integers operating as exponent $(2^0, 2^1, 2^2, 2^3)$. I maintain base (± 2) latus rectum chord of a **CSDA** putting definition or a limit on permitted area for domain curved space solution curves.

$$(\sqrt[0]{2}), \sqrt[1]{2}\ \sqrt[2]{4}\ \sqrt[3]{8}, \sqrt[4]{16}, \sqrt[5]{32} \ldots \sqrt[i+1]{n} = 2.$$

The radicand remains a base (2) solution for any index as long as index is exponent of curved space counting integer operating as a radicand yielding integer $(+2)$ result on curved space accretion domain There is an infinite number of solutions for such a series of indices and radicand producing (± 2). I use only indices $(0, 1, 2, and\ 3)$.

- $Index\ (0)$: ORDINATES $\left(\sqrt[0]{2}\ and\ 2^{0}\right)$; **CSDA** constructions are made mechanical using the Latus Rectum Chord and the parabola Directrix of Antiquity. $\left(\frac{\pi}{2}\right)$ spin radius provides initial parabola vertex focus radius as counting integer one of curved space and the directrix lays out counting integer two of square space on the number line domain. Coordinates $\left(2^{0},\ \sqrt[0]{2}\ \right)$ exist in curve space parametrics and find an inverse connection operating between two infinities, Macro & Micro. Inverse operation on the number line domain provides evaluation of central force inverse connection: $\left(\frac{1}{2} \leftrightarrow 2\right)$ not constructed. $\left(\frac{1}{r}\right) \leftrightarrow (r)$, exist in degree2 G-field space with respect to square space domain integer two as displacement radius (r). All parametrics are parallel with the domain number line except $((2)^{0})$. $((2)^{0})$, a meter of curved space parametrics, a boundary on the system domain separating curvature from radius of curvature. Latus Rectum Chord of the system finds unit two. Unit two belongs in Square Space. Fig.2
- $Index\ (1)$: discovery of DOMAIN $\left(\sqrt[1]{2}\ and\ 2^{1}\right)$; curved space and square space find agreement of mutual definition for $\left(n^{1}\ and\ \sqrt[1]{n}\right)$ on the domain of Macro space. Fig.3
- $Index\ (2)$: $\left(\sqrt[2]{4}\ \right)$ curved space parametric analytic utility of a **CSDA** is born. We can construct an independent curve, a dependent curve, a spin axis, and accretion domain. A profile function predicting central force field mechanical energy curves.
- $Index\ (3)$: $\left(\sqrt[3]{8}\ \right)$ 3-space construction of central force spin and rotation plane of accretion. The hemisphere (N) carries four positive quadrants and the hemisphere (S) carries four negative quadrants. Giving us an up, down, and around 3-space meter of our being.

I use parametric curves to find roots of number line integers.

$$\left\{t, \frac{t^{index}}{\mp 2} \pm \frac{radicand}{2}\right\}$$

Expression (n^0) is a boundary. Independent curve $\left(\frac{\pi}{2} spin\ radius\ (unit\ 1)\right)$ metered from (0), or (F) in curved space parametrics to the dependent curve vertex is focal radius (p). (n^0) also marks unit (1) on the number line domain. Index (1) for *ordinates* of curved space and exponent (1) for *domain* units of square space are equivalent.

Inversed main body solution curves (dependent part) of index (1):
$\left(\frac{t^{index}}{\mp 2} \pm \frac{radicand}{2}\right)^{-1}$ are strangely Degree1 asymptotic curves with abscissa definition of square space integer roots. Not linear as expected with Degree1 exponent. Inversed main body solution curves carry two spirits. One spirit is negative (colored red) and one spirit is positive colored (blue). See fig3.

2 space root indices	Main body solution curve	$(\pm)$ spirit inverse main body solution curve
$\sqrt[1]{2} \rightarrow 2$	$-\{t, \frac{t^1}{-2} + \frac{2}{2}\}$	$\left\{t, \left(\frac{t^1}{-2} + \frac{2}{2}\right)^{-1}\right\}$
	$+\{t, \frac{t^1}{+2} - \frac{2}{2}\}$	$\left\{t, \left(\frac{t^1}{+2} - \frac{2}{2}\right)^{-1}\right\}$

CSDA parametrics of main body solution curves for: $(\sqrt[1]{2} \rightarrow 2)$. There will be two solution curves. $[-\{t,\frac{t^1}{-2}+\frac{2}{2}\}$ *and* $+\{t,\frac{t^1}{+2}-\frac{2}{2}\}]$. The negative main body will be red $\left(-\{t,\frac{t^1}{-2}+\frac{2}{2}\}\right)$. The positive MBSC is blue $\left(+\{t,\frac{t^1}{+2}-\frac{2}{2}\}\right)$. I base signing and color assignment with pole experience and slope of solution curve(s) with $(\sqrt[1]{2})$.

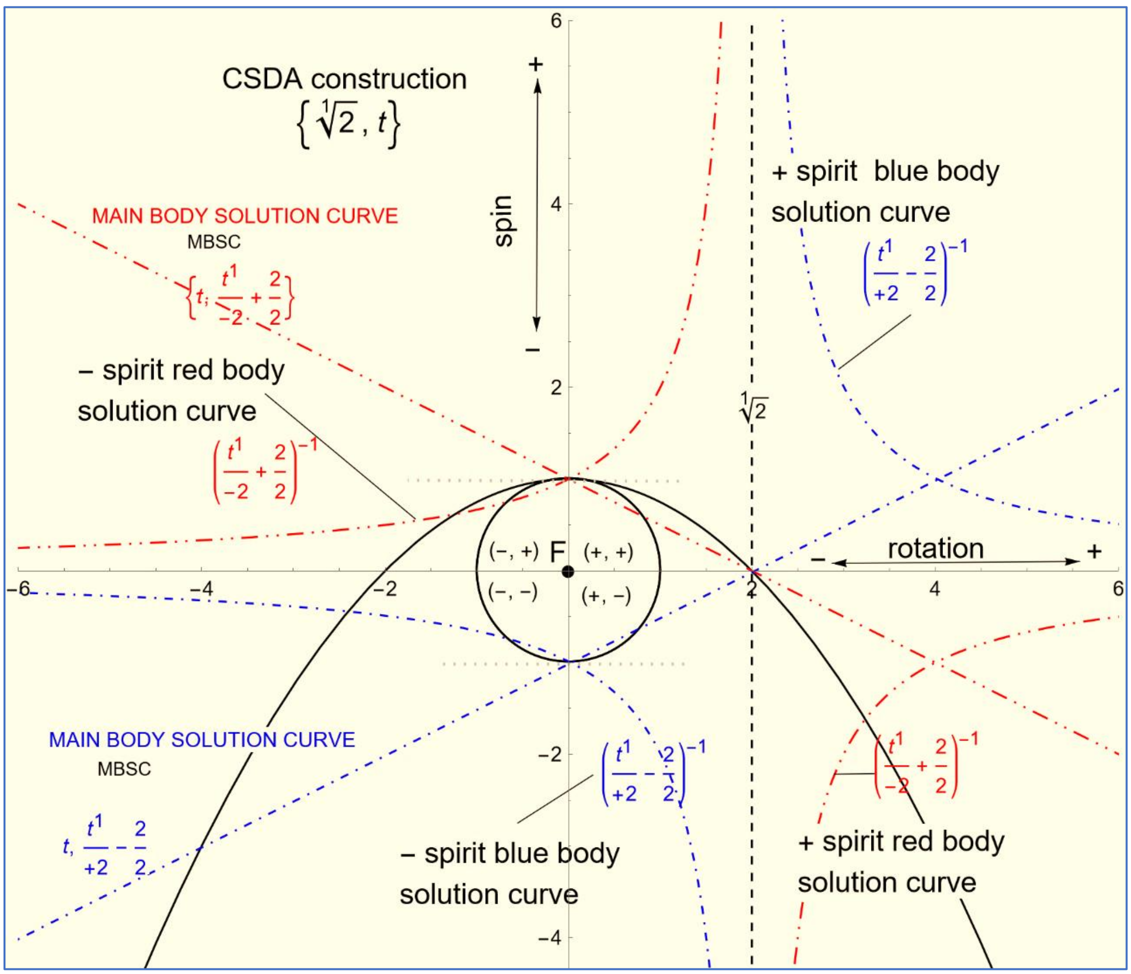

Figure 3: **CSDA** parametrics for $\sqrt[1]{2}$. This construction carries parametric curved space activity on square space $\sqrt[1]{2}$.

Index $\left(\sqrt[2]{4}\ and\ \sqrt[3]{8}\right)$ are the final construction for Central Force Field spin and rotation. Both radicands arrive at base (2) of Curved&Square space analytics, finding counting integer (2).

I reference number (2) as an average displacement curve in a **CSDA** because it is the required exponent when exploring sensory perception experience as we meter effect of position in the central force fields we live and work with. Candle power to meter lighting is one such measure. We meter all fields, magnetism, electric charge, and G-field orbit mechanics, using inversed squared (exponent 2) on radii of a central force experience.

As such, I investigate means to construct roots (the inverse operation of exponents) on Sir Isaac Newton's average energy radii (**CSDA** unit 2), the positive side of the system latus rectum to find the Inverse Cube of Central Force 3-space. Essentially constructing square space integer roots onto a spinning Central Force Field domain accretion plane.

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2 space root indices	Main body solution curve	$(\pm)$ spirit inverse main body solution curve
$\sqrt[2]{4} \rightarrow 2$	$-\{t, \frac{t^2}{-2} + \frac{4}{2}\}$	$\left\{t, \left(\frac{t^2}{-2} + \frac{4}{2}\right)^{-1}\right\}$
	$+\{t, \frac{t^2}{+2} - \frac{4}{2}\}$	$\left\{t, \left(\frac{t^2}{+2} - \frac{4}{2}\right)^{-1}\right\}$

$$\left(\pm\sqrt[2]{4}\ and\ \left(\pm\sqrt[2]{4}\right)^{-1}\right)$$

$$\text{ParametricPlot}[\{\{2\text{Cos}[t],2\text{Sin}[t]\},\{t,t^2/(-8)+2\},\{t,\frac{t^2}{-2}+2\},\{t,\left(\frac{t^2}{-2}+2\right)^{-1}\},\{t,\frac{t^2}{+2}-2\},$$
$$\{t,(\frac{t^2}{+2}-2)^{-1}\},\{\sqrt[2]{4},t\},\{-\sqrt[2]{4},t\}\},\{t,-3\pi,3\pi\},\text{PlotRange}\text{->}\{\{-5,5\},\{-3,3\}\},\text{AxesOrigin}\text{->}\{0,0\}]$$

Even index $(MBSC)^{-1}$ $\left(\{t,\left(\frac{t^4}{+2}-\frac{2}{2}\right)^{-1}\},\{t,\left(\frac{t^4}{-2}+\frac{2}{2}\right)^{-1}\}\right)$ are locked between $\pm abscissa\ ID$ of root and curvature limits imposed by the independent curve.

The $(-MBSC)^{-1}$ occupies quad 1&2. It's two spirits $(+\ and\ -)$ appear in quad 3&4 on the opposite (negative) side of accretion.

The $(+MBSC)^{-1}$ occupies quad 3&4. It's two spirits $(+\ and\ -)$ appear in quad 1&2 on the opposite (positive) side of accretion.

$$\text{ParametricPlot}[\{\{(\tfrac{8}{2})\text{Cos}[t],(\tfrac{8}{2})\text{Sin}[t]\},\{t,\frac{t^2}{\left(-4\left(\frac{8}{2}\right)\right)}+\frac{8}{2}\},\{t,t^3/(-2)+(\tfrac{8}{2})\},\{t,t^3/(+2)-(\tfrac{8}{2})\},$$
$$\{8^{\frac{1}{3}},t\},\{t,(\frac{t^3}{-2}+\frac{8}{2})^{-1}\},\{t,(\frac{t^3}{+2}-\frac{8}{2})^{-1}\},\{t,\frac{1}{4}\},\{t,\frac{-1}{4}\}\},\{t,-3\pi,3\pi\},\text{PlotRange}\text{->}\{\{-8,8\},\{-5,5\}\},\text{AxesOrigin}\text{->}\{0,0\}]$$

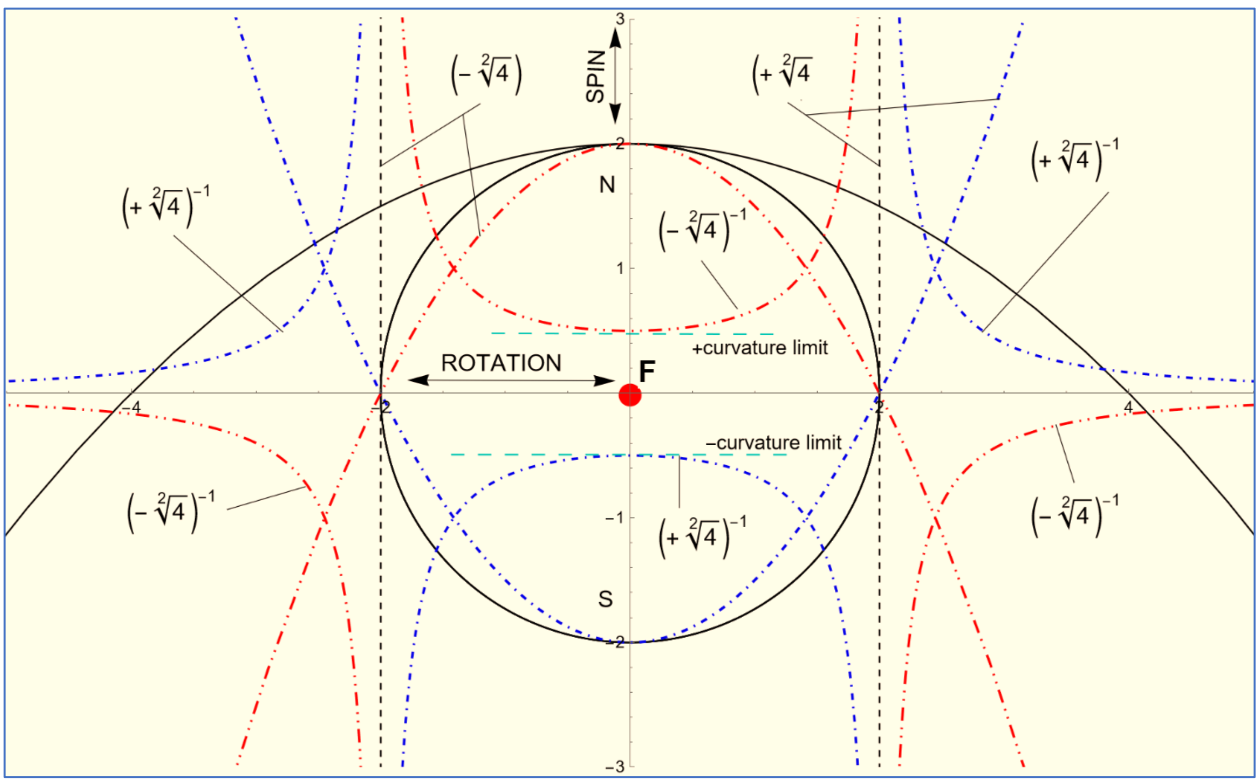

Figure 4 CSDA parametric curvature limits set boundary for inversed solution curves..

I've applied direction arrows for $(\pm MBSC)^{-1}$. I analyze both even indices and odd indices $(MBSC)\ and\ (MBSC)^{-1}$ events in the 1st Quad of Descartes. I imagine $(MBSC)^{-1}$ curves are Plasma currents carrying electromagnetic phenomena from Black Hole control center in our Galaxy. Asymptotic activity of these curves maps electromagnetic circuitry for Plasma charge, each curve a Plasma ±Potential seeking spin pole connect with opposite ±charge. I imagine these curves to exist throughout our spiral galactic frame.

Curved Space $\left(\sqrt[3]{8}\right)$ and the shape of Accretion Phenomena.
Both curves approach poles from negative side of spin. Negative curve Quad2 and positive curve Quad3.

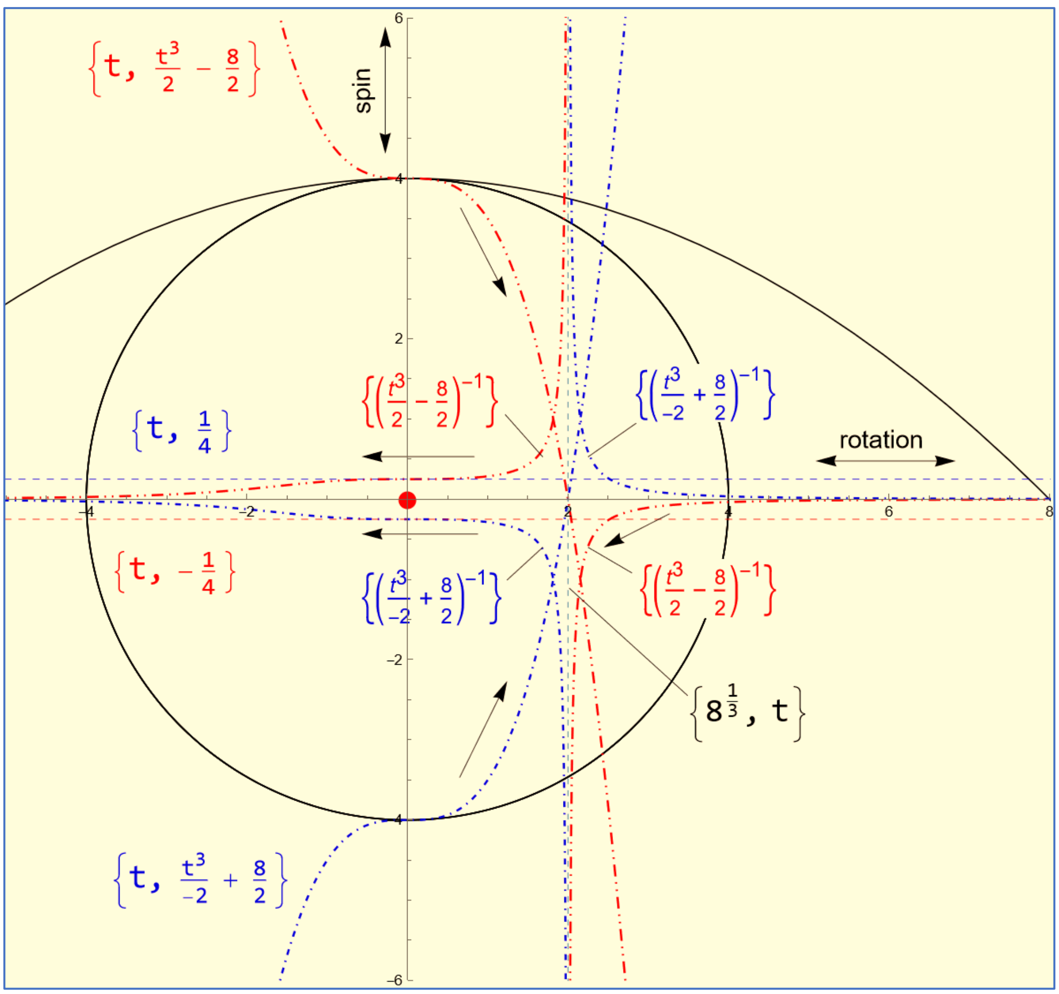

Figure 5: Proposed SBG construction of Plasma and its electromagnetic charge passing through and around central force spin and accretion parameters of our Sun

$(-MBSC)^{-1}$; $\{t, \left(\frac{t^3}{+2} - \frac{8}{2}\right)^{-1}\}$: approaches system in Quad1 along negative side of square space abscissa for $\left(\sqrt[3]{8}\right)$. Flat lines at (+curvature limit), crosses the limit at spin, and leaves system along positive side of accretion from negative side of spin.

$(+MBSC)^{-1}$; $\{t, \left(\frac{t^3}{-2} + \frac{8}{2}\right)^{-1}\}$: approaches system in Quad4 along negative side of square space abscissa for $\left(\sqrt[3]{8}\right)$. Flat lines at (-curvature limit), crosses the limit at spin, and leaves system along negative side of accretion from negative side of spin. Both curves are asymptotic to square space abscissa definition of $\left(\sqrt[3]{8}\right)$.

Both $(\pm spirit)$ curves flip position of travel on accretion domain, returning to Central Force spin on opposite sides of accretion from their start, leaving system spin rotation on positive side of integer root asymptotes, continuing on positive side of spin into field space. $(-MBSC^{-1})$ exiting S pole of system on positive side of root ID asymptote and $(+MBSC^{-1})$, now on positive side of accretion, exits N along positive side of root abscissa ID asymptote.

Finding the Inverse Cube Connection of Curved Space.

I use $\left(\sqrt[3]{8}\right)$ so as to connect a Degree3 curve with Cartesian number line counting integer (2) within the square space Euclidean degee2 time frame. I do so to construct inverse cube happening $\left(\sqrt[3]{8}\right)^{-1}$ onto a G-field rotating accretion plane.

There are two curves, $\left(\sqrt[3]{8}\right)$ and $\left(\sqrt[3]{8}\right)^{-1}$.

$$\left(\sqrt[3]{8}\right) \rightarrow 2 \text{ and its inverse } \left(\sqrt[3]{8}\right)^{-1} \rightarrow \frac{1}{2}$$

Inverse Cube Space connection with Degree2 Square Space is found at the source primitive **CSDA** $(\{(1)\mathrm{Cos}[t], (1)\mathrm{Sin}[t]\})$. Unit one of curved space and unit two of square space provide the Degree2 square space inverse connection defined by radius of curvature 2 and curvature evaluation $\left(\frac{1}{2}\right)$. Cube Space and Square Space have congruent happenings connecting radii macro space infinity at (Square Space unit2) with curvature, micro space infinity $\left(\frac{1}{2}\right)$ G-field anchor by system potential.

Finding the Inverse Cube Connection of Central Force Fields.

$$\text{ParametricPlot}[\{\{(\tfrac{8}{2})\text{Cos}[t], (\tfrac{8}{2})\text{Sin}[t]\}, \{(1)\text{Cos}[t], (1)\text{Sin}[t]\}, \{t, \frac{t^2}{-4} + 4\}, \{t, \frac{t^2}{-4} + 1\}, \{t, \frac{t^0}{+2} - 4\},$$

$$\{t, \frac{t^0}{-2} + 4\}, \{t, (\frac{t^3}{-2} + 4)\}, \{t, (\frac{t^3}{\frac{-1}{8}} + 1)\}, \{t, \frac{1}{4}\}, \{8^0, t\}\}, \{t, -3\pi, 3\pi\}, \text{PlotRange}-$$

$$> \{\{-8,10\}, \{-8,7\}\}, \text{AxesOrigin}-> \{0,0\}]$$

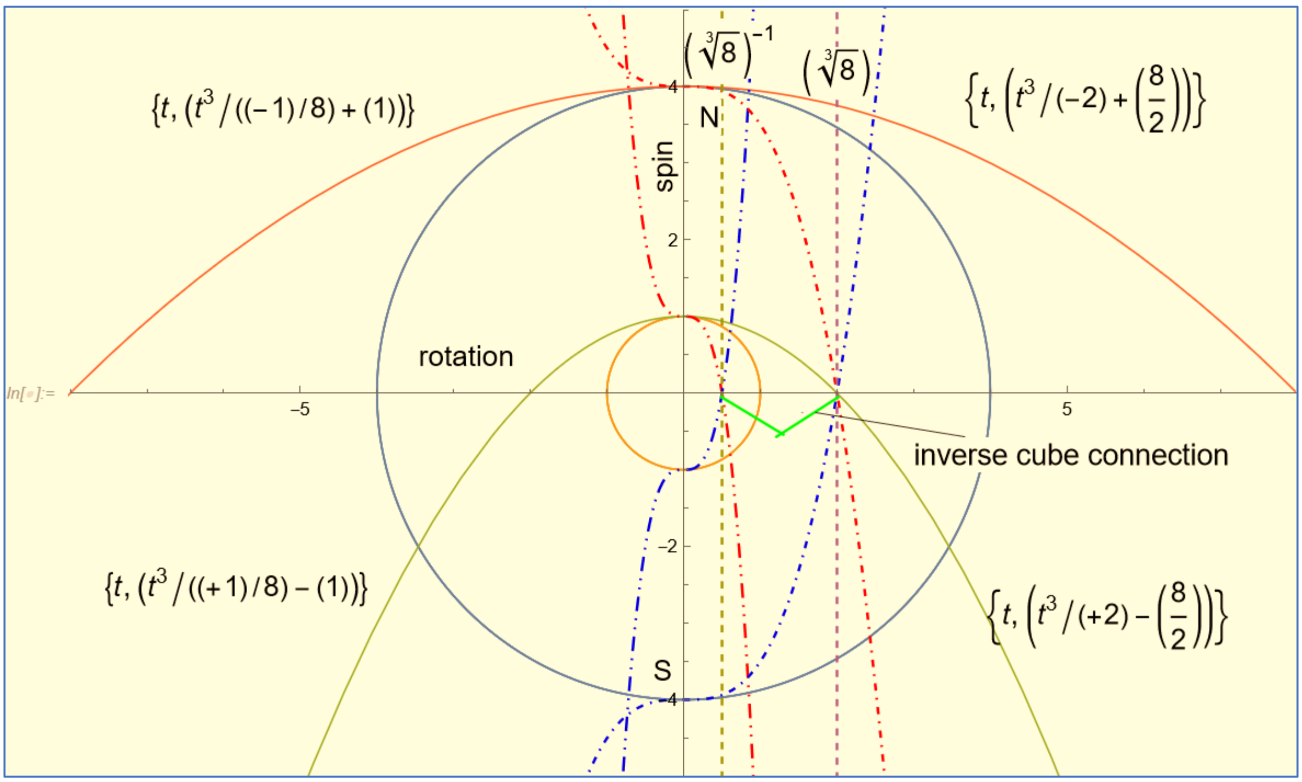

Figure 6; CSDA Parametric investigation for Inverse Cube properties of Central Force Deegree2 Fields.

Reading from the SandBox

$$\text{ParametricPlot}[\left\{\{\left\{\left(\frac{8}{2}\right)\text{Cos}[t],\left(\frac{8}{2}\right)\text{Sin}[t]\right\},\{(1)\text{Cos}[t],(1)\text{Sin}[t]\},\{t,\frac{t^2}{-16}+4\},\{t,\frac{t^2}{-4}+1\},\right\}$$

$$\left\{t,\left(\frac{t^3}{-2}+4\right)\right\},\left\{t,\left(\frac{t^3}{\frac{-1}{8}}+1\right)\right\},\{8^0,t\},\{2,t\},\{\frac{1}{2},t\}\},$$

$$\{t,-3\pi,3\pi\},\text{PlotRange}\text{−>}\{\{-8,10\},\{-8,7\}\},\text{AxesOrigin}\text{−>}\{0,0\}]$$

$\left\{\left(\frac{8}{2}\right)\text{Cos}[t],\left(\frac{8}{2}\right)\text{Sin}[t]\right\}$: this is discovery curve for Square Space counting integer 8.

$\{t,\frac{t^2}{-16}+4\}$: definition curve for Square Space counting integer 8.

$\{(1)\text{Cos}[t],(1)\text{Sin}[t]\},\{t,\frac{t^2}{-4}+4\}$: Source Primitive CSDA for Central Force Field spin and rotation.

$t,\left(\frac{t^3}{-2}+4\right)$; Curved Space solution curve for Square Space $\left(\sqrt[3]{8}\right)$.

$\left\{t,\left(\frac{t^3}{\frac{-1}{8}}+1\right)\right\}$: Curved Space solution curve for Square Space $\left(\sqrt[3]{8}^{-1}\right)$.

Exploring Plasma and Accretion Compression energy causing charged pancake disk orbit formations:

$$\text{ParametricPlot}[\{\{(\frac{8}{2})\text{Cos}[t],(\frac{8}{2})\text{Sin}[t]\},\{t,\frac{t^2}{-16}+4\},\{8^{\frac{1}{3}},t\},\{-8^{\frac{1}{3}},t\},\{t,1/4\},\{t,\left(\frac{t^3}{2}-\frac{8}{2}\right)^{-1}\},$$

$$\{t,\left(\frac{t^3}{-2}+\frac{8}{2}\right)^{-1}\},\{t,-1/4\},\{t,\left(\frac{-t^3}{2}-\frac{8}{2}\right)^{-1}\},\{t,\left(\frac{-t^3}{-2}+\frac{8}{2}\right)^{-1}\}\},\{t,-3\pi,3\pi\},$$

$$\text{PlotRange}\text{−>}\{\{-5,8\},\{-6,6\}\},\text{AxesOrigin}\text{−>}\{0,0\}]$$

Accretion phenomena will require several pages to divide the confusion into order. To be continued.

A study of shape will suffice for now. Red curves are negative

I imagine inter galactic Plasma Circuits to be bundled potential, both charges as negative and positive currents, carrying magnetic curl as a common house wire. However, signed potential has magnetic curl of opposite polarity. Negative field plasma connection with N stellar spin has CC curl and positive field plasma connection with S stellar spin has C curl. Dynamics of magnetism of Plasma scale

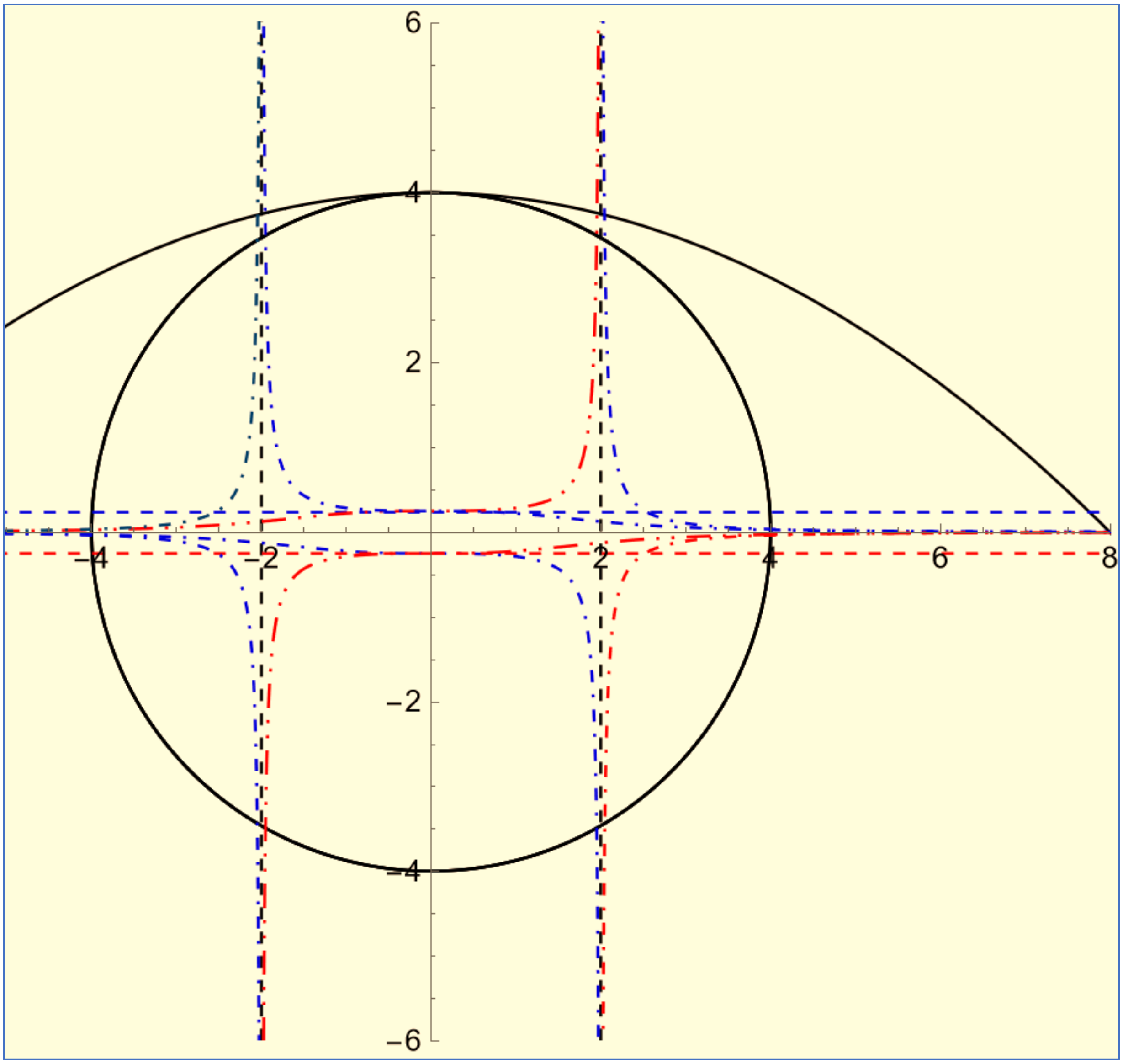

Figure 7: **CSDA** parametric construction of ±Plasma potential grip on accretion plane of our Sun by Galactic Back Hole.

hold our system in a plane of accretion, carrying magnetic polarity and charge of electric potentials.

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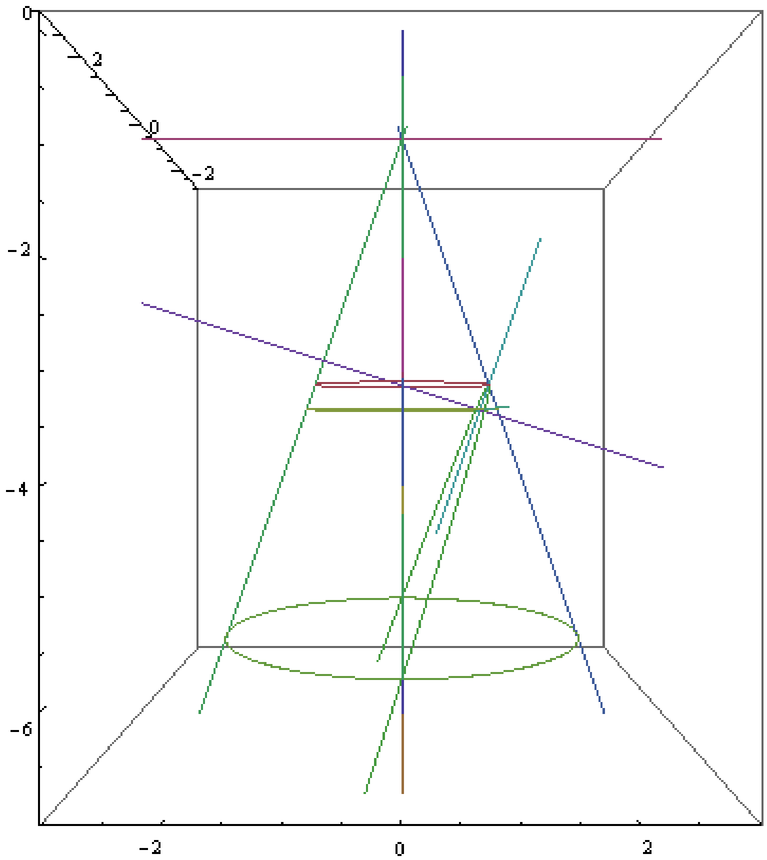
Using computer parametric geometry code to construct the focus of an Apollonian parabola section within a right cone.



"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.

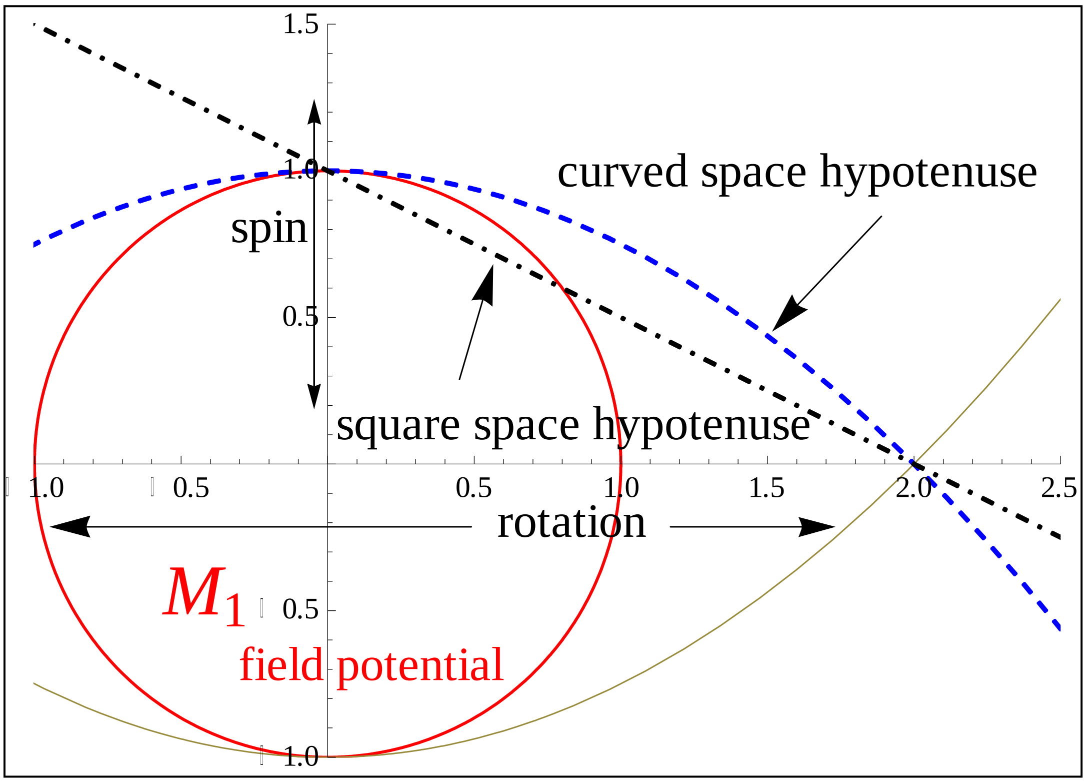
Utility of a Unit Circle and Construct Function Unit Parabola may not be used without written permission of my publishing company Sand Box Geometry LLC Alexander; CEO and copyright owner. alexander@sandboxgeometry.com

The computer is my sandbox, the unit circle my compass, and the focal radius of the unit parabola my straight edge.

ALΣXANDΣR; CEO SAND BOX GEOMETRY LLC

CAGE FREE THINKIN' FROM THE SAND BOX

The square space hypotenuse of Pythagoras is the secant connecting (π/2) spin radius (0, 1) with accretion point (2, 0). I will use the curved space hypotenuse, also connecting spin radius (π/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 **N** pole and one at the **S** pole of spin; just as a bar magnet. When exploring changing acceleration energy curves of M_2 orbits, we will use the N curve as our planet group approaches high energy perihelion on the north time/energy curve.

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