

Inverse exponents of mechanical curved space.

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11pages 2000 words

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## First four indices of (n)

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Constructing inverse exponent curves on a spinning  
M1M2 Mechanical E G-field Central Force.

Why inverse  
exponents on  
accretion  
domain(s)?

$$\left(\sqrt[3]{n}\right), \left(\sqrt[2]{n}\right), \left(\sqrt[1]{n}\right), \left(\sqrt[0]{n}\right)$$

By constructing inversed exponents  $\left(\sqrt[n]{n}\right)$  on to the accretion domain of a spinning central force field, we find mechanical allocation of  $(M_1)$  mass needed to sustain energy required for  $M_2$  orbit. This mass/volume ratio of  $M_1$  is found to be  $\left(\sqrt[2]{radicand}\right)$  as  $M_1$  curvature evaluation  $\left(\frac{1}{\left(\sqrt[2]{radicand}\right)}\right)$  of  $M_2$  displacement from  $M_1$  spin axis. A direct relative correlation of required  $M_2$  orbit energy distribution found by Sir Isaac Newton's Universal Law  $(radicand^2)$  inversed, working linear Degree1 square space, operating in Degree2 curved space.

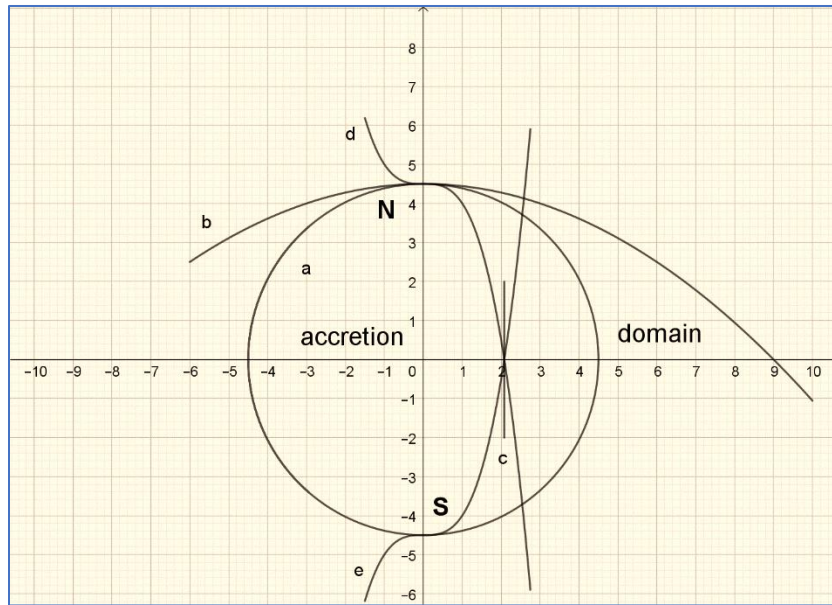
## Readings from the SandBox

PART2: Exploring  $(\sqrt[3]{9})$ ,  $(\sqrt[2]{9})$ ,  $(\sqrt[1]{9})$ ,  $(\sqrt[0]{9})$ . 3/9/22.23:38.

Constructing +domain counting integer roots is done using parametric geometry.

Parametric geometry construction for  $(\sqrt[3]{9}) = 2.08008$ . [Construction@GTG](#).

[roots2019\\_9root.nb](#)



odd indices:

(-) solution (*d*) comes from *Q2* infinity. Flat lines at **N** pole and finds  $(\sqrt[3]{9})$  on accretion domain of  $(M_1)$ .

(+) solution curve (*e*) comes from *Q3* infinity. Flat lines at **S** pole and finds  $(\sqrt[3]{9})$  on accretion domain of  $(M_1)$ .

Figure 1; CSDA parametric construction for  $(\sqrt[3]{9})$ . (GTG, screen record LP's, roots.)

## cube root (9): ALXANDER

No.	Name	Description	Value	Caption
1	Curve a	Curve(4.5cos(t), 4.5sin(t), t, -4, 4)	a:(4.5cos(t), 4.5sin(t))	independent
2	Curve b	Curve(t, t <sup>2</sup> / -18 + 9 / 2, t, -6, 10)	b:(t, t <sup>2</sup> / -18 + 9 / 2)	dependent
3	Curve c	Curve(9^(1 / 3), t, t, -2, 2)	c:(2.08, t)	abscissa definition
4	Curve d	Curve(t, t <sup>3</sup> / -2 + 9 / 2, t, -1.5, 2.75)	d:(t, t <sup>3</sup> / -2 + 9 / 2)	(-) solution
5	Curve e	Curve(t, t <sup>3</sup> / 2 - 9 / 2, t, -1.5, 2.75)	e:(t, t <sup>3</sup> / 2 - 9 / 2)	(+) solution

Created with [GeoGebra](#)

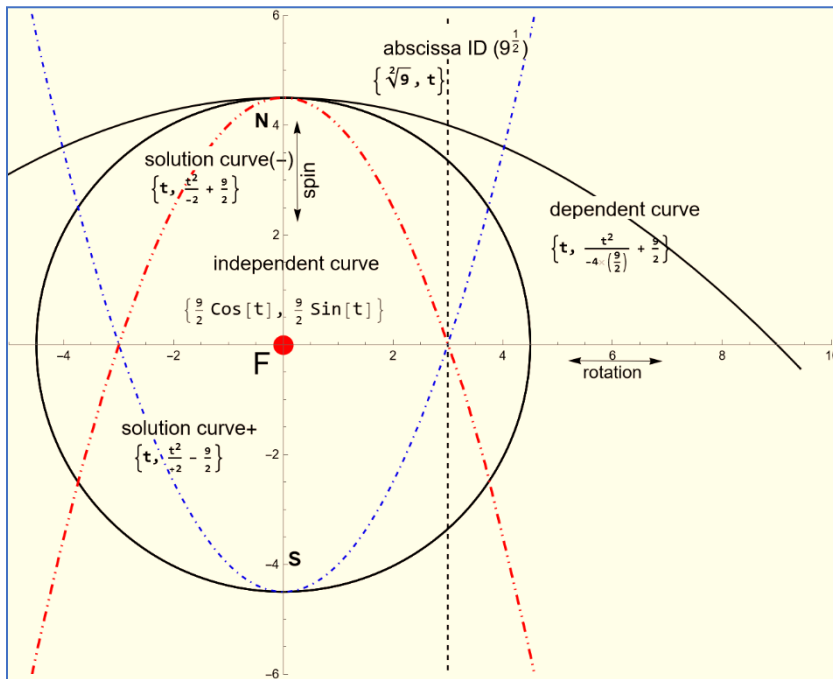
Parametric geometry construction for  $(\sqrt[2]{9})$ . [Construction@GTG\\_roots2019\\_9root.nb](mailto:Construction@GTG_roots2019_9root.nb)

Root construction on an Energy Field domain is done on the system plane of rotation. I use the (+ side) quadrant1 latus rectum produced, to find integer (radicand) of inquiry for root(s) constructions.

```
ParametricPlot[{{ $\frac{9}{2} \cos[t], \frac{9}{2} \sin[t]$ }, { $t, \frac{t^2}{-4(\frac{9}{2})} + \frac{9}{2}$ }, { $t, \frac{t^2}{-2} + \frac{9}{2}$ }, { $t, \frac{t^2}{+2} - \frac{9}{2}$ }, { $\sqrt[2]{9}, t$ }}, { $t, -3\pi, 3\pi$ },
PlotRange -> {{ $-\frac{9}{2}, 9$ }, { $-9/2, 9/2$ }}, AxesOrigin -> {0,0}
```

I color two solution curves. Blue is (1st quad(+)) and red is (1st quad(-)). I sign the solution curves using slope happening @ 1<sup>st</sup> quad root abscissa definition. Both curves approach **CSDA** spin axis from quads (2&3), red to **N** from (Q3), and blue to **S** from (Q2). Flatline at poles, then find the required solution on the rotation domain of field.

Spin is Rotation for nuclear **CSDA** analytics and Rotation is Accretion for G-field analytics.



(-) solution comes from Q3 infinity. Flat lines at **N** pole and finds  $(\sqrt[3]{9})$  on accretion domain of  $(M_1)$ .

(+) solution curve comes from Q2 infinity. Flat lines at **S** pole and finds  $(\sqrt[3]{9})$  on accretion domain of  $(M_1)$ .

NOTE source primitive infinities of polar solution curve seeking inverse exponent definition on accretion domain of  $(M_1)$ .

Figure2: square space and curved space finding  $(\sqrt[2]{9})$ . (GTG; roots 8221; GeoGebra CSDA roots2).

## Readings from the SandBox

EVEN INDICES: red (−) to **N** from ( $Q3$ ), and blue (+) to **S** from ( $Q2$ ).

ODD INDICES: FIGURE1; (−) solution comes from  $Q2$  infinity. Flat lines at **N** pole and finds ( $\sqrt[3]{9}$ ) on accretion domain of ( $M_1$ ).

(+) solution curve comes from  $Q3$  infinity. . Flat lines at **S** pole and finds ( $\sqrt[3]{9}$ ) on accretion domain of ( $M_1$ ).

Indexed exponents flip signing in their respective source primitive infinities (from where they come) according to odd or even integer definition.

Even indices are parabolic, closing and gathering a mass definition for accrete phenomena of Central Force **F** directed at ( $M_2$ ) period time. Motive energy of  $M_1$  period time curve is controlled by mass allocation structured by ( $\sqrt[2]{n}$ ).

Odd indices are open curves. These curves carry charge assignment from opposite infinities, but still, negative parts to a **N** polarity and positive parts to a **S** polarity. I sense and believe this is imbued plasma control of our solar system electromagnetic arrangement by our galactic black hole.

As to even indices. I suspect that (*integer2*) units of anything has opposites influence across their existence providing our inverse square law (exponent2) so prevalent throughout our experience of being.

ALEXANDER

Parametric geometry construction for  $(\sqrt[3]{9})$ . [Construction@GTG\\_roots2019\\_9root.nb](mailto:Construction@GTG_roots2019_9root.nb)

Interesting construction. I imagine a G-field **CSDA** where  $(M_1)$  uses 1<sup>st</sup> degree solution curves to find that place in time and space where  $(M_2)$  range of motive energy  $(f(r))$  is found to be  $(M_1)$  panoptic, subservient:  $(radicand(n), 0)$ . Not only is  $(M_2)$   $(f(r))$  a zero registration on the system range, but also a slope  $(m = \pm 1)$  energy tangent event creating a central force presentation of two unity **energy** curves for sustainable orbit motion.

UNITY CURVES: PROPOSAL; let there be two curves composing a zero-sum philosophy describing orbit energy exchange between  $(M_1 \leftrightarrow M_2)$ .

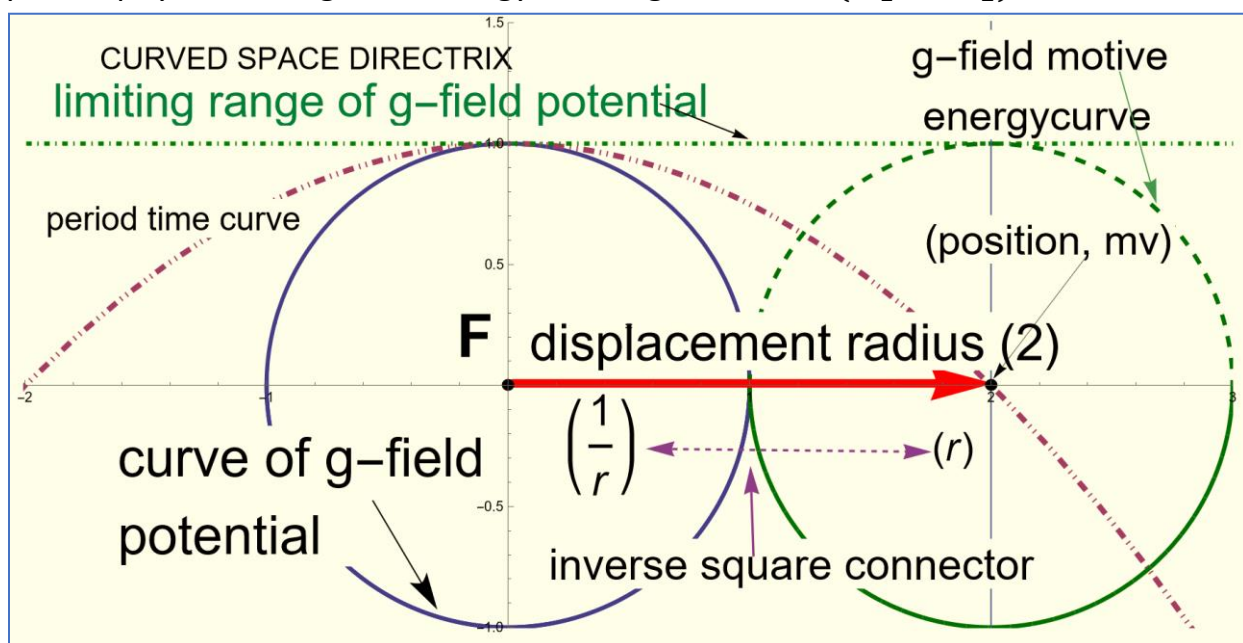


Figure 1: 2014 JMM presentation.

1ST CURVE IS POTENTIAL: a FIXED, CLOSED unity curve  
(*curvature and radius of curvature = 1*) centered about **F**.

2nd curve is (cause and effect) motive properties of  $(M_1)$  potential, ORBIT MOMENTUM,  $(f(r))$  of Sir Isaac Newton displacement radius  $(r)$ . We have before us our system  $(r f(r))$ .

Unity Curve2 happens when etangent slope is a  $(\pm 1 \text{ event})$  on the period time curve of  $(M_2)$ .

Since energy exchanged between these two curves determines orbit momentum, we need two equal energy curves to *quantify* available energy to share, when

added together zero balance the exchange for stable orbit motion. Somewhere on the period time curve, there will be a motive energy curve of same shape as potential less the (mass/volume) content. Enter the latus rectum as average orbit diameter of a **CSDA** G-field system. Here we find the reference level of gravity field orbit energy curves. It is here, and only here, on the average diameter of an orbit can two unity curves co-exist.

Deeper investigation(s) of  $(M_1M_2)$  explanatory is reserved for exploration of Sir Isaac Newton's  $(S\&T2)$ .

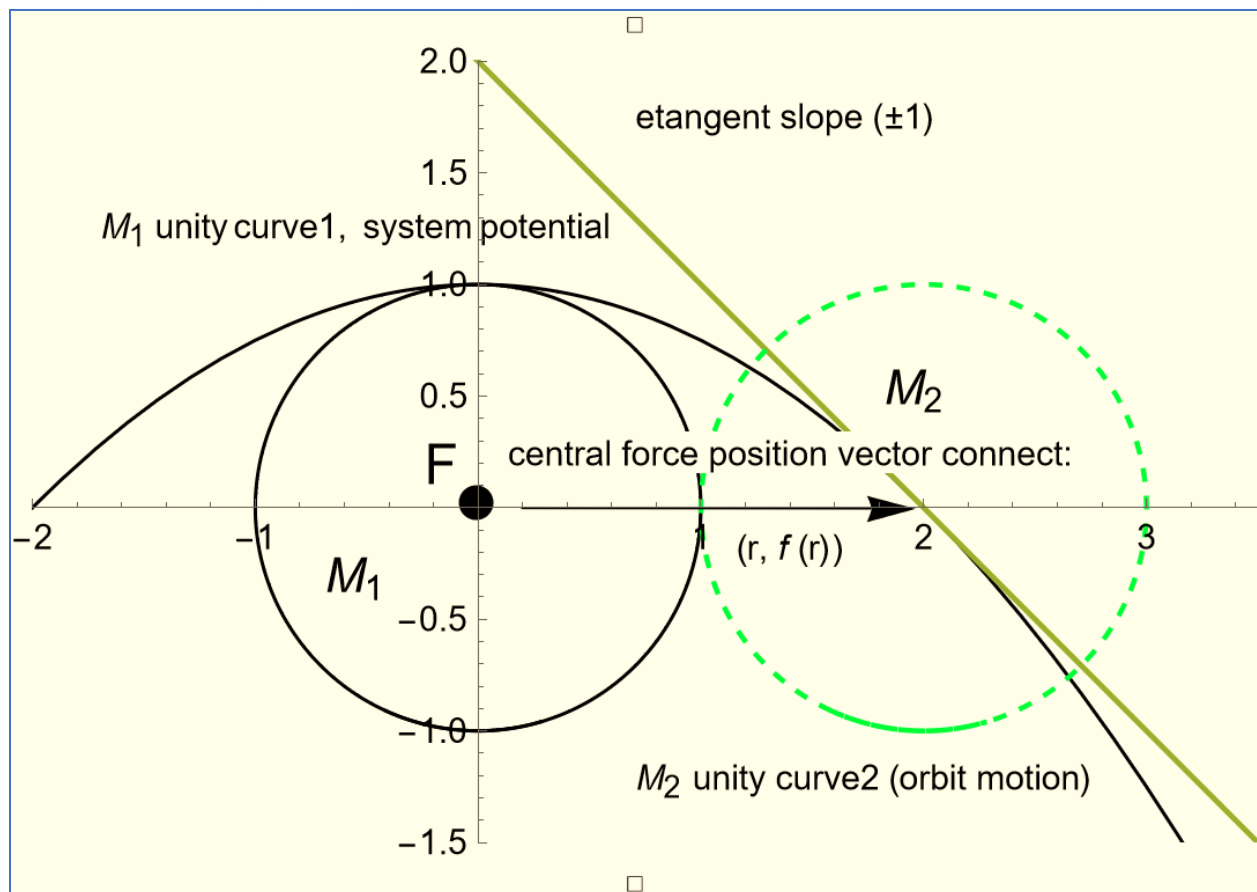


Figure 2: JMM2014: CIRCULAR ENERGY CURVES OF GALILEO AND GRAVITY FIELD MOTION OF OUR PLANET GROUP.

Two unity curves exist on and only on a latus rectum average energy diameter. Becoming *potential* and *motive* energy congruent at etangent event ( $m = \pm 1$ ) on the period time curve of  $(M_1M_2)$  orbit energy parameters for *independent*( $t$ ) and *dependent*( $t$ ).

Parametric geometry construction for  $(\sqrt[1]{9})$ .

```
ParametricPlot[{{(9/2) Cos[t], (9/2) Sin[t]}, {t, -t^2/4 + 9/2}, {sqrt[1]{9}, t}, {t, t^1/2 + 9/2}, {t, t^1/2 - 9/2}}, {t, -3pi, 3pi}, PlotRange -> {{-5, 10}, {-6, 6}}
```

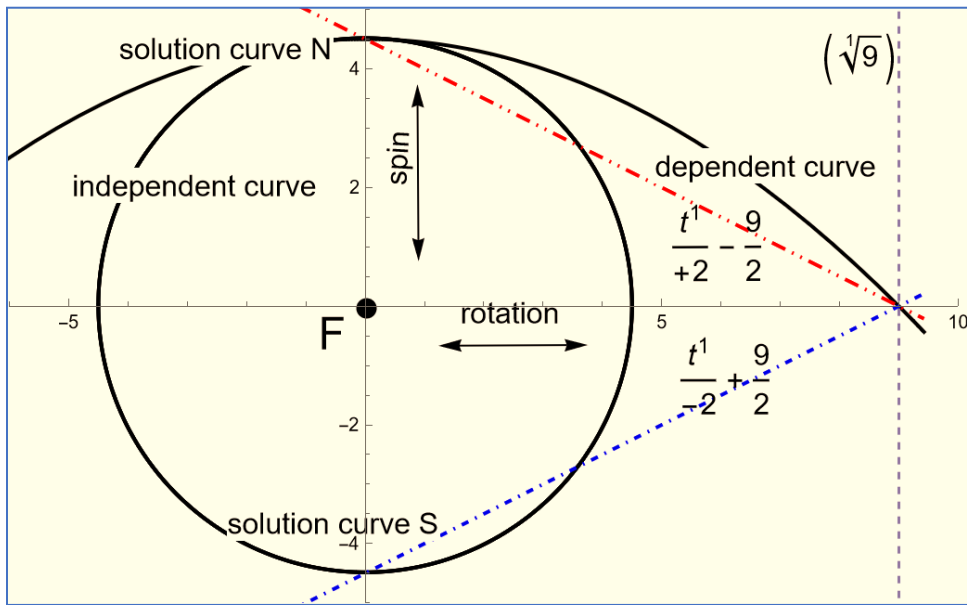


Figure 3: CSDA construction for  $\sqrt[1]{9}$  on Central Force Field domain.

Note slope of both solution curves are linear:  $(\pm \frac{1}{2})$ . Such slope distributes Central Force energy in equal proportion with respect to spin. Half to potential(e) half to motive(e).

Note numerator of the dependent part of solution curves carry a degree1 exponent, making (t) the inquiry radicand ( $n^1 = n$ ) :  $(t, \frac{t^1}{\mp 2} \pm \pm \frac{9}{2})$ . This provides ( $M_2$ ) with ( $f(r) = 0$ ) on the Gfield (dependent) period time curve.

1<sup>st</sup> root of 9 is 9:  $(\sqrt[1]{9} = 9)$ .

**CSDA** central force index ( $\sqrt[1]{n}$ ) registers domain radicand for orbit energy weigh-in.

Note ( $\sqrt[1]{n}$ ) solution curve(s) behavior with respect to spin axis pole identity of ( $M_1$ ). Blue is (1st quad(+)) and red is (1st quad(-)). Both curves approach **CSDA** spin axis from quads (2&3), red to **N** from (Q2), and blue to **S** from (Q3).

Parametric geometry construction for  $(\sqrt[9]{9})$ . Construction@GTG, roots82021, roots of curvedspace square space



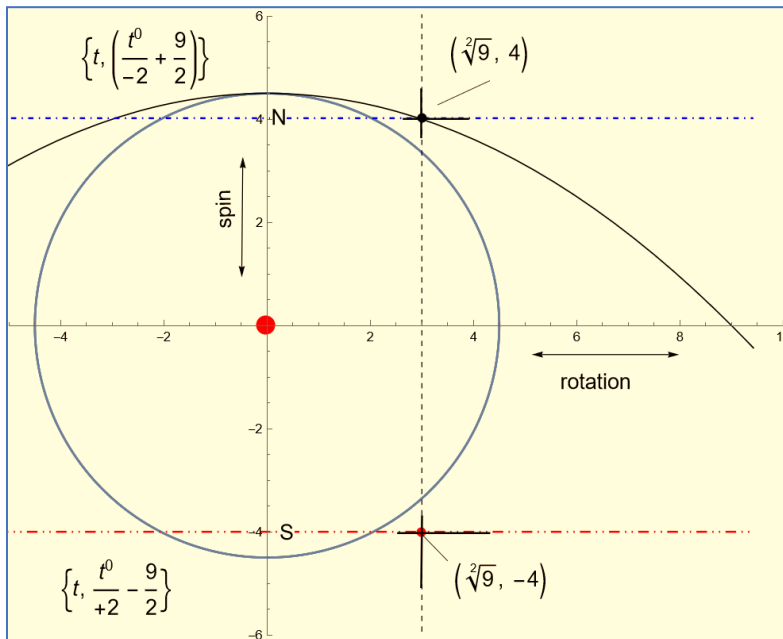
I have eliminated  $(\sqrt[0]{9})$  from parametric arguments (*on my Wolfram.nb*) because a domain abscissa does not exist and indeterminate exasperation by the computer does!!

A domain decision for  $(\sqrt[0]{9})$  might not exist but the range part of Central Force mechanical potential does. Potential, if not working, is rest energy. (*index(0)*) range part of solution curve(s) presents their presence to  $(M_1)$  by intercept with the system dependent curve at the last discovered (*degree2*) *index* inquiry for radicand (9). What (*rest*) range will do is intercept the time energy curve (AKA) discovery or independent, finding the first known (*domain and range*) definition for *index* (2) working the curved space registration of radicand (*n*).

```

ParametricPlot[{{2 Cos[t], 2 Sin[t]}, {t, -4 (9/2) + 9/2}, {sqrt[0]{9}, t}, {t, (t^0/(-2) + 9/2)},
t, t^0/2 - 9/2, {sqrt[0]{9}, t}, {t, -3pi, 3pi}, PlotRange -> {{-5,10}, {-6,6}}]
    
```

What's happening here? First of all, both curves have (0 slope). Both solution

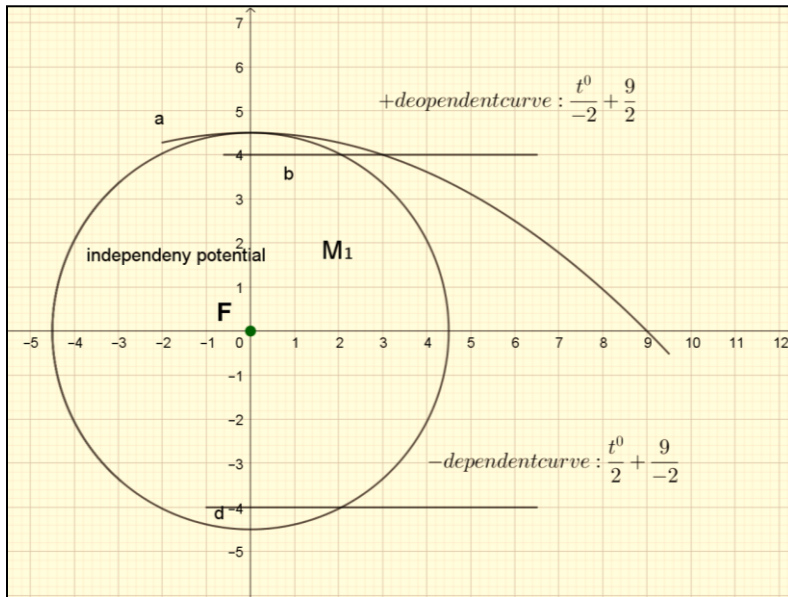


curves are held tight within the bounds of **F** as rest energy, *not* working outside  $(M_1)$  sphere of influence. When solution curves operate at central force poles, potential of **F** comes alive! At the poles, both solution curves can roam the range of external spacetime with polar ( $m = 0$ ) slope, parallel with accretion, operating on the curved space directrix.

Figure 4: A *CSDA* inquiry for  $(\sqrt[0]{9})$



When the index is (0), rest energy happens forbidding range beyond discovery influence of (F).



Here's how parametric solution curves present a rest event for  $(\sqrt[0]{9})$ .

The dependent composition  $(\frac{t^0}{\mp 2} \pm \frac{9}{2})$  let's the numerator  $(t^0)$  become (1).

The dependent part (range) of a parametric solution curve *can* compute a

(0 index) for  $(\sqrt[0]{9})$ , the answer being  $(\pm 4)$ .

So, solution curves seek a range place on the Central Force spin axis called  $(\pm 4)$  placed in space by  $(\sqrt[0]{9})$ .

There is a Central Force domain discovery for solution curve(s) inquiry on the dependent curve at the range place called  $(\pm 4)$  for radicand (9). The first domain registration produced by degree0 range investigation of  $(\sqrt[0]{9})$ : is at the place in space ID'd as  $(+3, \pm 4)$ . A 1<sup>st</sup> & 4<sup>th</sup> quad demonstration.

$$(\sqrt[2]{\text{radicand}(9)} = 3)$$

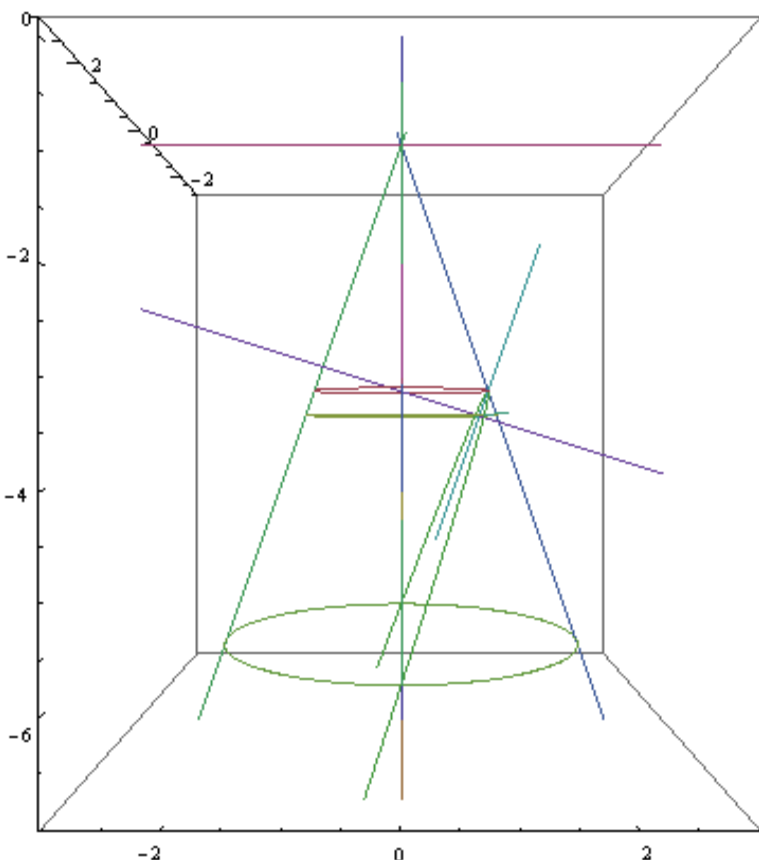
I say when Cartesian number line integers are used as index for root(s) of **CSDA** domain counting integers, central force root solution curves exist. Including place holder (0).

When (0) is used as index, solution curves of index (0) become linear infinite locked at  $(\sqrt[0]{\text{radicand}})$  range definition  $(\frac{t^0}{-2} + \frac{9}{2})$ . These curves intercept  $(\pm \text{dependent})$  time energy curve controlled by  $(M_1)$  at degree2 index inquiry for radicand integer  $\sqrt[2]{(n)}$ .

QED (roots part2): *ALEXANDER; CEO SAND BOX GEOMETRY LLC*

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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.

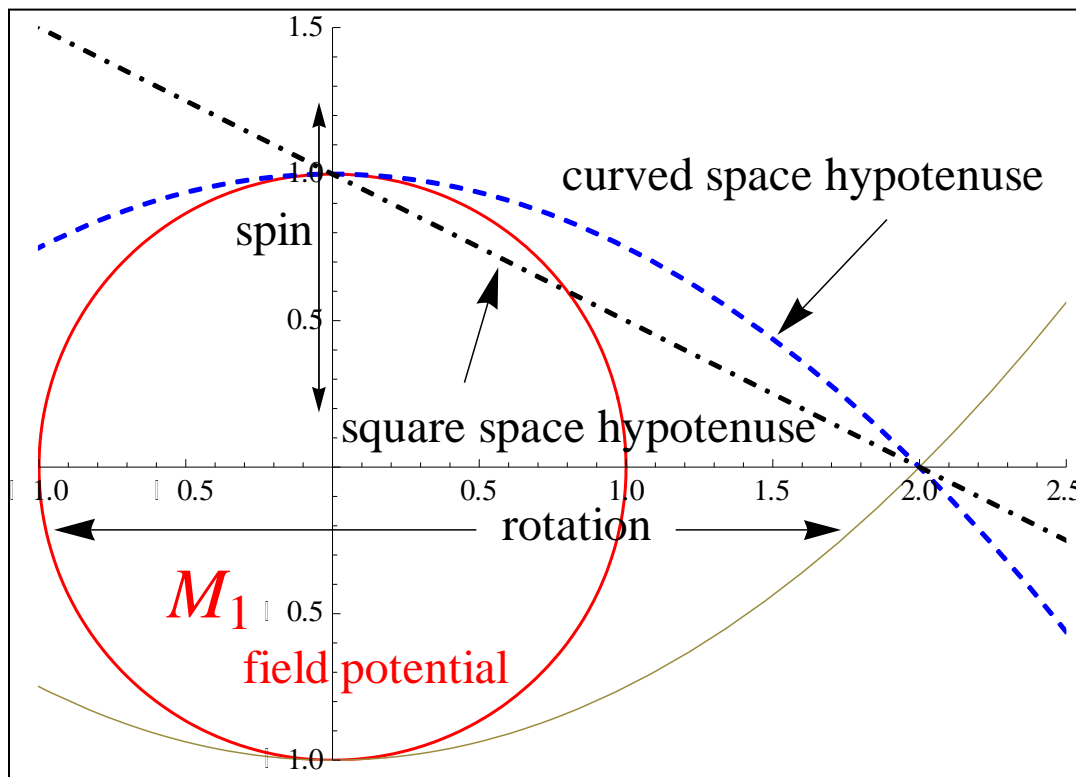
Utility of a Unit Circle and Construct Function Unit Parabola may not be used without written permission of my publishing company Sand Box Geometry LLC Alexander, CEO and copyright owner. [alexander@sandboxgeometry.com](mailto:alexander@sandboxgeometry.com)

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.

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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 **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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