CrossOver Point(C) and index solution curve $\left(t, \frac{t^1}{-2} + \frac{SpaceCurve}{2}\right)$ registration of spin and displacement.

Finding curved space step function

August 16
2025

Diving into the linear index solution curve (registration)

Step function's and primes

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It's not often I do a correction ~~three~~ four times in a week. this axis I have created of perfect squares residing on a Central Force Domain, opposed to spin as range, has been confusing. Mainly because it is not recognizable. Or, let me rephrase that, has not been recognized, until me.

Let me review three points (A, B, C) concerning my crossovers.

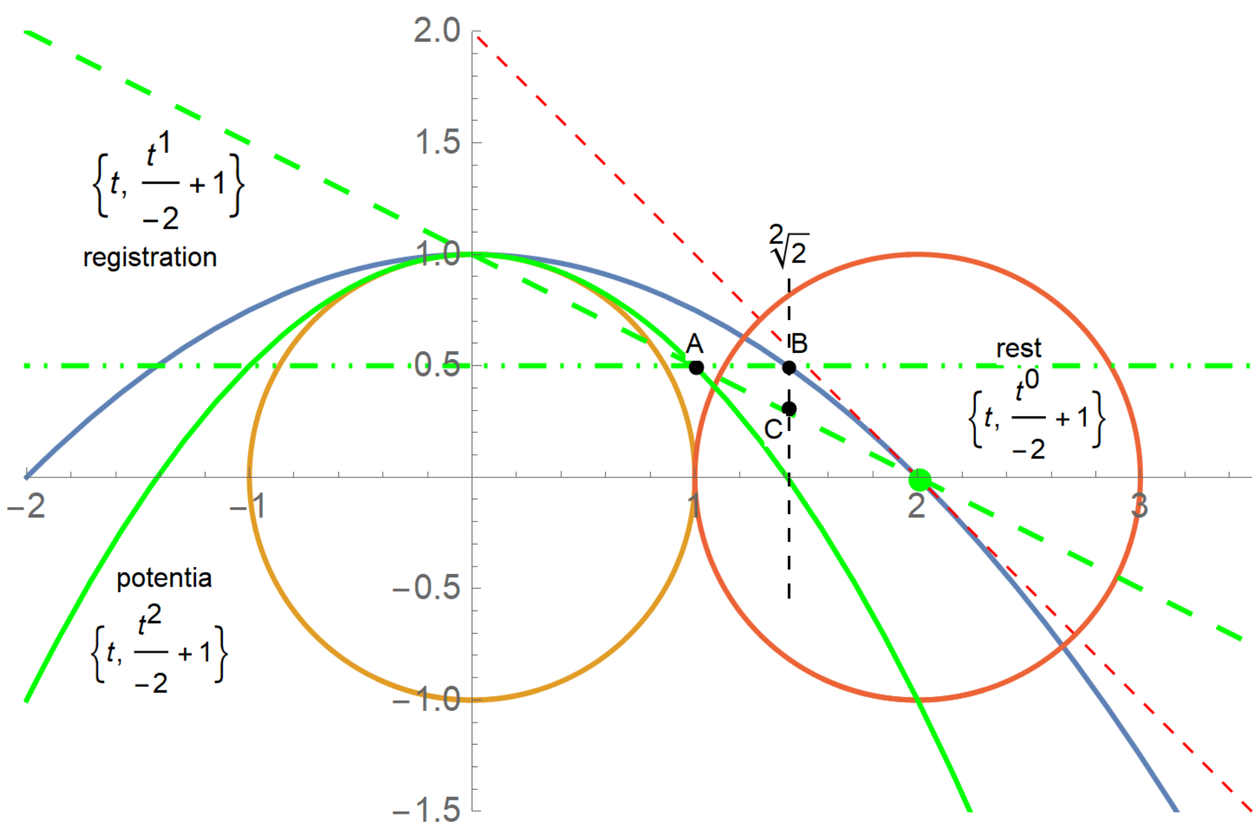
Point(A). Strictly Galileo's connection with his first second tile.

Point(B). The cast of potential from spin to Sir Isaac Newton's period time curve connecting registration of range with position. Puppet strings of motion.

Point(C) We're about to get into that one.

The following construction has three central force field index solution curves labeled as rest, registration and potential.

```
In[ ]:= ParametricPlot[{{{t, t^2/(-4 (1)) + 1}, {1 Cos[t], 1 Sin[t]}, {t, -t + 2},
    {1 Cos[t] + 2, 1 Sin[t] + 0}, {t, t^0/(-2) + 1}, {t, t^1/(-2) + 1}, {t, t^2/(-2) + 1}},
   {t, -2, 5}, PlotRange → {{-2, 3.5}, {-1.5, 2}}]
```



Point(A) is always associated with abscissa definition of Galileo's first second tile.

Point(B). is the link of spin with potential on the period time curve. The link is defined by $(\sqrt[2]{2})$. Which is $(\sqrt[2]{spacecurve(n)})$, square root of the place of period motion on the period time curve by (M_2). (M_2) need not go there. Point(B) produced with point(A) is a linear map connecting spin and potential creating SpaceCurve(2).

I post a table for area of potential as part of Central Force whole to see number behavior. Elucidating as to curved space coordinate system of integer cooperation constructing the index solution scheme of (M_1M_2) system registration (abscissa, ordinate) identity of poit(C).

integer	potential	crossover(C)	ordinate$(crossover(C))$
n	$2*\int_0^{\sqrt[2]{n}}(\frac{t^2}{-2}+\frac{n}{2})\,dt$	$\{\sqrt[2]{n},(\frac{n}{2}-\frac{\sqrt[2]{n}}{2})$	$(\frac{n}{2}-\frac{\sqrt[2]{n}}{2})$
1	$(\frac{2}{3})$	$(1,0)$	$(1,0)$
2	$(\frac{4\sqrt{2}}{3})$	$(\sqrt[2]{2},(\frac{2}{2}-\frac{\sqrt[2]{2}}{2}))$	$(\frac{2}{2}-\frac{\sqrt[2]{2}}{2})$
3	$(2\sqrt{3})$	$(\sqrt[2]{3},\frac{3}{2}-\frac{\sqrt[2]{3}}{2})$	$(\frac{3}{2}-\frac{\sqrt[2]{3}}{2})$
4	$(\frac{16}{3})$	$(\sqrt[2]{4},\frac{4}{2}-\frac{\sqrt[2]{4}}{2})$	$(2,1)$
5	$(\frac{10\sqrt{5}}{3})$	$(\sqrt[2]{5},\frac{5}{2}-\frac{\sqrt[2]{5}}{2})$	$(\frac{5}{2}-\frac{\sqrt[2]{5}}{2})$
6	$(4\sqrt{6})$	$(\sqrt[2]{6},\frac{6}{2}-\frac{\sqrt[2]{6}}{2})$	$(\frac{6}{2}-\frac{\sqrt[2]{6}}{2})$
7	$(\frac{14\sqrt{7}}{3})$	$(\sqrt[2]{7},\frac{7}{2}-\frac{\sqrt[2]{7}}{2})$	$(\frac{7}{2}-\frac{\sqrt[2]{7}}{2})$
8	$(\frac{32\sqrt{2}}{3})$	$(\sqrt[2]{8},\frac{8}{2}-\frac{\sqrt[2]{8}}{2})$	$(\frac{8}{2}-\frac{\sqrt[2]{8}}{2})$
9	(18)	$(\sqrt[2]{9},\frac{9}{2}-\frac{\sqrt[2]{9}}{2})$	$(3,3)$
10	$(\frac{20\sqrt{10}}{3})$	$(\sqrt[2]{10},\frac{10}{2}-\frac{\sqrt[2]{10}}{2})$	$(\frac{10}{2}-\frac{\sqrt[2]{10}}{2})$
16	$(\frac{128}{3})$	$(\sqrt[2]{16},\frac{16}{2}-\frac{\sqrt[2]{16}}{2})$	$(4,6)$
20	$(\frac{80\sqrt{5}}{3})$	$(\sqrt[2]{20},\frac{20}{2}-\frac{\sqrt[2]{20}}{2})$	$(\frac{20}{2}-\frac{\sqrt[2]{20}}{2})$
25	$(\frac{250}{3})$	$(\sqrt[2]{25},\frac{25}{2}-\frac{\sqrt[2]{25}}{2})$	$(5,10)$

~~serious correction~~ August(15), year of my Lord2025. Domain is SC(n); abscissa; is $\sqrt{SpaceCurve(n)}$, ordinate: previous SC(n) (abscissa + ordinate).

1	4	9	16	25	36	49	64	81	100
(1, 0)	(2, 1)	(3, 3)	(4, 6)	(5, 10)	(6, 15)	(7, 21)	(8, 28)	(9, 36)	10, 45
□	□	□	□	□	□	□	□	□	□
121	144	169	196	225	256	289	324	361	400
(11, 55)	(12, 66)	(13, 78)	(14, 91)	(15, 105)	(16, 120)	(17, 136)	(18, 153)	(19, 171)	(20, 190)
□	□	□	□	□	□	□	□	□ × □	□

curved space step function. Courtesy AlexG, aka: ALΣXANDΣR cage free thinkin' from the SandBox

curved space spin axis is range

□	□	□	□	□	□	□	□	□	□	□	□
10	□	□	□	□	□	□	□	□	□	□	□
9	□	□	□	□	□	□	□	□	□	$\sqrt{SC100}$; (10, 45)	□
8	□	□	□	□	□	□	□	□	$\sqrt{SC81}$; (9, 36)	□	□
7	□	□	□	□	□	□	□	$\sqrt{SC64}$; (8, 28)	□	□	□
6	□	□	□	□	□	□	$\sqrt{SC49}$; (7, 21)	□	□	□	□
5	□	□	□	□	□	$\sqrt{SC36}$; (6, 15)	□	□	□	□	□
4	□	□	□	□	$\sqrt{SC25}$; (5, 10)	□	□	□	□	□	□
3	□	□	□	$\sqrt{SC16}$; (4, 6)	□	□	□	□	□	□	□
2	□	□	$\sqrt{SC9}$; (3, 3)	□	□	□	□	□	□	□	□
1	□	$\sqrt{SC4}$; (2, 1)	□	□	□	□	□	□	□	□	□
0	$\sqrt{SC1}$; (1, 0)	SC (4)	SC (9)	SC (16)	SC25	SC36	SC49	SC64	SC81	SC10	□

}

integer	potential	crossover (C)	ordinate (X – over (C))
n	$2 * \int_0^{\sqrt[2]{n}} \left(\frac{t^2}{-2} + \frac{n}{2}\right) dt$	$\{\sqrt[2]{n}, \left(\frac{n}{2} - \frac{\sqrt[2]{n}}{2}\right)$	$\left(\frac{n}{2} - \frac{\sqrt[2]{n}}{2}\right)$
1	$\left(\frac{2}{3}\right)$	(1, 0)	(1, 0)
2	$\left(\frac{4\sqrt{2}}{3}\right)$	$\left(\sqrt[2]{2}, \left(\frac{2}{2} - \frac{\sqrt[2]{2}}{2}\right)\right)$	$\left(\frac{2}{2} - \frac{\sqrt[2]{2}}{2}\right)$
3	$\left(2\sqrt{3}\right)$	$\left(\sqrt[2]{3}, \frac{3}{2} - \frac{\sqrt[2]{3}}{2}\right)$	$\left(\frac{3}{2} - \frac{\sqrt[2]{3}}{2}\right)$

CF domain axis integer count is SpaceCurve(n:perfect-squares). Curved space abscissa of SpaceCurve(n), in scope of field entity is $\sqrt[2]{SC(n)}$. Ordinate is sum of previous SpaceCurve (abscissa+ordinate)??? Strange indeed.

Cannot seem to get this off my mind. the domain is different, extremely different, in fact this number system axis has no one-to-one correspondence, it only has affinity. An affine collection of perfect squares.

The range behaves as expected. one unit at a time. The domain; the set of perfect squares, is confusing untill you ralize the space between separation is without prediction only stand-in-place solution. The solution *is* the abscissa. Integer(4), aka spacecurve(4) has abscissa(2).

To find curve space abscissa of spacecurve(n), take the square root of the space curve itself. So space curve 16 would be sqrt 16 or 4. Now the ordinate. Add abscissa and ordinate of the previous SpaceCurve.

The query SpaceCurve integer(base) is still present by addition of both current coordinates and past SpaceCurve coordinates. Ex. SC(16) and SC(9):

$\sqrt{SC16}$; (4,6). And $\sqrt{SC9}$; (3,3). We find source query (base)SpaceCurve integer(16) by adding all coordinates: SC(16)(4+6)+SC(9)(3+3) =SC(16)

Conclusions. I believe, whole mentally, perfect squares are to curved space as the primes are to square space.

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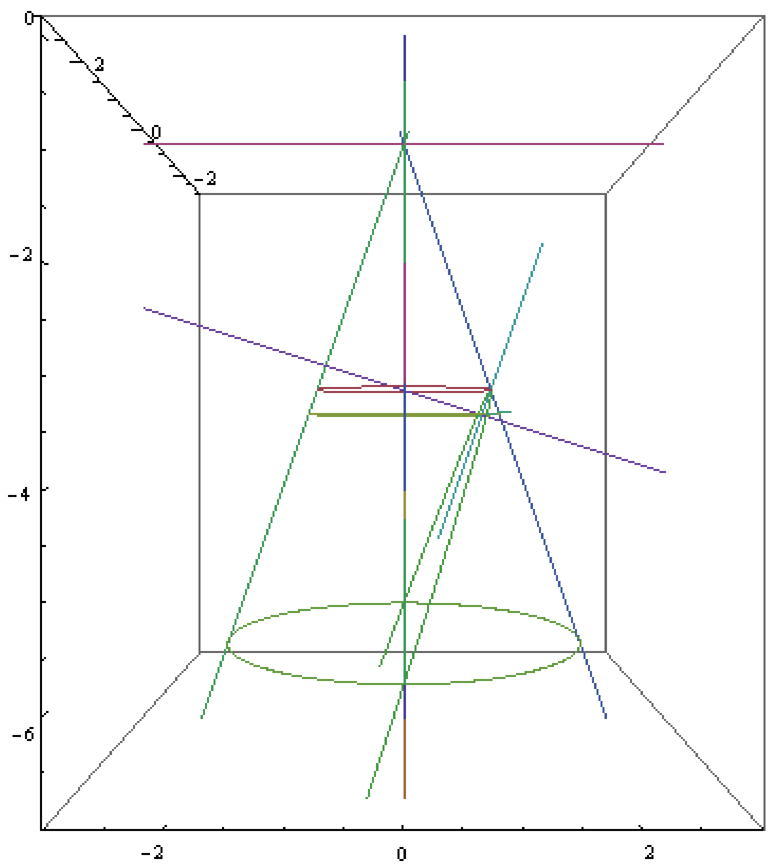
Using computer parametric geometry code to construct the focus of an Apollonian parabola section within a right cone.

"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.



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

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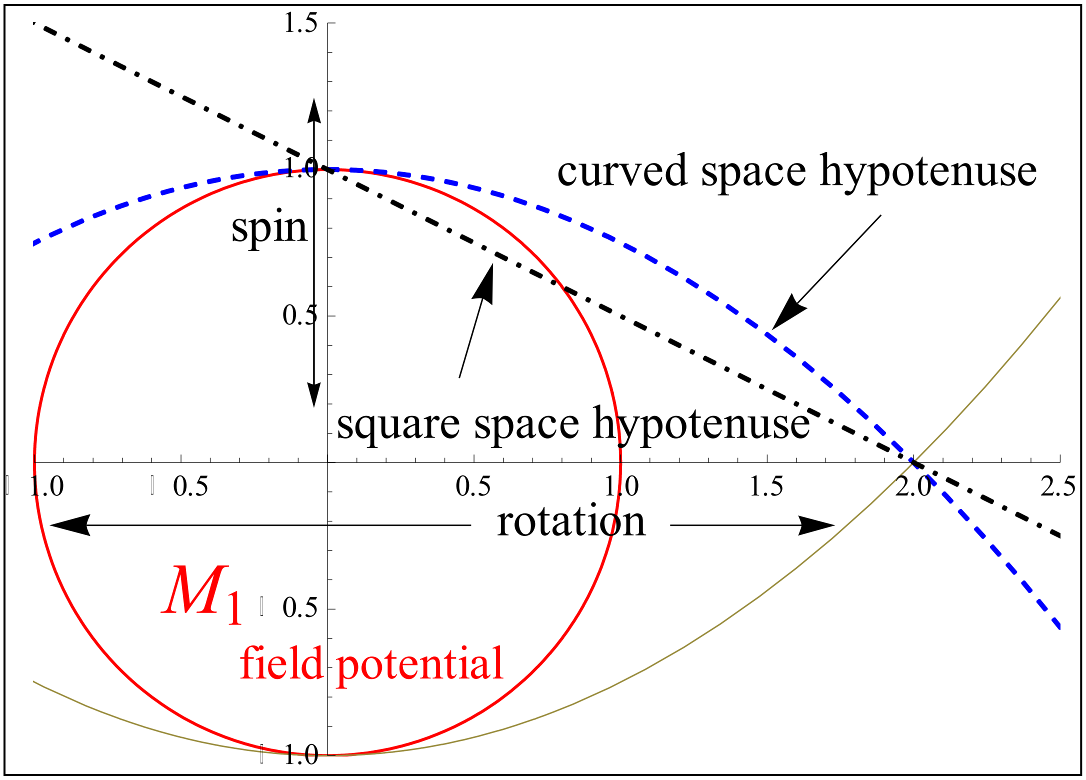
CAGE FREE THINKIN' FROM THE SAND BOX

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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