This is my conclusion concerning ‘WHATS Happening With Mercury’?.

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An untrained professional Parametric Geometer Extraordinaire.

A means to construct period maps of M_1M_2	7/31/26.08:36.

I use my CSDA as a parametric machine to construct the PeriodTime curve of M_2 orbits. I then construct the frame of a SpaceTimeSquare enclosing period motion on the time curve using orbit limits perihelion and aphelion. Utility of M2 period limits to build a SpaceTime square produces a curved space hypotenuse spanning Cartesian Quadrant(1&4) define positive curved space accretion using Cartesian number line with respect to F. Unfortunately, such transition from Quad(4) representing (+Space, -Energy) to Quad(1) representing (+Space, +Energy) is a partial definition being half the orbit period. I will now map full period curves. High energy Perihelion initial to final, and low energy Aphelion as initial to final. Demonstrating the Mercurian spiral collapse into our Star.

How to construct and read full period maps of M1 SpaceCurves and M2 Orbit Period Curves using Kepler’s Major Diameter end points shaping M2 curved space.

Pages 19 and words 3000

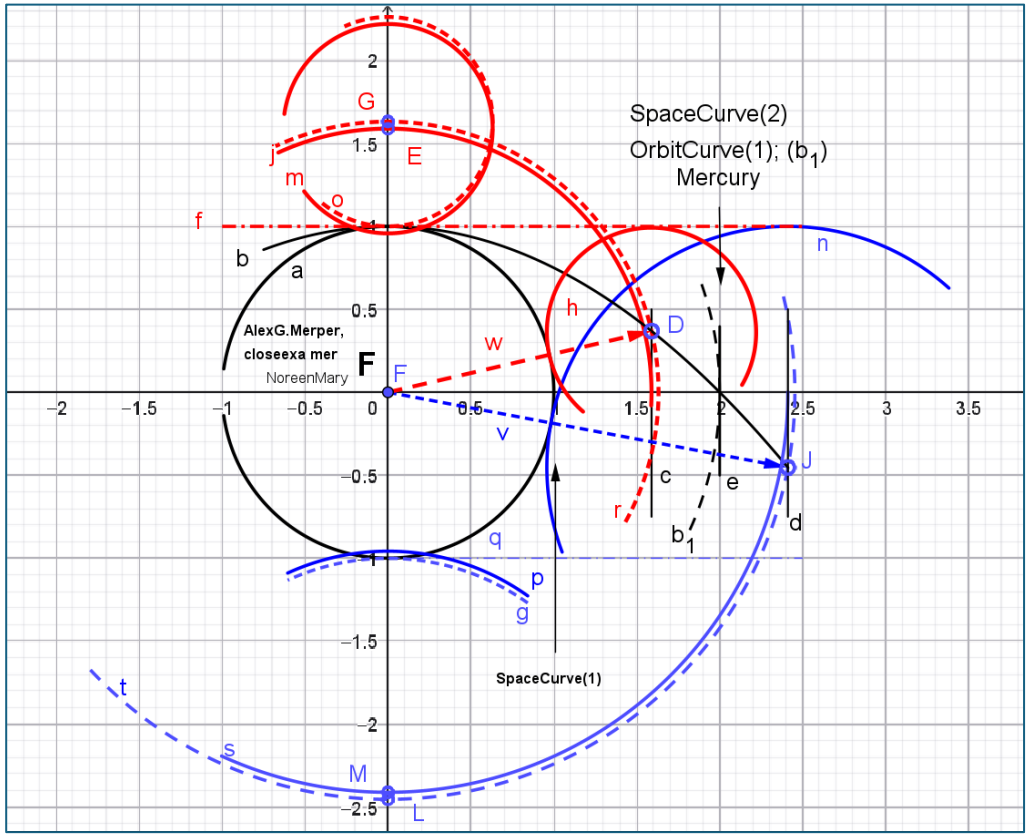


Figure 1; curve(b_1) is the CSDA system unity curve and average motive energy curve of Mercury appearing as SpaceCurve(2) OrbitCurve(1).

This construction uses motive energy curves($h\ and\ n$) of Mercury orbit limits($c\ and\ d$) as transfer energy curves of both Perihelion and Aphelion from accretion(domain) to spin(range). Why do so? To construct the Mercurian Anomaly.

M_2 motive energy curves($h\&n$) need to maintain constant contact with M_1 surface acceleration curve(a), and continual contact with the curved space directrix(f). Motive energy curves($h\&n$), of Sir Isaac Newton's square space displacement integers($c\&d$), when transfer of accretion energy from domain to spin, curves($m\&p$), do not float on the directrix but seem to be --- swallowed by M_1 potential; surface acceleration curve(a).

focal radii($w\&v$) the $(r, f(r))$ of period coordinates ($J\ and\ D$) energy transfer from accretion to spin, curves($o\&g$) are a clean and smooth connect with curved space directrix *and* surface acceleration curve(a) thanks to square space $(f(r))$ extra kick on points ($G\&E$). Let's dive into this.

We have two radii operating each orbit limit. One set would be Sir Isaac Newton displacement(r), limit(c) for terminus Perihelion and limit(d) for terminus Aphelion. The others? Two focal radii($w\ and\ v$) and their acquired energy $(r, f(r))$ working points ($D\ and\ J$). Let us use this fact to construct the anomaly and then construct a parametric path for a full period cycle aphelion to perihelion and back to aphelion.

Before I begin my conclusion, I want to set a link to see operating energy of Mercury's Orbit curves. Potential and motion. You will need GeoGebra in your machines to see the dynamic construction I've posted on my GeoGebra website.

https://www.geogebra.org/m/txcukzjt

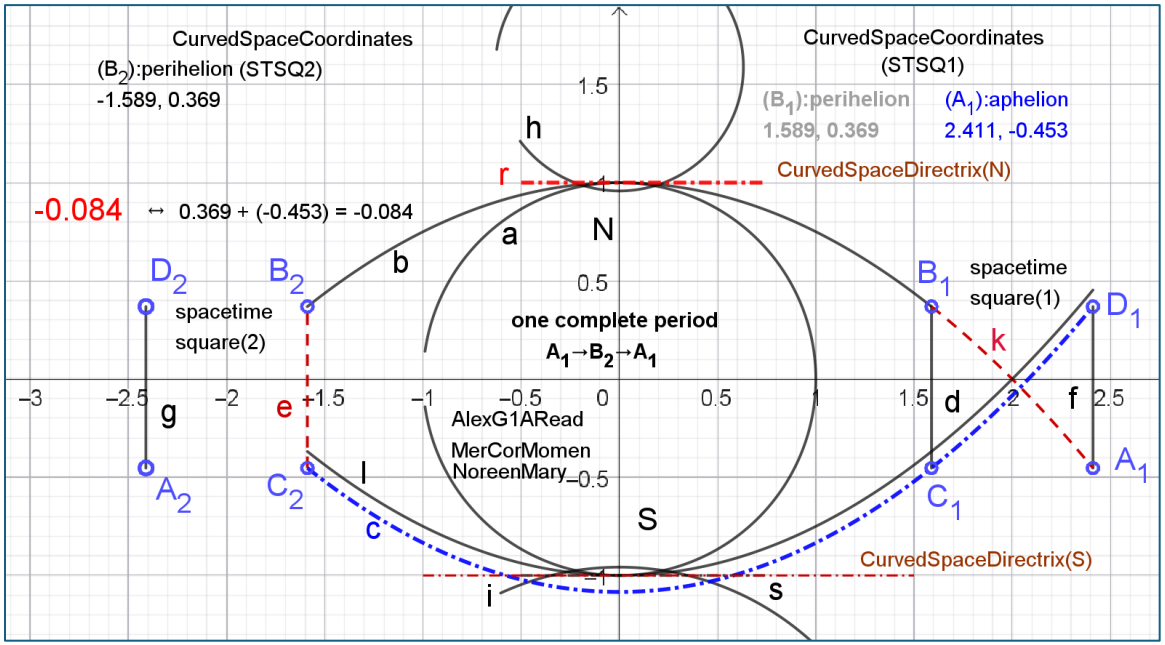


Figure 2: STSQ(1) is the period map of enquiry. STSQ(1) is a half period record, carries a complete one-way history of orbit curvature and velocity ($A_1 \rightarrow B_1$). A return map will be found at B_2 in STSQ(2) on the major diameter endpoint of Mercury a half space-time period away.

Consider this. I want to map a complete orbit cycle of Mercury from Aphelion to Perihelion and back to Aphelion as place of initial *and* place of final. One orbit period.

POINT(A_1): let place initial be $(+)$aphelion in SpaceTimeSQ(1) with Mercurian curved space coordinates: $(2.411, -0.453)$

For motive energy curve(k) to reach $(+)$perihelion(B_1) having ☿ curved space coordinates $(1.589, 0.369)$ in SpaceTimeSQ(1), we need M_2 motive energy working in STSQ(1) to cross the domain NumberField, aka solar accretion plane, using period curve(b) to get to point (B_1) from (A_1) mapped in STSQ(1).

But this is not the Perihelion we require per Kepler(Nat#2). We need a half orbit revolution about our Sun to a point 180^0 opposite SPTSQ(1) to get to the other major diameter endpoint (B_2) $(-space, +energy)$ a ½ period of space time away before a return to (A_1) $(+space, -energy)$ aphelion in SPTSQ(1). The initial major diameter endpoint of consideration, making a complete parametric map.

How we gonna do this??

Lets propose period time curves can only demonstrate $(r, f(r))$ *period* motion as a *begin* and an *end* event within a closed STSQ by using $(\pm)$orbit limits as displacement space(r) on the system domain and $(\pm)$energy the$(f(r))$ as system range creating a degree(2) hypotenuse predicting $(r, f(r))$ of orbit motion within an STSQ. ($A_1 \rightarrow B_1$); STSQ(1). Period curves are a curved space hypotenuses serving STSQ's of our square space. My CSDA uses changing energy of range, the $(f(r))$of orbit energy to move along period curve(k). I let units of energy/unit time meter units of changing orbit space/unit time as opposed to mapping the period shape using changing domain space per unit time as did Kepler. The natural balancing exchange of orbit energy between the prime mover and the moved. M_2 changing energy of orbit motion suffers changing orbit curvature per unit time inflicted by shared potential of an $(M_1 M_2)$ bond. Energy curves do move as circles. Kepler's Music of the Spheres unit time(range) per changing unit space(domain) of Classic orbit motion.

To enable a parametric space-time jump of 180^0 to the major diameter opposite end point on the orbit curve of a Central Force M_1M_2 system, I propose the following conventions for mapping a complete GravityField orbit period using spacetime structures STSQ(1&2):

THE MAP: Quadrants$(4 \rightarrow 1 \rightarrow 2 \rightarrow 1 \rightarrow 4)$.

1. When M_2 motive energy crosses the system DOMAIN number field, change the sign of the range energy field to acquire curved space coordinates [$DomainOrbitLimits, \pm RangeEnergy\ limits$].
2. When M_2 period curve crosses the SPIN AXIS of M_1, change the sign of the domain displacement to acquire curved space coordinates. $[\pm DomainOrbitLimits, RangeEnergyLimits]$
3. It's a OneWay travel on a continuous curve, no discontinuity, no reverse happenings.

MOTION(k)

Consider motion(k) STSQ(1): when leaving $(+)$aphelion is in $(+)$space but $(-)$energy $(+2.411, -0.453)$; orbits to place (B_1) in STSQ(1)…, (+1.589, 0.369), a place of (+)space and (+) energy.

(M_2) orbit period has crossed (M_1) accretion zone. Change signing of range from (-0.453) to (0.369).

Let the period time curve(b) connect $(+)$perihelion(B_1) with $(-)$perihelion(B_2). A spacetime warp connecting the actual time and place event happening @ major diameter end point B_2. To do so, the period time curve must transgress the spin of (M_1) circumventing the required half period of orbit spacetime. When the period curve(b) crosses the spin axis of (M_1), the curved space directrix(r) registers neutral momentum. A (0)slope energy tangent event. A balanced place in space to hang two STSQ's, 180^0 opposite. No energy to do work, the planet is out of STSQ(1), adrift in orbit space. Drift time is specific. It's the time required by M_1 to alter sign of momentum from positive(acceleration) or negative(deceleration) experiences.

The planet has moved from STSQ(1) place (B_1), [$(+)$space, $(+)$energy], to STSQ(2) B_2 a place of [$(-)$space, $(+)$ energy]. Crossing a Central Force spin axis flips displacement signing to positive or negative space without changing sign of range energy.

±(Changing Orbit Accelerations and Neutral Momentum). In between STSQ frames the planet floats. The potential of M_1 still works even though M_2 motive energy does not. The planet is adrift tethered with system center by M_1 potential.

I call this orbit time and space astronomical stall. Something akin to uniform acceleration aeronautical stall. That moment in time and space when a projectile (or aircraft) comes to rest, changing lift mechanics to fall. That moment between rise(escape) and fall(terminal-velocity) of orbit energy is astronomical stall.

Let M_2 arrive at CurvedSpaceCoordinates: (-1.589, 0.369). with very high but a fixed, no longer +acceleration velocity, into negative space carrying positive energy. The motive energy is relative, the same in STSQ(2) as possessed leaving STSQ(1). Motive control is passed to M_1. The planet drifts with highly charged momentum and an empty fuel tank. M_1 assumes control and begins the bleed of +energy from M_2 .

Note: The period curves vertex intersection with central force spin marks the average energy diameter endpoints of Mercury's orbit on the central force domain: Positive Space (2, 0)@STSQ(1) and Negative Space (-2,0)@STSQ(2). Linking both STSQ(1) and STSQ(2) center to center using the orbits average energy diameter. We see the average energy diameter is not only embedded in STSQ(1) and STSQ(2), it is conveniently laid out on the CurvedSpace domain number field as CSDA latus-rectum of period time curve(b) linking both STSQ's on the domain numberfield (± 2) units of space.

Let us start at STSQ(1) end point B_1. We leave STSQ(1)on period curve(b) to spin. Using range (zero-slope) +momentum stall energy the planet motion accesses the domain number field. The average energy diameter is a Euclidean shortest distance between two points as well as vector calculus shortest distance between two space, so we use it and arrive at spacetime happening STSQ(2) in negative

space at negative Perihelion B_2 having CurvedSpaceCoordinates (-1.588, 0.368). Just where we want to be at half the period curve space *and* time. And we still have (+stall momentum), a state of $(+)$energy.

We will not be there for long. Just long enough for astronomical stall to begin sign change of momentum. $(+)$Motive energy is being reclaimed by M_1 and the slide on the period time curve begins back to +aphelion @ A_1. $(+)$momentum energy will become $(-)$momentum when crossing domain at $STSQ(1)$. We are snatched from $STSQ(2)$ and sent back to where we came before M_1 can swallow any more space of Mercury's orbit. Back using period time curve(b), sliding across the spin axis to $STSQ(1)$ to [+(space), +(energy)] @ B_1. Arriving at B_1 we slide the rest of the way to [+(Space), $(-)$Energy] aphelion with curved space coordinates (2.411, -0.453).

I believe Mercury will not resist the pull of our Star forever. Mercury is destined to eventually be drawn into the nuclear solar abyss. What happens to the rest of us when that small piece of a centrifugal force spinning madly about the sun is no longer there? Do Square Space orbits curves drop a notch a sort of reshuffled motion ever closer to M_1 surface acceleration curve(a) to fill the void of Space Curve(2) OrbitCurve(1)? Maybe we all jump a notch closer: $\big(SpaceCurve(n) \rightarrow (SpaceCurve(n-1))\big)$.

Our collective group shows Mercurian anomalies, especially Mars. We will never be here long enough to see how the anomaly plays out. Organic things cycle. Inanimate things have a crumble cycle. Time is the acid of age. All things have prescribed come and go. The roll of dice called Space and Time by Providence.

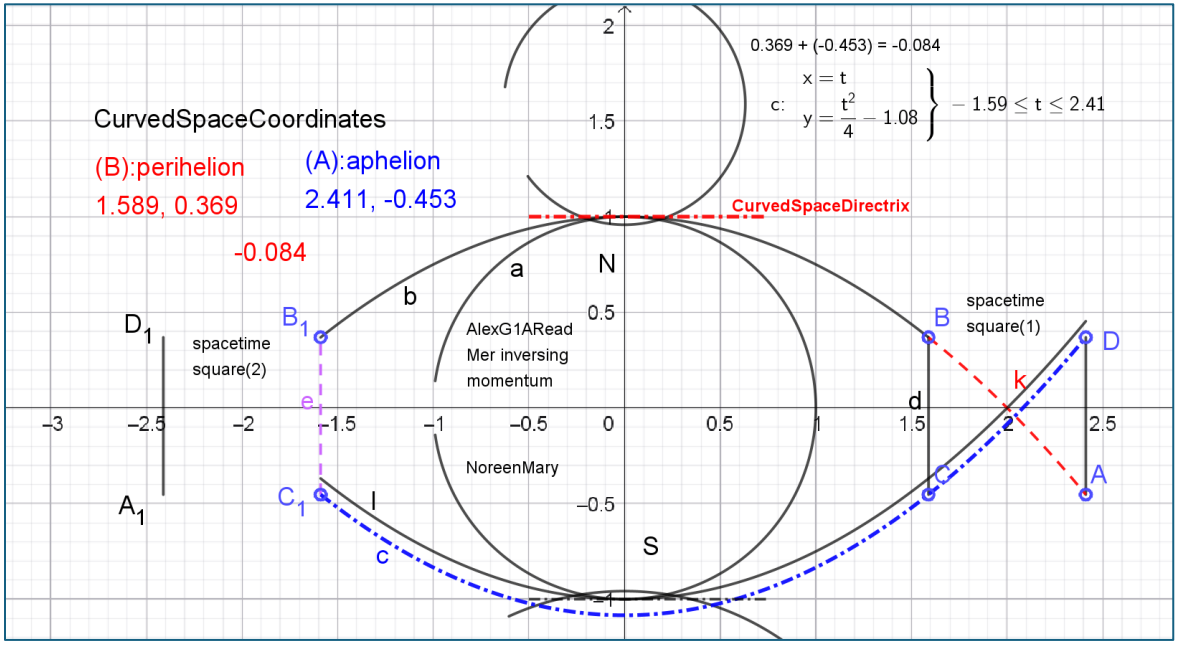
This next exercise I use an energy differential to adjust the southern period time curve so as to be congruent with potential and the curved space directrix. And maybe connect an alternate link between STSQ(1) with STSQ(2).

A return map from (−)Perihelion in S&T(2) to (+)Aphelion in S&T(1). Screwed-up but interesting.

I spent considerable time trying to understand how the South Period Time Curve(l) might come to play in a returned trip to point(A) of STSQ(1), Quadrant(1). Turns out it doesn't.

Our planet group approaches perihelion from aphelion in a S to N direction. Period Time Curve(l) is not used.

We never lose (+)acceleration energy acquired to arrive at B_1, [–(space), +energy] terminus Perihelion. No accelerations just static momentum. I leave the following discourse as a parametric geometry argument, philosophical of course, presenting a construction failing to complete its mission; negative space Perihelion terminus B_1 back to +(space) terminus Aphelion (A).



In the construction we have arrived at B_1. Negative space, positive energy STSQ(2). Perihelion is always approached with high energy acceleration. Having crossed spin using period curve(b), lets change sign of domain placement from positive space($Q1$) to negative space($Q2$).

Suppose we could fall along the range in STSQ(2), B_1 to C_1. Having crossed accretion ($B_1 \rightarrow C_1$) lets change sign of energy field from positive energy(Q2) to negative energy(Q3) and drop to C_1 in Quad(3). With curved space coordinates of (−)perihelion: (-1.589, -0.453).

Doing so presents us with period time curve(c). We have a direct connect with +(space) terminus Aphelion terminus D in STSQ(1) (+2.411, 0.368) and miss our connect with +(space) Aphelion terminus A (+2.411, -0.453). However, I find I can introduce a meter on range energy which will adjust curve(c) making congruent spacetime with curve(l). $\big((0.369) + (-0.453) = (-0.084)\big)$

Malarkey. We've already addressed accretion energy field in STSQ(1). Changing energy field from negative to positive @STSQ(1). Still same efield arriving at (B_1) in STSQ(2). To return to STQ(1) we must first traverse spin using period time curve(b). Not Period time curve(c) or period time curve(l).

A correction on absolute energy differential to correct S period curve obvious corrupt registration

The astronomical stall is complete and our planet is required to burn acquired $(+)$energy of approach, departs from C_1 $(-)$perihelion in Q(3) to (D), $(+)$aphelion and $(+)$ energy in Q(1) via period curve South(l).

Having crossed spin, lets change sign of domain placement from negative space(Q3) to positive space(Q1). Having crossed accretion, lets change sign of energy range from negative(Q3) to positive (Q1). We have returned to STSQ(1) and curved space coordinates of point(D): (2.411, 0.369).

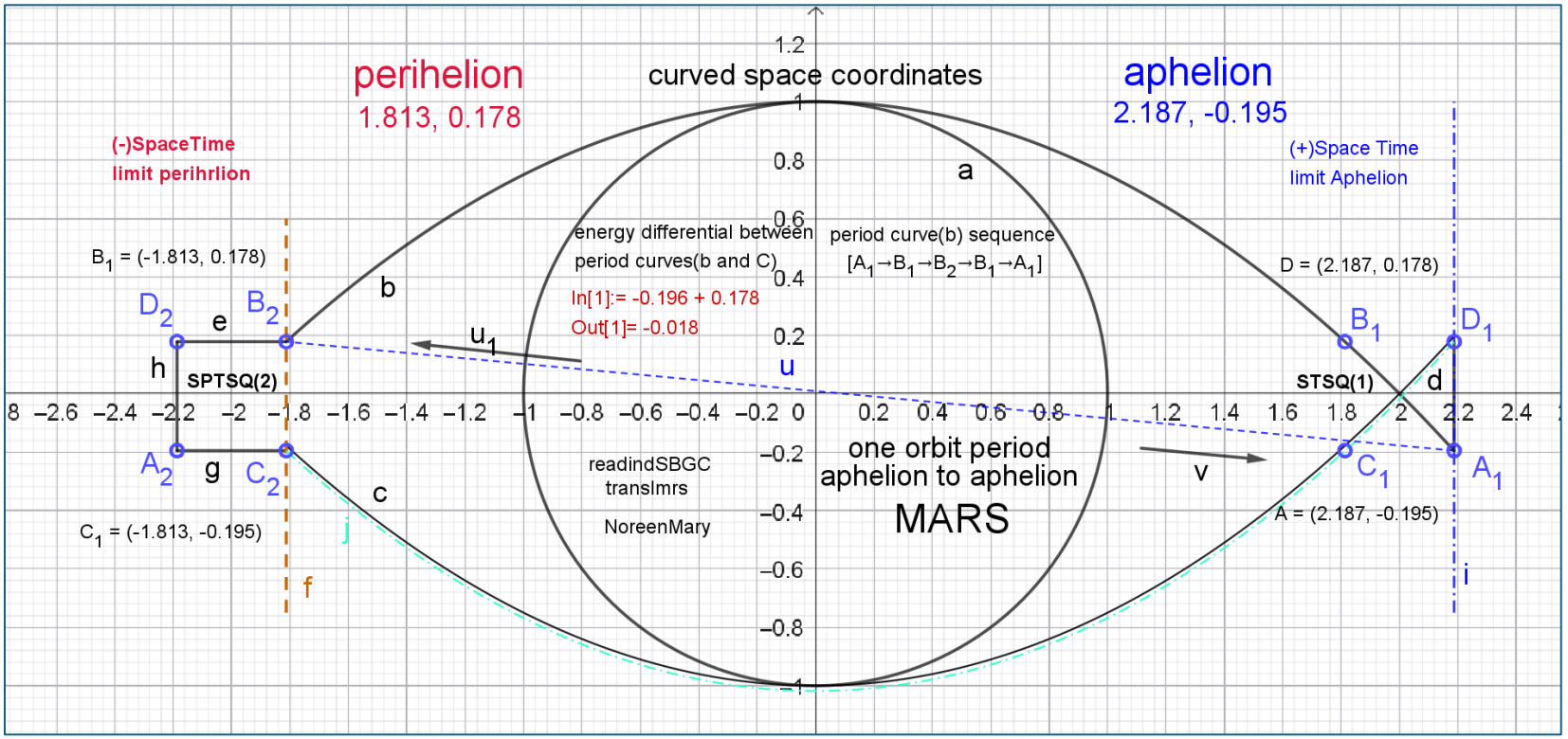
Point(D) is not where we want to go. We want to return to point(A) positive aphelion' and negative energy. Not positive space, positive energy.

The only viable time curve left to complete the journey with correct spacetime registration is our period time curve(b) operating@N spin vertex.

Summary. A period time curve can only analyze M_2 motion using a curved space hypotenuse, an analytical tool to meter changing energy tangents within the locked sides of the limits for space and limits on range of energy. That portion of a period Times Square appearing is a mirror image of the event to occur 180° opposite the diameter of an orbit.

orbit period Mars (+)space aphelion A_1 to (+)space aphelion A_1

I will now present a complete orbit map for Mars. First up will be aphelion(A_1) to perihelion(B_2) and back to aphelion(A_1) using STSQ(1) period curve(A_1 to B_1) and the central force domain numberfield($A_1 \rightarrow B_2 \rightarrow A_1$) .



We start with (+)space aphelion A_1. Use partial period curve(b) to B_1. Use domain number field to cut across to B_2. (-)space perihelion STSQ(2). This is the opposite end point diameter limit. Return (+)space perihelion B_1. And continue our descent to (+)space aphelion A_1.

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aph to aph MARS

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No.	Name	Description	Value	Caption
2	Curve a	Curve(1cos(t), 1sin(t), t, -5, 5)	a:(1cos(t), 1sin(t))	
4	Curve d	Curve(2.19, t, t, -0.2, 0.18)	d:(2.19, t)	
5	Curve b	Curve(t, t^2 / -4 + 1, t, -1.81, 2.19)	b:(t, t^2 / -4 + 1)	
6	Curve e	Curve(t, 0.18, t, -2.19, -1.81)	e:(t, 0.18)	
7	Curve g	Curve(t, -0.2, t, -2.19, -1.81)	g:(t, -0.2)	
8	Curve h	Curve(-2.19, t, t, -0.2, 0.18)	h:(-2.19, t)	
9	Curve c	Curve(t, t^2 / 4 - 1, t, -1.81, 2.19)	c:(t, t^2 / 4 - 1)	
10	Point A_1(2.19, -0.2, 0)		A_1 = (2.19, -0.2, 0)	
11	Point B_2(-1.81, 0.18, 0)		B_2 = (-1.81, 0.18, 0)	
12	Point C_2(-1.81, -0.2, 0)		C_2 = (-1.81, -0.2, 0)	

20	Segment u	Segment A_1, B_2	u = 4.02	
21	Point E		E = (-0.81, 0.11, 0)	
22	Point F		F = (-1.39, 0.17, 0)	
23	Vector u_1	Vector(E, F)	u_1 = (-0.58, 0.06)	
26	Point B_1(1.81, 0.18, 0)		B_1 = (1.81, 0.18, 0)	
27	Point D_1(2.19, 0.18, 0)		D_1 = (2.19, 0.18, 0)	
28	Point C_1(1.81, -0.2, 0)		C_1 = (1.81, -0.2, 0)	
29	Point D_2(-2.19, 0.18, 0)		D_2 = (-2.19, 0.18, 0)	
30	Point A_2(-2.19, -0.2, 0)		A_2 = (-2.19, -0.2, 0)	
31	Point I		I = (1.12, -0.19, 0)	
32	Point J		J = (1.55, -0.23, 0)	
33	Vector v	Vector(I, J)	v = (0.43, -0.04)	
43	Curve i	Curve(2.19, t, t, -0.75, 1)	i:(2.19, t)	
44	Curve f	Curve(-1.81, t, t, -0.75, 0.6)	f:(-1.81, t)	
45	Text text21		"In[1]:= -0.196 + 0.178 Out[1]= -0.018"	

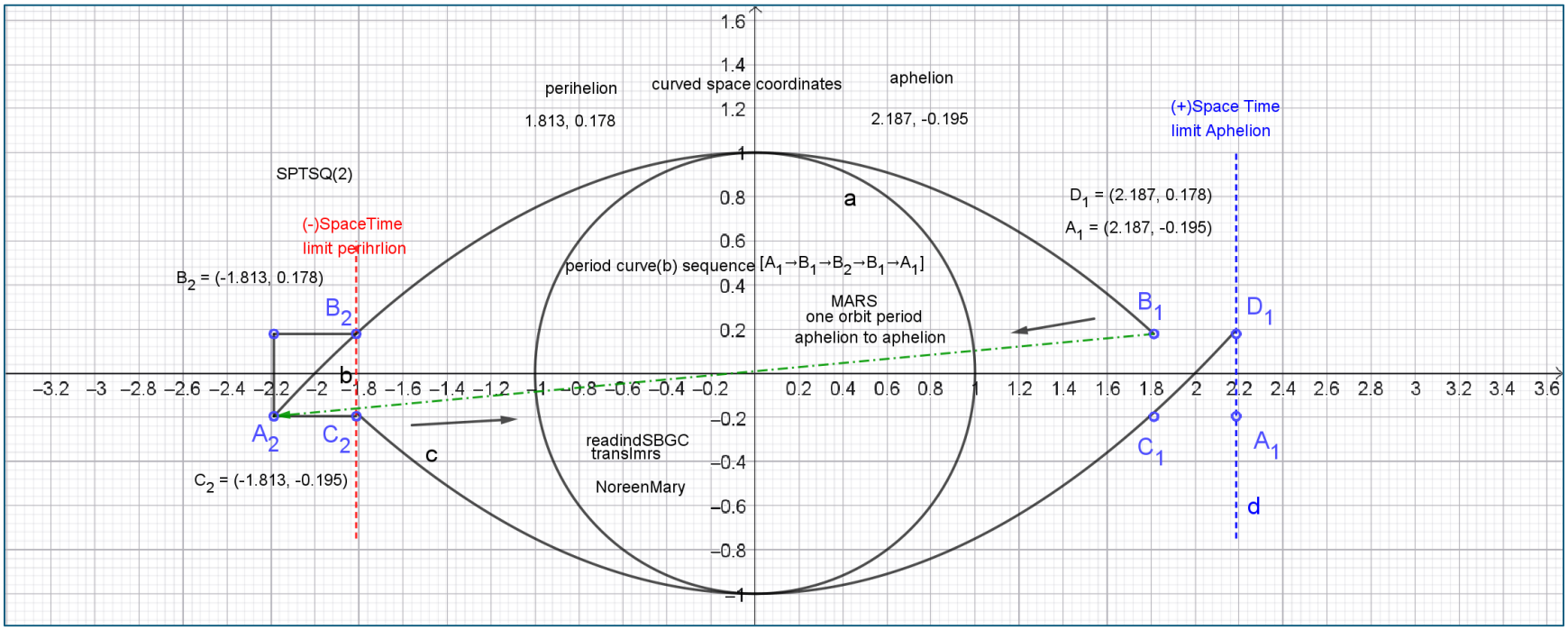
46	Curve j	Curve(t, t² / 4 - 1 - 0.02, t, -1.81, 2.19)	j:(t, t² / 4 - 1 - 0.02)	

Created with GeoGebra

MARS

Orbit period Mars (+)space perihelion(B_1) to (-)space aphelion back to (+)space perihelion(B_1)

Complete orbit map for Mars. perihelion (B_1) to aphelion A_1 and back to perihelion (B_1).



Mars Unity Curves. (+)spaceB1to (-)spaceA2 back to (+)spaceB1

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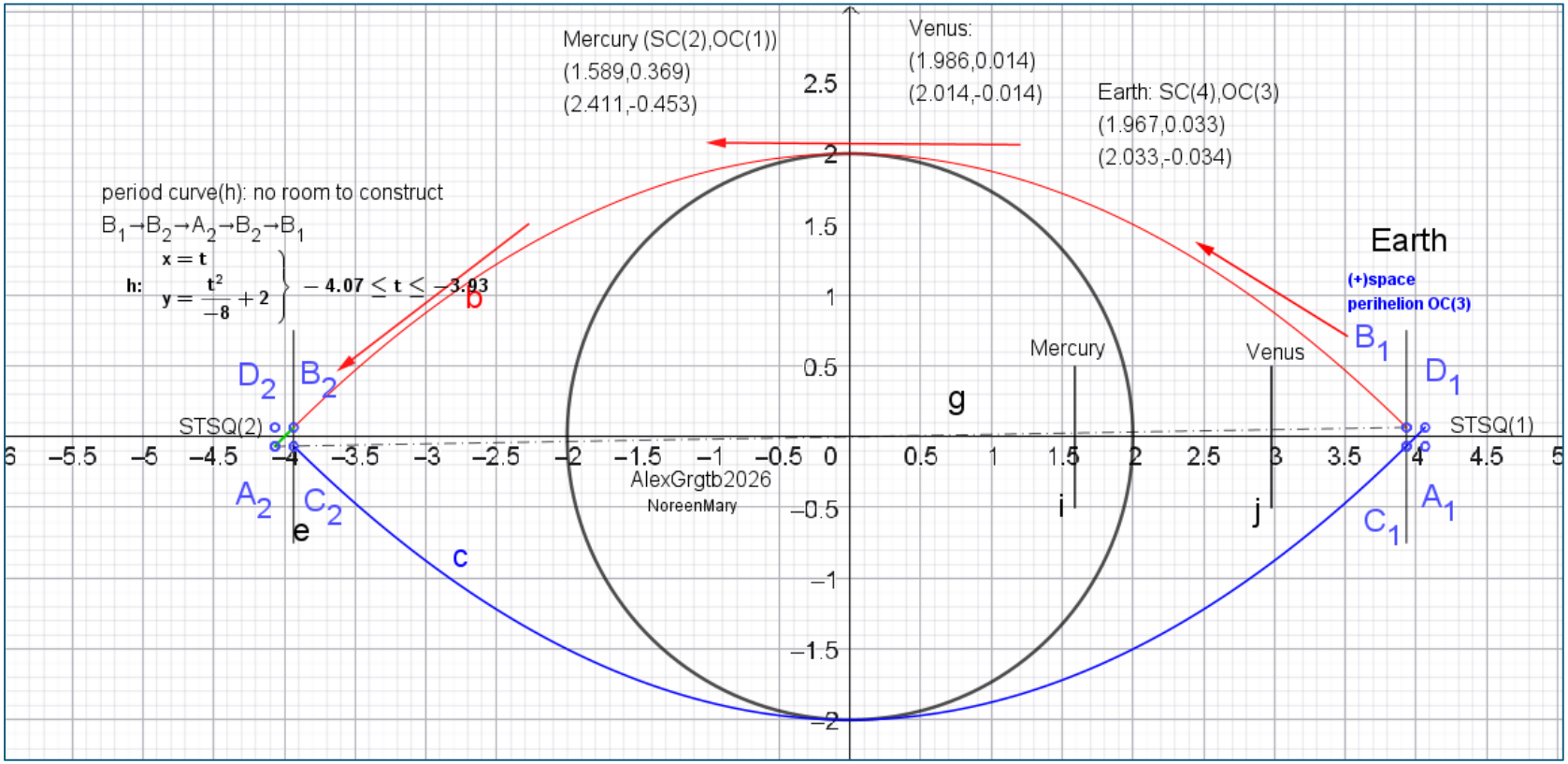
No.	Name	Description	Value	Caption
1	Curve a	Curve(1cos(t), 1sin(t), t, -5, 5)	a:(1cos(t), 1sin(t))	
2	Curve c	Curve(t, t² / 4 - 1, t, -1.81, 2.19)	c:(t, t² / 4 - 1)	
3	Curve d	Curve(2.19, t, t, -0.75, 1)	d:(2.19, t)	
4	Curve e	Curve(-1.81, t, t, -0.75, 0.6)	e:(-1.81, t)	
5	Curve f	Curve(t, -0.2, t, -2.19, -1.81)	f:(t, -0.2)	
6	Curve g	Curve(-2.19, t, t, -0.2, 0.18)	g:(-2.19, t)	
7	Curve h	Curve(t, 0.18, t, -2.19, -1.81)	h:(t, 0.18)	
28	Point B_1(1.81, 0.18, 0)		B_1 = (1.81, 0.18, 0)	
29	Point A_1(2.19, -0.2, 0)		A_1 = (2.19, -0.2, 0)	
30	Point C_1(1.81, -0.2, 0)		C_1 = (1.81, -0.2, 0)	
31	Point D_1(2.19, 0.18, 0)		D_1 = (2.19, 0.18, 0)	
32	Point C_2(-1.81, -0.2, 0)		C_2 = (-1.81, -0.2, 0)	

33	Point A_2(-2.19, -0.2, 0)		A_2 = (-2.19, -0.2, 0)	
34	Point B_2(-1.81, 0.18, 0)		B_2 = (-1.81, 0.18, 0)	
35	Point A		A = (-2.19, 0.18, 0)	
36	Curve b	Curve(t, t^2 / -4 + 1, t, -2.19, 1.81)	b:(t, t^2 / -4 + 1)	
37	Vector u	Vector(B_1, A_2)	u = (-4, -0.37)	
38	Point B		B = (1.54, 0.25, 0)	
39	Point C		C = (1.16, 0.18, 0)	
40	Vector v	Vector(B, C)	v = (-0.38, -0.06)	
41	Point D		D = (-1.56, -0.24, 0)	
42	Point E		E = (-1.08, -0.21, 0)	
43	Vector w	Vector(D, E)	w = (0.48, 0.03)	
44	Curve i	Curve(t, t^2 / -4 + 1, t, 1.81, 2.19)	i:(t, t^2 / -4 + 1)	

Created with GeoGebra

Period curve Earth: [$B_1 \rightarrow B_2 \rightarrow A_2 \rightarrow B_2 \rightarrow B_1$].

Difficult construction because the space-time squares cannot be read with out zoom feature. This is the orbit Earth using the domain number field. I have embedded perihelion limits of Mercury and Venus on domain.



Earth across Central Force numberfield perihelion initial to perihelion final

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No.	Name	Description	Value	Caption
1	Text text1		"Mercury (SC(2),OC(1)) (1.589,0.369) (2.411,-0.453)"	
2	Text text2		"Venus: (1.986,0.014) (2.014,-0.014)"	
3	Text text3		"Earth: SC(4),OC(3) (1.967,0.033) (2.033,-0.034)"	
4	Curve a	Curve(2cos(t), 2sin(t), t, -5, 5)	a:(2cos(t), 2sin(t))	
5	Point B_1(3.93, 0.07, 0)		B_1 = (3.93, 0.07, 0)	
6	Point C_1(3.93, -0.07, 0)		C_1 = (3.93, -0.07, 0)	
7	Point D_1(4.07, 0.07, 0)		D_1 = (4.07, 0.07, 0)	
8	Point A_1(4.07, -0.07, 0)		A_1 = (4.07, -0.07, 0)	
9	Curve d	Curve(2 * 1.97, t, t, -0.75, 0.75)	d:(3.93, t)	
10	Text text4		"(+)space perihelion OC(3)"	

11	Curve e	Curve(2(-1.97), t, t, -0.75, 0.75)	e:(-3.93, t)	
12	Point B_2(-3.93, 0.07, 0)		B_2 = (-3.93, 0.07, 0)	
13	Point A_2(-4.07, -0.07, 0)		A_2 = (-4.07, -0.07, 0)	
14	Curve c	Curve(t, t^2 / 8 - 2, t, 2(-1.97), 2 * 2.03)	c:(t, t^2 / 8 - 2)	
15	Point D_2(-4.07, 0.07, 0)		D_2 = (-4.07, 0.07, 0)	
16	Number f		f = 2	
17	Text text5		"b"	
18	Text text6		"c"	
19	Segment g	Segment B_1, A_2	g = 8	
20	Curve b	Curve(t, t^2 / -8 + 2, t, 2(-1.97), 2 * 1.97)	b:(t, t^2 / -8 + 2)	
21	Curve h	Curve(t, t^2 / -8 + 2, t, 2(-2.03), 2(-1.97))	h:(t, t^2 / -8 + 2)	

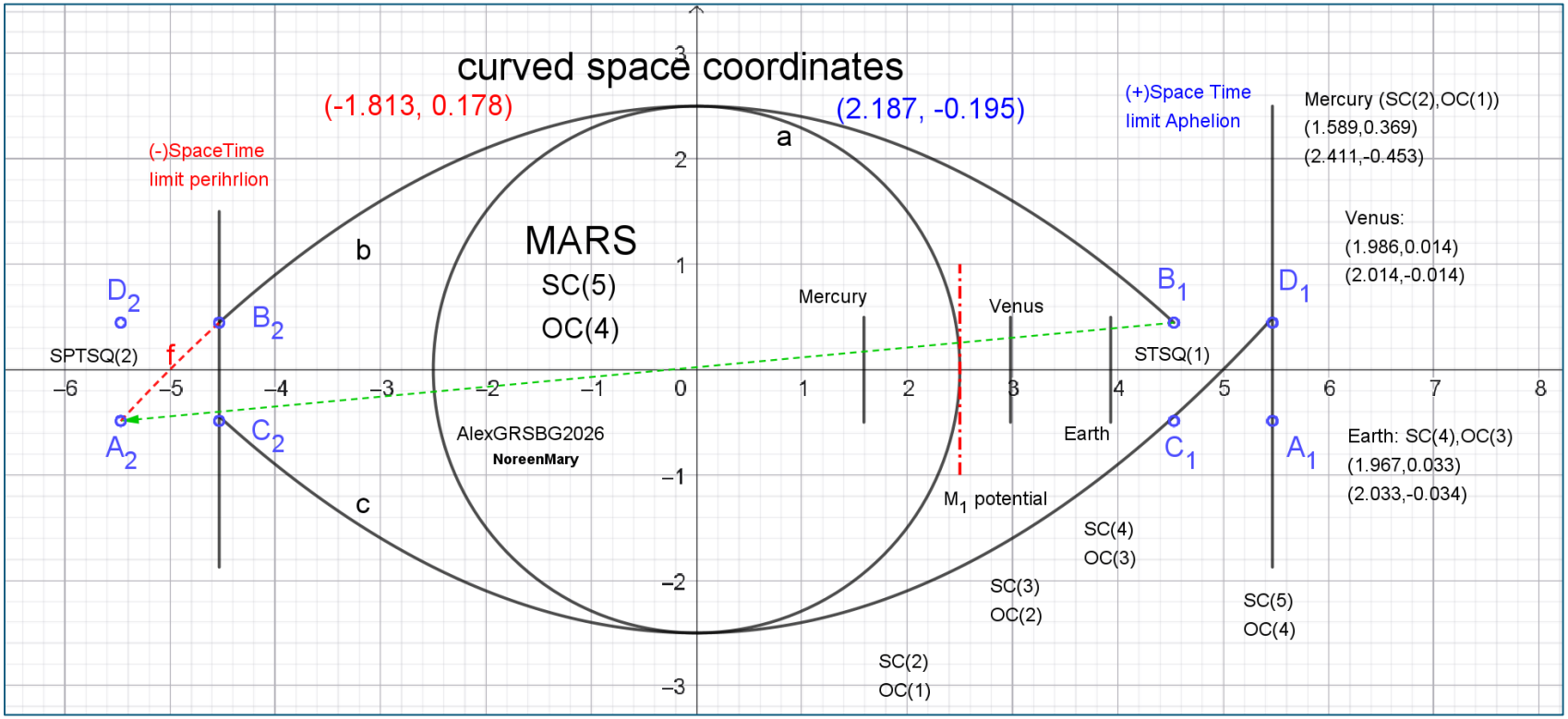
22	Point B		B = (3.52, 0.71, 0)	
23	Point C		C = (2.44, 1.38, 0)	
24	Vector u	Vector(B, C)	u = (-1.08, 0.67)	
25	Point D		D = (1.2, 2.06, 0)	
26	Point E		E = (-1.02, 2.08, 0)	
27	Vector v	Vector(D, E)	v = (-2.22, 0.01)	
28	Point F		F = (-2.27, 1.5, 0)	
29	Point G		G = (-3.63, 0.46, 0)	
30	Vector w	Vector(F, G)	w = (-1.36, -1.04)	
31	Text text7	FormulaText(h, true, true)	"h\mathpunct{:}\,\left.\begin{array}{lll}x = t\\ y = \frac{t^{2}}{-8} + 2 \end{array}\right\} \; -4.07 \le t \le -3.93"	
32	Text text8		"period curve(h): no room to construct B_1→B_2→A_2→B_2→B_1"	
33	Point C_2(-3.93, -0.07, 0)		C_2 = (-3.93, -0.07, 0)	
34	Curve i	Curve(1.59, t, t, -0.5, 0.5)	i:(1.59, t)	
35	Text text10		"Mercury"	

36	Text text11		"Venus"	
37	Text text12		"Earth"	
38	Text text9		"NoreenMary"	
39	Text text13		"AlexGrgtb2026"	
40	Text text14		"STSQ(1)"	
41	Text text15		"STSQ(2)"	
42	Curve j	Curve(3 / 2 * 1.99, t, t, -0.5, 0.5)	j:(2.98, t)	

Created with GeoGebra

orbit Mars on CF domain numberfield B1 STSQ(1) A2 STSQ(2) back STSQ(1)B1

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I have embedded perihelion limits of Mercury, Venus, Earth on the domain.

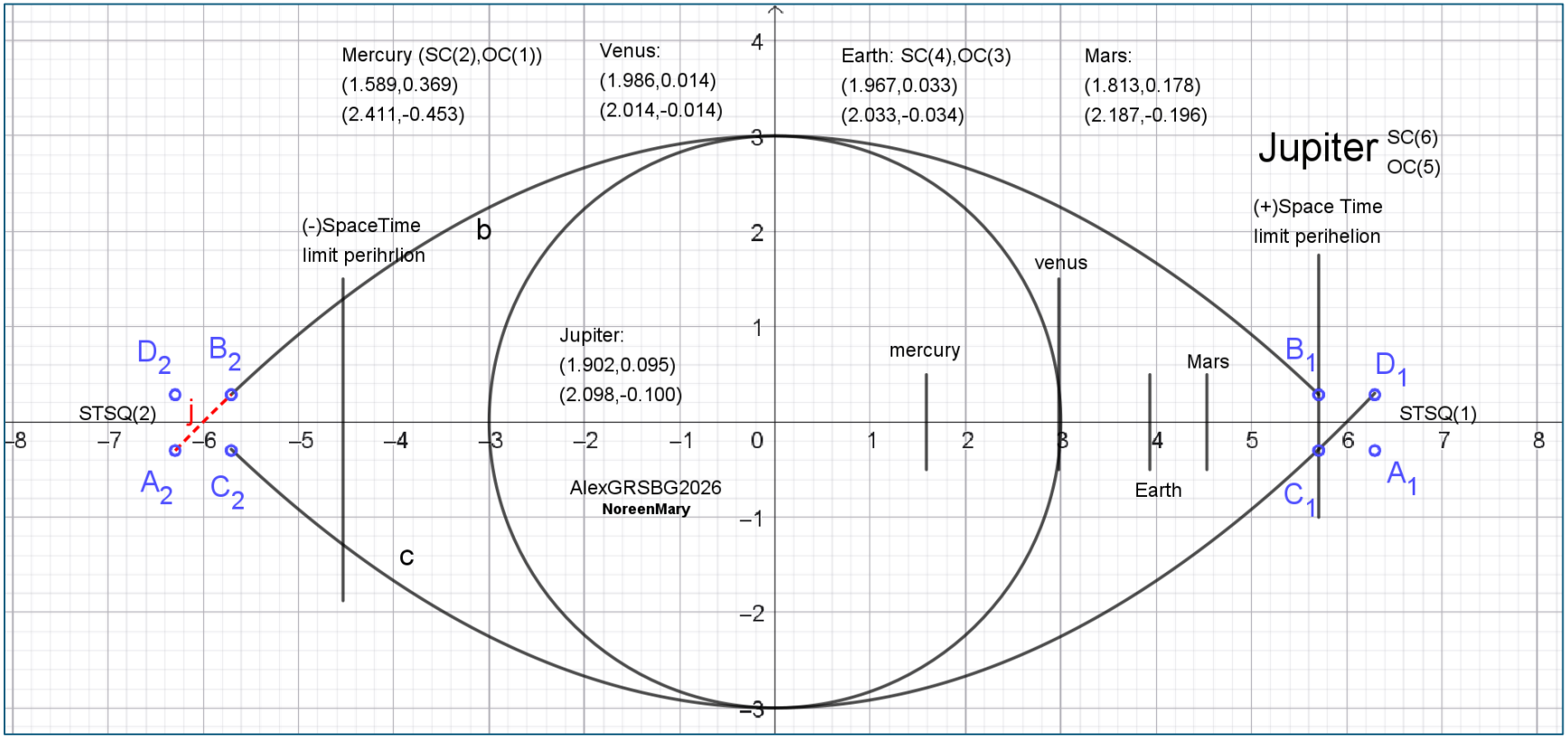
No.	Name	Description	Value	Caption
6	Curve a	Curve(5 / 2 cos(t), 5 / 2 sin(t), t, -5, 5)	a:(5 / 2 cos(t), 5 / 2 sin(t))	
7	Curve c	Curve(t, t² / 10 - 5 / 2, t, 5 / 2 (-1.81), 5 / 2 * 2.19)	c:(t, t² / 10 - 5 / 2)	
8	Curve e	Curve(5 / 2 (-1.81), t, t, 5 / 2 (-0.75), 5 / 2 * 0.6)	e:(-4.53, t)	
9	Curve d	Curve(5 / 2 * 2.19, t, t, 5 / 2 (-0.75), 5 / 2 * 1)	d:(5.47, t)	
12	Point B_1(4.53, 0.45, 0)		B_1 = (4.53, 0.45, 0)	
13	Point C_1(4.53, -0.49, 0)		C_1 = (4.53, -0.49, 0)	
14	Point D_1(5.47, 0.45, 0)		D_1 = (5.47, 0.45, 0)	
15	Point A_1(5.47, -0.49, 0)		A_1 = (5.47, -0.49, 0)	
16	Point B_2(-4.53, 0.45, 0)		B_2 = (-4.53, 0.45, 0)	
17	Point C_2(-4.53, -0.49, 0)		C_2 = (-4.53, -0.49, 0)	
18	Point D_2(-5.47, 0.45, 0)		D_2 = (-5.47, 0.45, 0)	
19	Point A_2(-5.47, -0.49, 0)		A_2 = (-5.47, -0.49, 0)	
20	Vector u	Vector(B_1, A_2)	u = (-10, -0.93)	
25	Curve b	Curve(t, t² / -10 + 5 / 2, t, 5 / 2 (-1.81), 5 / 2 * 1.81)	b:(t, t² / -10 + 5 / 2)	

26	Curve f	Curve(t, t² / -10 + 5 / 2, t, 5 / 2 (-2.19), 5 / 2 (-1.81))	f:(t, t² / -10 + 5 / 2)	
38	Curve k	Curve(2 * 1.97, t, t, -0.5, 0.5)	k:(3.93, t)	
39	Curve h	Curve(3 / 2 * 1.99, t, t, -0.5, 0.5)	h:(2.98, t)	
40	Curve g	Curve(5 / 2, t, t, -1, 1)	g:(2.5, t)	
41	Curve i	Curve(1.59, t, t, -0.5, 0.5)	i:(1.59, t)	

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Orbit Jupiter laid out on CF numberfield 360 from B1 to B2 back to B1

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I have embedded perihelion limits of Mercury, Venus, Earth, Maars on the domain.

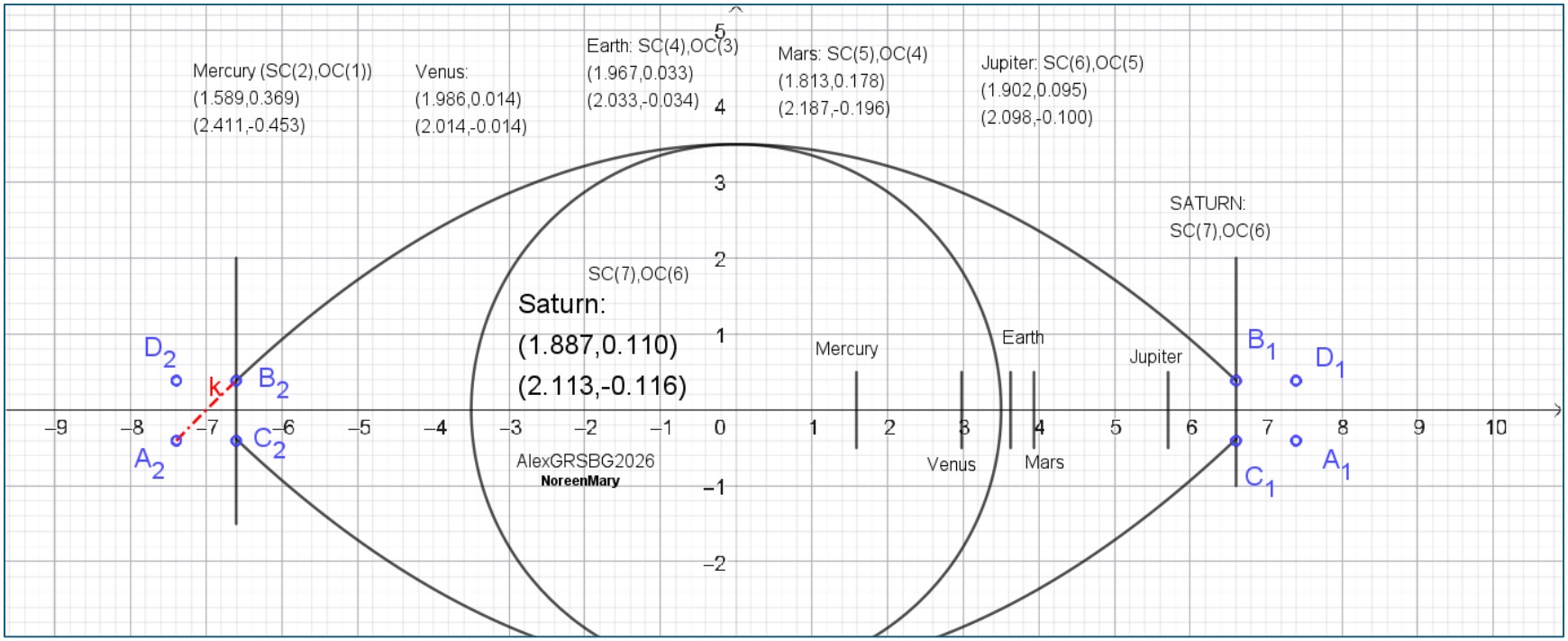
No.	Name	Description	Value	Caption
1	Curve d	Curve(5 / 2 * 2.19, t, t, 5 / 2 (-0.75), 5 / 2 * 1)	d:(5.47, t)	
2	Curve e	Curve(5 / 2 (-1.81), t, t, 5 / 2 (-0.75), 5 / 2 * 0.6)	e:(-4.53, t)	
5	Curve a	Curve(3cos(t), 3sin(t), t, -6, 6)	a:(3cos(t), 3sin(t))	
6	Text text4		"Jupiter: (1.902,0.095) (2.098,-0.100)"	
7	Curve b	Curve(t, t^2 / -12 + 3, t, 3(-1.9), 3 * 1.9)	b:(t, t^2 / -12 + 3)	
8	Curve c	Curve(t, t^2 / 12 - 3, t, 3(-1.9), 3 * 2.1)	c:(t, t^2 / 12 - 3)	
9	Point B_1(5.71, 0.29, 0)		B_1 = (5.71, 0.29, 0)	
10	Point C_1(5.71, -0.3, 0)		C_1 = (5.71, -0.3, 0)	
11	Point D_1(6.29, 0.29, 0)		D_1 = (6.29, 0.29, 0)	
12	Point A_1(6.29, -0.3, 0)		A_1 = (6.29, -0.3, 0)	
13	Point B_2(-5.71, 0.29, 0)		B_2 = (-5.71, 0.29, 0)	
14	Point C_2(-5.71, -0.3, 0)		C_2 = (-5.71, -0.3, 0)	

15	Point D_2(-6.29, 0.29, 0)		D_2 = (-6.29, 0.29, 0)	
16	Point A_2(-6.29, -0.3, 0)		A_2 = (-6.29, -0.3, 0)	
23	Curve f	Curve(5 / 2 * 1.81, t, t, -0.5, 0.5)	f:(4.53, t)	
28	Curve g	Curve(2 * 1.97, t, t, -0.5, 0.5)	g:(3.93, t)	
29	Curve h	Curve(3 / 2 * 1.99, t, t, -0.5, 1.5)	h:(2.98, t)	
30	Curve i	Curve(1.59, t, t, -0.5, 0.5)	i:(1.59, t)	
31	Curve j	Curve(t, t^2 / -12 + 3, t, 3(-2.1), 3(-1.9))	j:(t, t^2 / -12 + 3)	

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SC(7) OC(6) B1 to B2 to A2 back to B2 and B1

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No.	Name	Description	Value	Caption
8	Curve a	Curve(7 / 2 cos(t), 7 / 2 sin(t), t, -7, 7)	a:(7 / 2 cos(t), 7 / 2 sin(t))	

9	Curve c	Curve(t, t² / -14 + 7 / 2, t, 7 / 2 (-1.89), 7 / 2 * 1.89)	c:(t, t² / -14 + 7 / 2)	
10	Curve b	Curve(t, t² / 14 - 7 / 2, t, 7 / 2 (-1.89), 7 / 2 * 1.89)	b:(t, t² / 14 - 7 / 2)	
11	Curve d	Curve(7 / 2 * 1.89, t, t, -1, 2)	d:(6.6, t)	
12	Curve e	Curve(7 / 2 (-1.89), t, t, -1.5, 2)	e:(-6.6, t)	
13	Curve f	Curve(3 * 1.9, t, t, -0.5, 0.5)	f:(5.71, t)	
14	Curve g	Curve(2 * 1.81, t, t, -0.5, 0.5)	g:(3.63, t)	
15	Curve h	Curve(2 * 1.97, t, t, -0.5, 0.5)	h:(3.93, t)	
16	Curve i	Curve(3 / 2 * 1.99, t, t, -0.5, 0.5)	i:(2.98, t)	
17	Curve j	Curve(1.59, t, t, -0.5, 0.5)	j:(1.59, t)	
24	Point B_1(6.6, 0.39, 0)		B_1 = (6.6, 0.39, 0)	
25	Point C_1(6.6, -0.41, 0)		C_1 = (6.6, -0.41, 0)	
26	Point D_1(7.4, 0.39, 0)		D_1 = (7.4, 0.39, 0)	
27	Point A_1(7.4, -0.41, 0)		A_1 = (7.4, -0.41, 0)	
28	Curve k	Curve(t, t² / -14 + 7 / 2, t, 7 / 2 (-2.11), 7 / 2 (-1.89))	k:(t, t² / -14 + 7 / 2)	
29	Point A_2(-7.4, -0.41, 0)		A_2 = (-7.4, -0.41, 0)	

30	Point D_2(-7.4, 0.39, 0)		D_2 = (-7.4, 0.39, 0)	
31	Point B_2(-6.6, 0.39, 0)		B_2 = (-6.6, 0.39, 0)	
32	Point C_2(-6.6, -0.41, 0)		C_2 = (-6.6, -0.41, 0)	

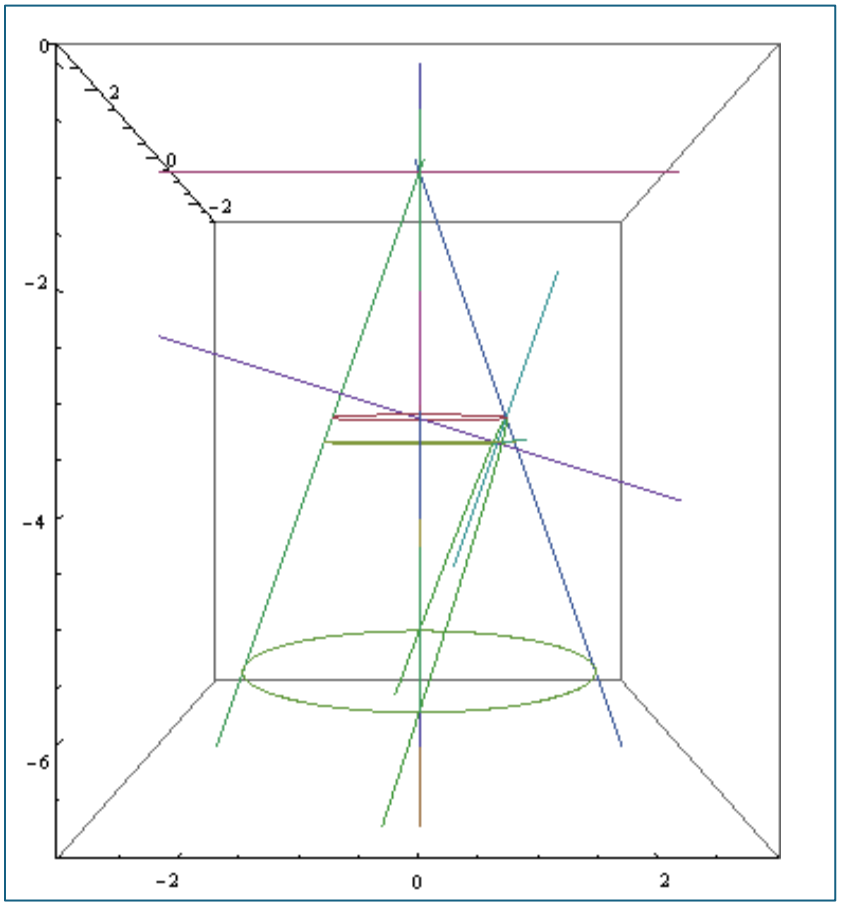
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Sand Box Geometry LLC, a company dedicated to utility of Ancient Greek Geometry in pursuing exploration and discovery of Central Force Field Curves.

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.



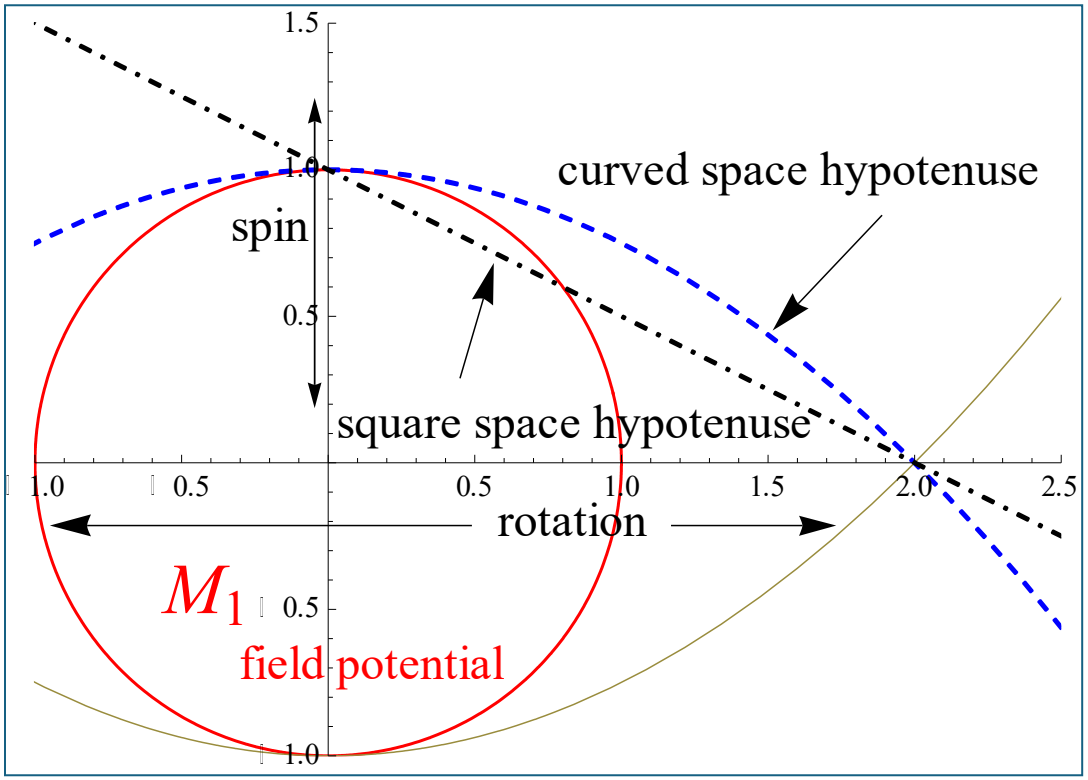
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The computer is my sandbox, the unit circle my compass, and the focal radius of the unit parabola my straight edge.

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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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