Parametric Geometry construction of inverse square displacement radii and G-field potential.

PREMISES: constructing a parametric geometry for (M_2) changing motive energy curves happening at Sir Isaac Newton's displacement radius (2).

1. Construct two Central Force *unity* curve(s) of Galileo on a Cartesian 2-space coordinate system; curvature and radius of curvature = 1.
    - Construct range of potential as a tangent limit through orbit space.
    - Construct shape of potential curve (curvature = 1) about center F; given.
    - Compute and construct shape of motive ecurve of (M_2) at slope event $(m = -1)$ using:
        - focal property differential.
        - Sir Isaac Newton inverse square law.

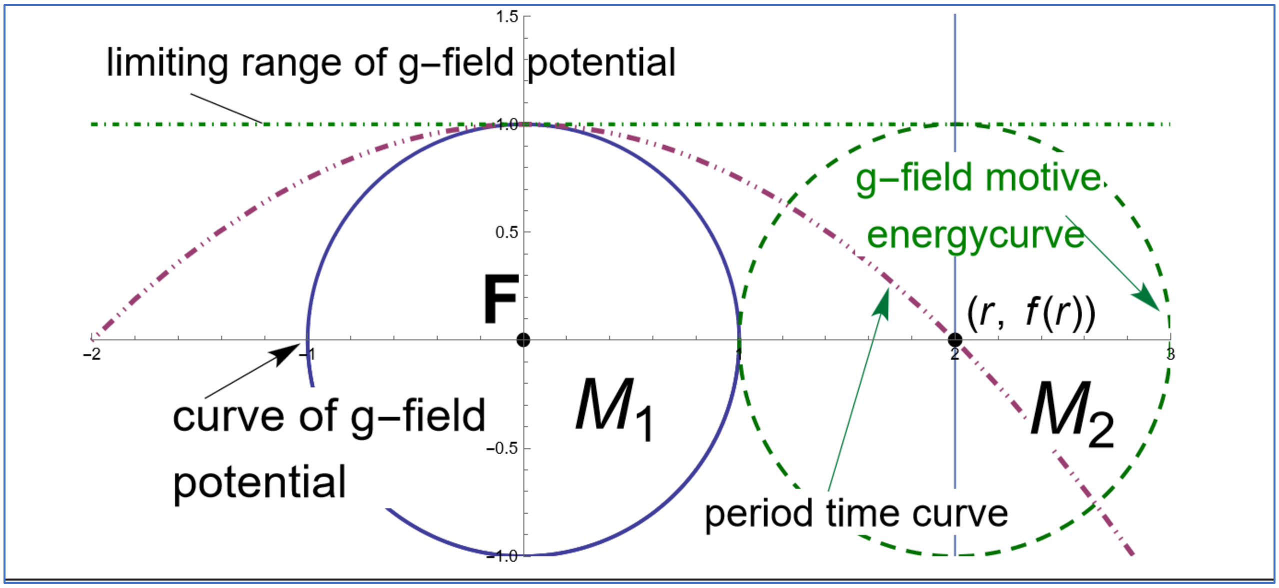


Figure 1: mapping two unity curves on a central force domain.

Construct two unity curves. One as a surface acceleration curve of (M_1); central force potential. And one at (M_2) displacement radius occuring at $(m = -1)$ slope event on G-field period time curve. This is the only place on the field period time curve where two unity curves can co-exist. This cooperative endeavor gives a double unit ecurve event composed using two energy unit radii, one for potential and one for motion.

- radius of motive energy field of (M_2): $(focal\ radius\ mag\ -\ potential)$

$$(2 - 1 = 1)$$

- radius of (M_2) motive energy curve using Sir Isaac Newton's Universal Law

$$\left(F_{acc} \propto G\,\frac{M_1 M_2}{r^2}\right)$$

Let $(G \times M_1 \times M_2)$ serve **F** as constant of proportionality(k). We have:

$$\left(Force_{acc} \propto k\left(\frac{1}{r^2}\right) \propto k * (curvature)^2\right).$$

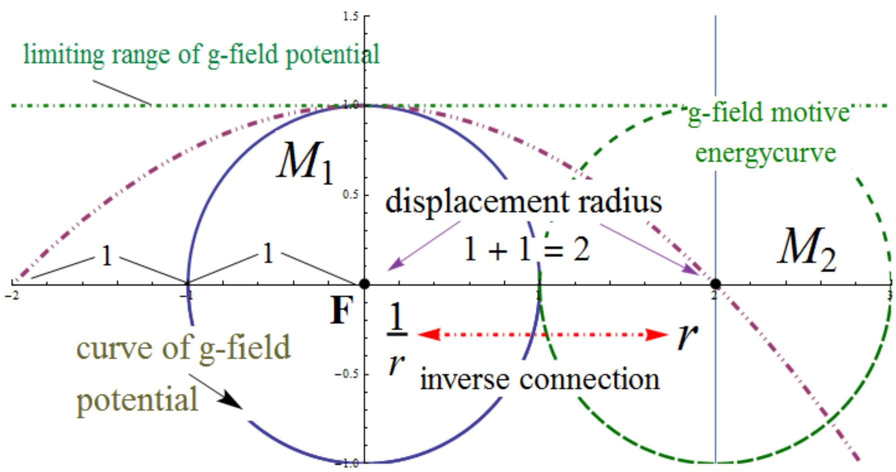
We can now say the motive energy curve shaping planetary motion is proportional to:

$$((event\ curvature\ of\ orbit)^{2} \times (constant\ of\ proportionality))^{-1}$$

Inverse the result to convert curvature terminology into a inverse square meter of orbit displacement/energy. I will show the constant of proportionality for our planet group is always the average curve of orbit, which we will find to be the latus rectum diameter (AKA; principal parabola chord) of a **CSDA**.

The **CSDA** latus rectum becomes the average energy diameter/curve of (M_2). All Other orbit curves lying between period time curve limits of high energy perihelion and low energy aphelion are relative with the system average energy/diameter. All orbit curves of (M_2), surrender or acquire velocity as needed to balance a conserved energy system as determined by slope event $(m = \pm 1)$.

Construct two unity curves, one as central force potential, and one at negative slope event (- 1) on the gfield time curve. This cooperative endeavor gives us a two unit event radius happening at (-1) slope event time and energy curve.



Notice the inverse connection: G-field M1 unity curve contains the complete history of micro infinity event curvature; and outside the surface curve of M1 potential we find the complete history of macro infinity square space event radii. Plane Geometry Inversed connections are the g-field tether connecting M2 event radii motion in square space with the micro infinity curving phenomena of gravity field M1 potential.

(Slide 8 dialogue)

- An interesting concept of calculus is the capability to change the degree of space.
- With **CSDA** perspective we can use calculus to move between primitive KE of curved space to find linear planetary momentum of g-field orbit curves using a Cartesian ordered pair:
  (position, position energy).
- Let position be event radii on the accretion domain and changing KE of (M_2) orbit curves be metered on the period time curve.

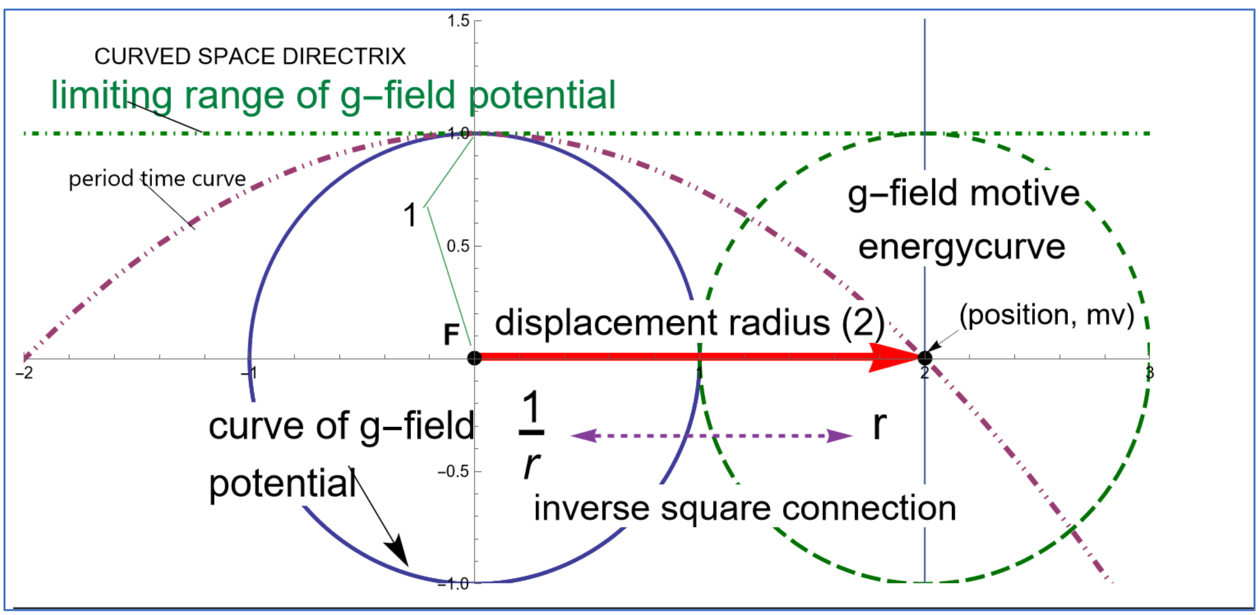
- ΔKE of orbit moves exhibits on the period time curve as energy tangent slope caught between high energy limit perihelion and low energy limit aphelion of an orbit period.

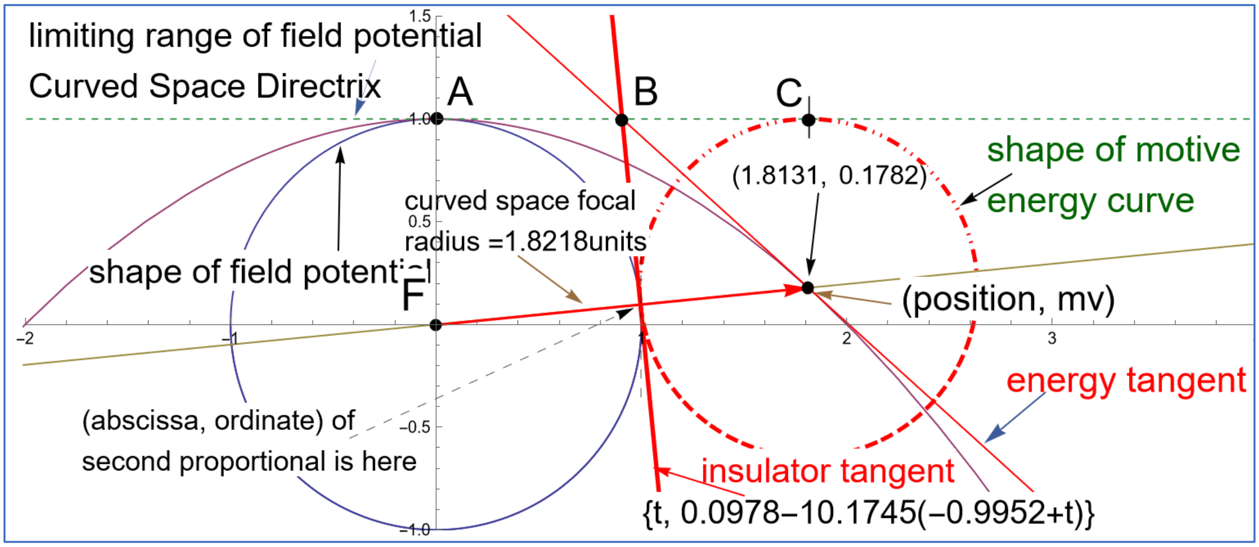
Theorem (On the Potential and Motive Circles of Galileo)

1). The conserved sum of available energy for system motion is found on the **CSDA** Latus Rectum Diameter. When central force potential curvature =1, and focal radius motive curvature =1; then CSDA Square Space Radius 2 will balance, center to center, 2 unity curves (curvature and RoC =1). The first curve is about F as center of potential and second curve is center of motive event at slope event $(m = \pm 1)$ of (M_2) energy tangent happening (where?) on **CSDA** period time curve (when?) on dependent curve latus rectum rotating diameter, the average energy curve of this system.

2). Motive curve + energy level (f (r)) = potential curve

3). Potential curve - (Motive curve + energy level (f (r))) = zero





- Since all motive parameters are subservient to g-field potential working the orbit; acting motive curve will:
    - maintain contact with limiting range of field potential (G-field curved space directrix), and
    - Maintain contact with surface acceleration curve of potential (in a similar way as we are captured by surface acceleration curve of our earth).

Slide 24: I premised inverse square proofing based on shared energy between two unity curves, potential and motion. Kepler's Empirical Law concerning equal area/unit time needs to be addressed. I do so use tangents, energy tangents and insulator tangents. Insulator tangents separate opposing gravity field forces of attraction and escape.

Construct High Energy Insulator Tangent use point slope form:

- (The slope of insulator is normal with the event focal radius, change sign of focal slope, invert, and post into point slope linear algebra equation). To find (abscissa, ordinate) needed for point slope parametric definition, consider right triangle direct proportion using the focal radius as common hypotenuse. With unknown as second proportional and potential hypotenuse (= 1) as the first proportional, proportional 3 and 4 operate using event focal radius hypotenuse as numerator and event (r, f (r)) as alternate denominator, $r \rightarrow$ for abscissa and $f\ (r) \rightarrow$ for ordinate.

$$compute\ abscissa\ of\ insulator\ tangent\ \rightarrow$$
$$Solve[1/x == 1.8218/1.8131, x]\ \rightarrow \{\{x -> 0.9952\}\}$$

$$compute\ ordinate\ of\ insulator\ tangent\ \rightarrow$$

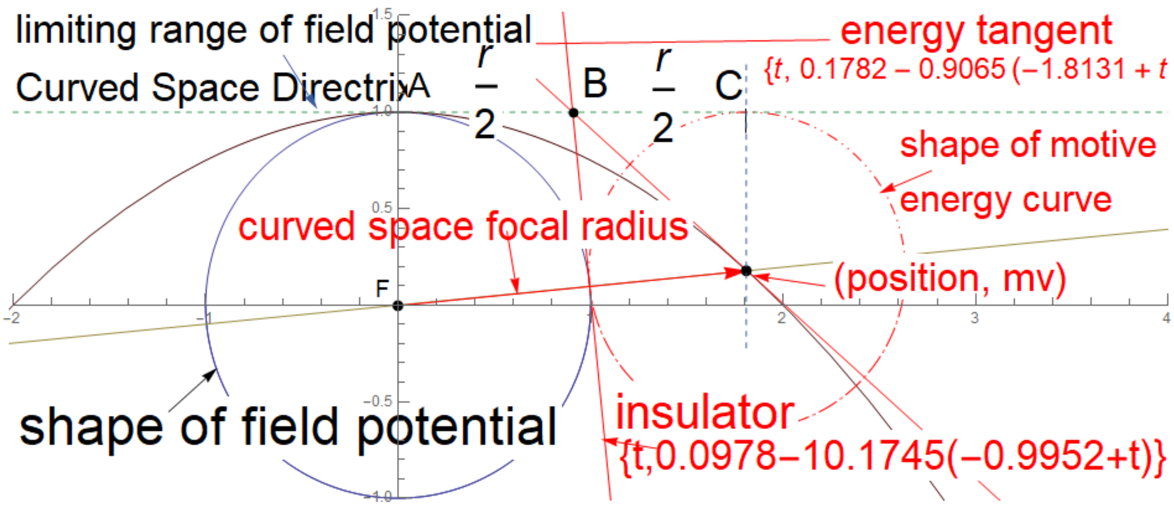
$$Solve[1/x == 1.8218/0.1782, x]\ \rightarrow\ \{\{x -> 0.0978\}\}$$

$$Solve\left[y\ -\ 0.0978\ ==\ \left(\frac{0.1782}{1.8131}\right)^{-1}\ (x\ -\ 0.9952),\ y\right] \rightarrow$$

$$\{t, 0.0978\ -\ 10.1745\ (-0.9952\ +\ t)\}$$

CONVERGENCE POINT OF MOTION ENERGY AND ANGULAR MOMENTUM (B):

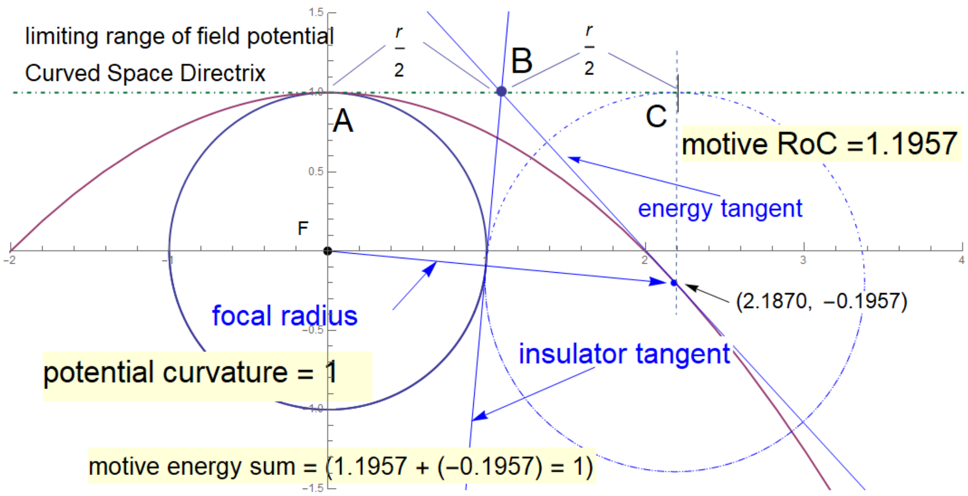
All energy tangent phenomena (motive and insulator) connect at curved space directrix at point B: (event radius/2).



Motive energy curves of Galileo change shape to accommodate conserved angular momentum experienced by changing orbit radii.

Step 11: Construct Both Low Energy Orbit Tangents (Mars).\[LongRightArrow] CSDA Mars:

ENERGY TAB: motive energy sum = (1.1957;motive radius + (-0.1957; f(r)) = 1)



$$\text{Solve}\left[y-(-0.1957) == \frac{-2.187}{2}(x-2.187), y\right]$$

$$\{\{y \to -0.1957 - 1.0935(-2.187 + x)\}\}$$

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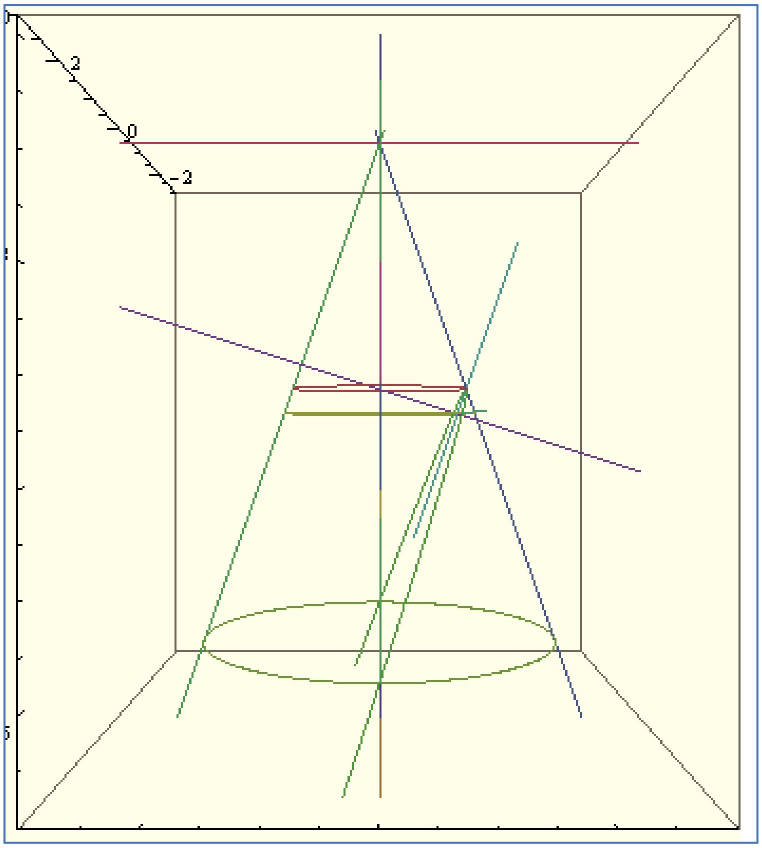
Using computer parametric geometry code to construct the focus of an Apollonian parabola section within a right cone.



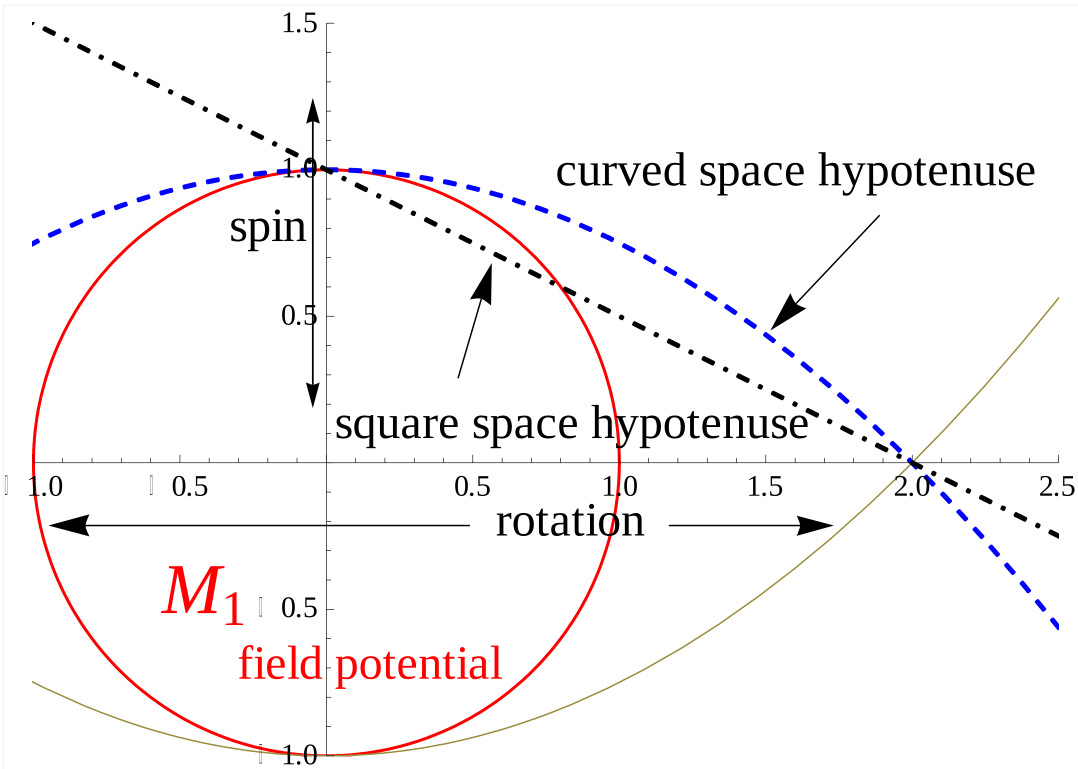
"It is remarkable that the directrix does not appear at all in Apollonius great treatise on conics. The focal properties of the central conics are given by Apollonius, but the foci are obtained in a different way, without any reference to the directrix; the focus of the parabola does not appear at all... 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 changing straight edge length (L).

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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