

Things (blog, protium crvpsqsp) MP4: document zoom

The MAA August experience in Philadelphia, becomes more paradigm exciting every day. Just gotta' post something before the end of year. Something significant.

SandBox index solution curves provide a way to map a 'fall' through and across displacement energy curves of the gravity field. Displacement integers on the central force domain are (latus rectum) average energy/diameters of an (M_1M_2) **CSDA** system.

I will talk a fall path with my next construction. From outer to inner. What we will be doing is hopscotch skipping using average energy curves of five solar orbits; from displacement(6), Jupiter, to displacement(2), Mercury. Average energy orbit diameter curves are **CSDA** slope ± 1 events on **CSDA** dependent period time curves.

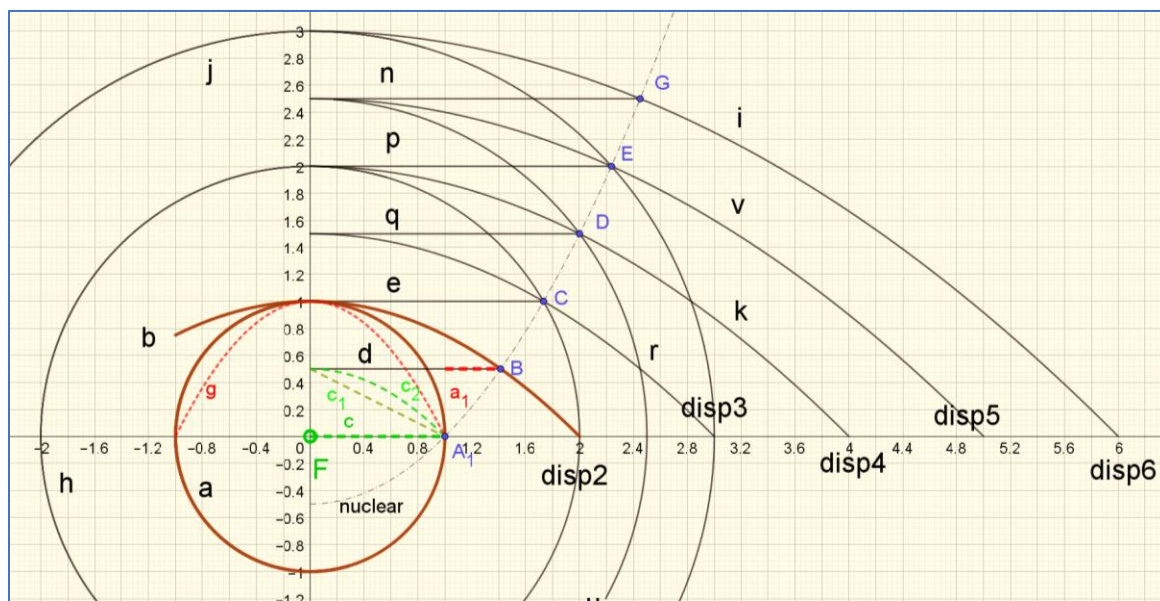


Figure 1: Fall paths of Gfield average orbit energy curves. Displacement radii of Sir Isaac Newton, outer to inner.

Fall paths begin on (M_2) period time curves. (*i, v, k, r, and b*).

Gfield orbit decay presuppose a catastrophic event. I like one monster asteroid vaporizing the Pacific sending our world spiraling outta' whatever.

Falling at ever increasing velocity toward surface of (M_1), our fall curve lacks ability to slow down and hook onto orbit energy tangents carrying velocity, enabling escape from fall acceleration tangents carrying terminal velocity (reference Frenet-Serret mechanical energy vectors).

Dynamic **CSDA** etangents.

<https://www.geogebra.org/m/br2x3fmg>

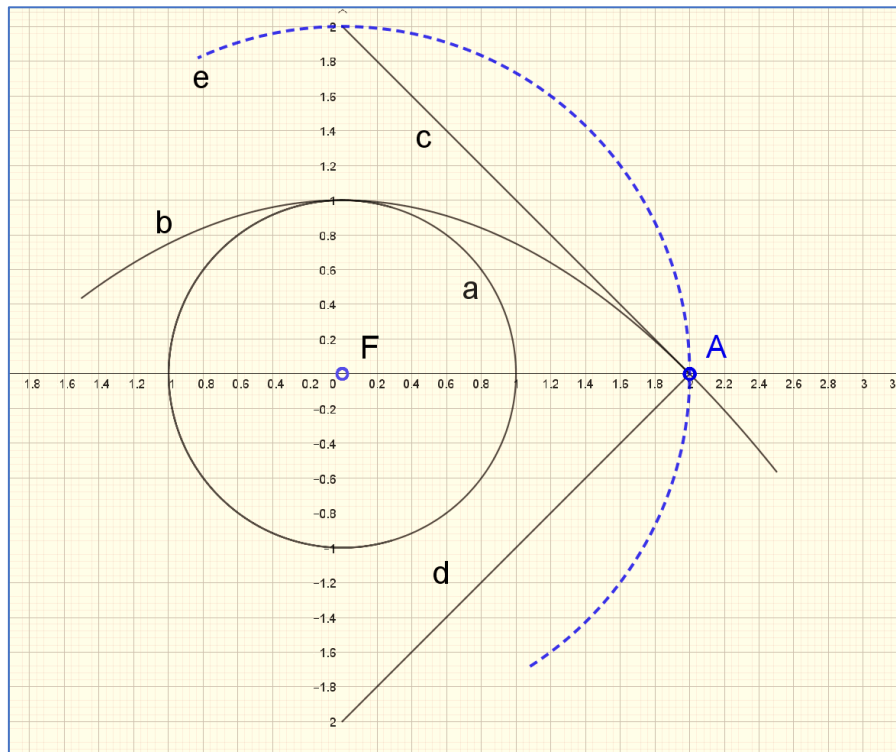


Figure 2: Using energy tangent slope to construct changing orbit diameters of (M_2) period motion.

let period time curve etangent(c) be ($-m$).

let period time curve etangent(d) be ($+m$).

Etangents ($c&d$) carve new orbit diameter(e) for (M_2) at event (A) on period time curve(b). (Reference Thales Theorem).

Back to figure1

Start at displacement space (6). Follow period time curve to (G):

$$\text{CurvedSpaceCoordinates; CSC: } \left(\sqrt[2]{\text{displcurve}(6)}, (\text{reste discovery3}) \right)$$

Rest energy range of discovery(3), (n), links our fall with spin axis of (M_1), and discovery(2.5) producing period time curve(v) of the average orbit energy

diameter on the domain of (M_1) , displacement integer(5). Capture parameters for this Gfield energy system, comprising displacement integer(5), are not quite right to brake our fall and we keep on spiraling across orbits defined by integer(5) .

Follow period time curve of displacement(5) to (E).

$$CSC: \left(\sqrt[2]{displ(5)}, (reste dicov(2.5)) \right)$$

Rest energy range of discovery(2.5), (p) , links displacement curve(5) with spin axis of (M_1) and discovery(2) producing period time curve(k) of the average orbit energy diameter on the domain of (M_1) , displacement integer(4). Capture parameters for this Gfield energy system, comprising displacement integer(4), are not quite right to brake our fall and we keep on spiraling across orbits defined by integer(4).

Follow period time curve of displacement(4) to (D).

$$CSC: \left(\sqrt[2]{displ(4)}, (reste dicov(2)) \right)$$

Rest energy range of discovery(2), (q) , links our fall with spin axis of (M_1) , and discovery(1.5) producing period time curve(r) of the average orbit energy diameter on the domain of (M_1) , displacement integer(3). Capture parameters for this Gfield energy system, comprising displacement integer(3), are not quite right to brake our fall and we keep on spiraling across orbits defined by integer(3)

Follow period time curve of displacement(3) to (C).

$$CSC: \left(\sqrt[2]{displ(3)}, (reste dicov(1.5)) \right)$$

Rest energy of discovery(1.5), (e) , links displacement curve(3) with spin axis of (M_1) . Here we find discovery(1.0) and its displacement, curve(b), connecting displacement integer(2) with (M_1M_2) spin/rotation system. Displacement integer(2), curve(b), and curve(a), happen to be my basic analytical machine for curved space energy happenings. I consider discovery curve(a) the surface acceleration curve of (M_1) , a place studied by Galileo a few centuries back. We've

fallen to ground level happenings of Uniform Accelerations and no longer experience central force orbit curves.

Curve(a) is the system independent/discovery curve. It also serves as border separation of our two infinities. Macro-space and micro-space.

Solution curves can work on central force unity curves ($r = 1$) . Crossing the border of our infinities, things become...???

Need rest my head a bit. To be continued with Things2.

All parametric solution curves are performed on average energy curves of displacement. The following indexed solution operations are on displacement energy curve 2, two units from spin, registered on the dependent **CSDA** period time curve(b).

$$\begin{aligned} \text{Reste range: } & \left(displacement^{\frac{1}{0}} \right) \longrightarrow \left(t, \frac{t^0}{-2} + \frac{displacement}{2} \right) \\ & \left(\frac{t^0}{-2} + \frac{(2)}{2} \right) /. t \rightarrow \sqrt{2} \longrightarrow \frac{1}{2} \end{aligned}$$

$$\begin{aligned} \text{Regist. Range:} & \left(displacement^{\frac{1}{1}} \right) \longrightarrow \left(t, \frac{t^1}{-2} + \frac{displacement}{2} \right) \\ & \left(\frac{t^1}{-2} + \frac{(2)}{2} \right) /. t \rightarrow \sqrt{2} \longrightarrow 1 - \frac{1}{\sqrt{2}} \end{aligned}$$

$$\text{Potential ecurve:} \left(displacement^{\frac{1}{2}} \right) \longrightarrow \left(t, \frac{t^2}{-2} + \frac{displacement}{2} \right)$$

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ParametricPlot[{{1Cos[t],1Sin[t]}, {t,  $\frac{t^2}{-4(1)} + 1$ }, {t,  $\frac{t^0}{-2} + \frac{(2)}{2}$ }, {t,  $\frac{t^1}{-2} + \frac{(2)}{2}$ },
{t,  $\frac{t^2}{-2} + \frac{(2)}{2}$ }}, {t, -2,3}, PlotRange-> {{-2,3}, {-1,2}}, AxesOrigin-> {0,0}]
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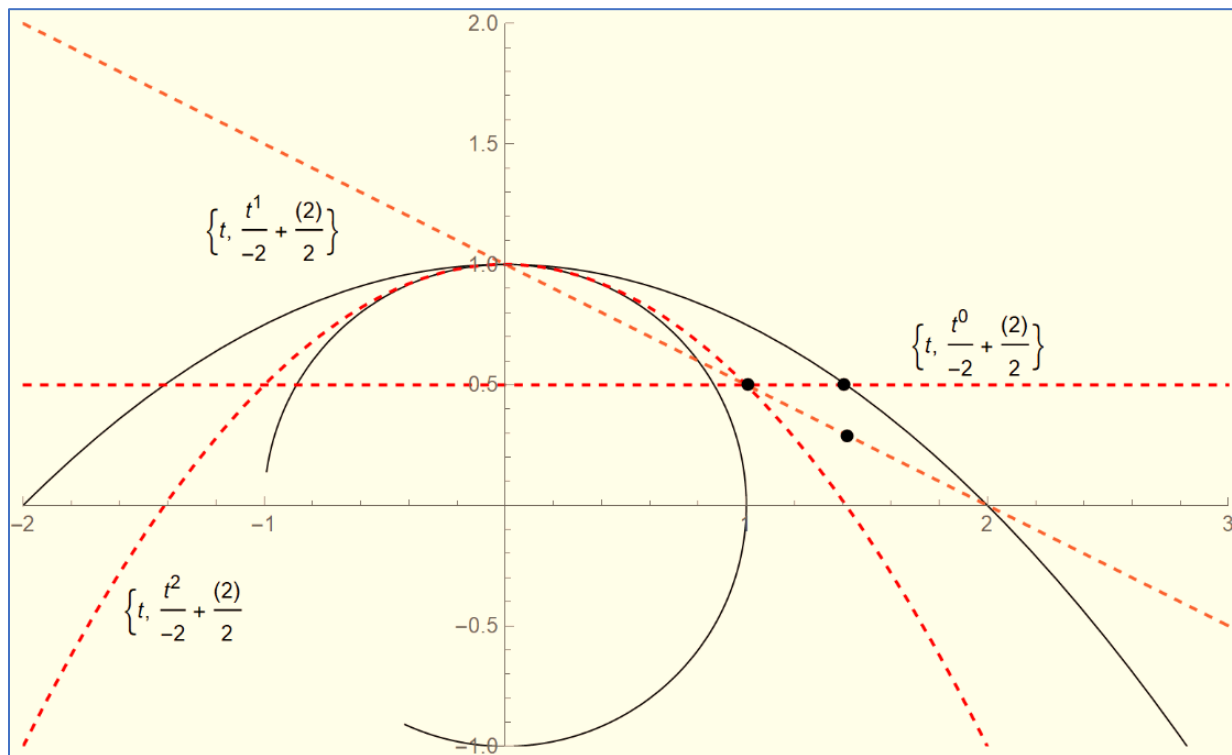
Black curves are basic curved space **CSDA** analytical machine.

Red curves:

Rest energy of discovery curve: $\{1\text{Cos}[t], 1\text{Sin}[t]\} \xrightarrow{\text{yields}} \{t, \frac{t^0}{-2} + \frac{(2)}{2}\}$.

Registration of displacement: $\{t, \frac{t^1}{-2} + \frac{(2)}{2}\}$

Potential ecurve of system, $(\sqrt[2]{\text{displacement}})$: $\{t, \frac{t^2}{-2} + \frac{(2)}{2}\}$



Cross over triangle (Black points) are curved space Rosetta Stone linking curved space mechanical energy with our predictive square space math.

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