Things(2)   (10 pages, 1800 words)

I closed a Gfield fall experience (Things1) by falling through six average $(M_1 M_2)$ diameter/energy curves. Slightly different experience from Galileo's incline plane. His experience is 'stuck to the ground' environmental controlled fall via Gfield Uniform Acceleration, or as I prefer, surface acceleration. In orbit space we have sling shot accelerations. Depending on entry orientation with these type Gfield energy curves, we can be thrown into deep space, captured in an orbit, or continue fall to surface curve of (M_1).

Review of Gfield fall path from initial discovery curve(a). Discovery(a), $\left(\frac{3}{2}\cos(t), \frac{3}{2}\sin(t)\right)$, controls visitors orbit motion via average diameter (latus rectum chord) position on period time curve(b), metered from $(-3 \leftrightarrow +3)$ on the domain of (**F**). Fig.1

Allow me a particular parametric geometry Gfield fall path across $(M_1 M_2)$ orbit curves to map a visitors plummet to (M_1). Let our fall be from initial discovery curve(a) to a final discovery curve(s) as labeled in figure1 construction. Let curve(a) and curve(s) represent average energy curves of (M_1) potential as a neighborhood experience perturbing a visitor's intrusion.

Since each **CSDA** discovery curve is specific to an average energy diameter in its neighborhood of $(M_1 M_2)$ happenings, each analytical fall is a time frame of initial (a start place) from somewhere in the neighborhood of curve(a), to some final (end place) in the neighborhood of curve(s). Essentially, we have fallen from displacement curve(3) to displacement curve(2) found on the domain of **F**.

Let parametric falls begin from that place in space with abscissa event point(B) happening on (M_2) period time curve(b).

$$\left(\sqrt{displacement(3)}, rest\ energy\ discovery(a)\right).$$

It is here we can find a direct connection with discovery curve(s) average mechanical energy orbit diameter as the **CSDA** latus rectum chord of displacement(2). Let discovery(a) rest energy, index solution curve(j), transfer fall parametrics from displacement(3) to parametrics residing on displacement(2) average orbit diameter. We now have a map for a Gfield fall from the period time curve(b), of orbit displacement(3), to the period time curve(r) of orbit displacement(2) and its discovery curve(s) produced and controlled by central force **F**.

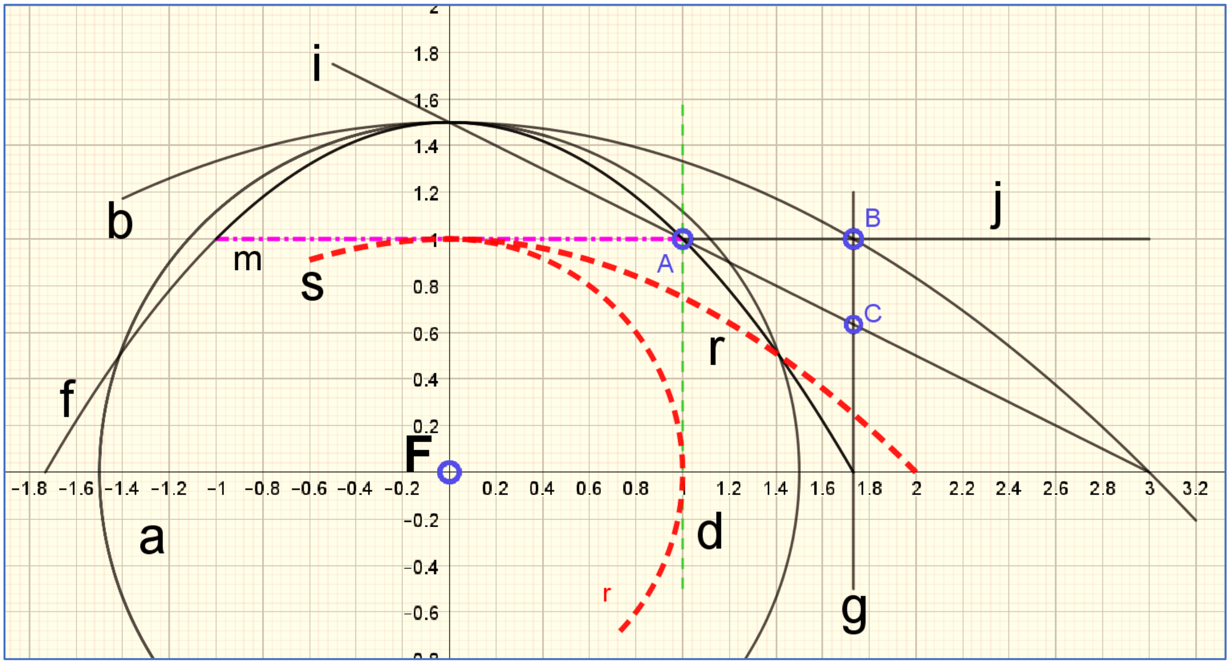


Figure 1: Gravity field map, fall from average energy displacement curve(3) to average energy displacement curve(2).

A RECAP:

We have fallen from the neighborhood of period time curve(b) of average energy displacement(3) to average energy displacement curve(2), via the neighborhood of discovery(s) period time curve(r).

CROSSOVER TRIANGLES…(ABC)

I will be exploring the rt triangle (ABC). I name them Crossovers. They link the previous displacement neighborhood, in this construction displacement(3), with the next displacement neighbor(2). Consider, I want to fall to the surface acceleration curve of (M_1). To arrive there, I must successfully traverse displacement neighborhood(2), avoiding capture or throw back to deep space.

A word about right triangle (ABC). Right triangles are the geometric foundation of our civilization. We are a right triangle species of intelligence. Crossover triangle(s) link the analytics of being, connecting curved space Central Force ME with our predictive square space mathematics.

Dynamic displacement jumping Crossovers only happen on the three index solution curves I use to analyze mechanical energy of active (M_1M_2) Gfield neighborhoods: let (n) be the average energy curve of (M_1M_2) displacement.

$$\left(n^{\frac{1}{2}}\right),\left(n^{\frac{1}{1}}\right),\left(n^{\frac{1}{0}}\right)$$

- Solution curve(f) figure1: degree(2) energy curve of Gfield potential. the central force **F** prime mover of (M_2):

$$\left(displacement^{\frac{1}{2}}\right).\left(t,\frac{t^{(index2)}}{-2}+\frac{displacement}{2}\right)$$

- Solution curve(i) figure1: degree(1) linear registration of average energy diameter as displacement with the North spin vertex of a central force field. Provides square space right triangle analytics of curved space ME.

$$\left(displacement^{\frac{1}{1}}\right).\left(t,\frac{t^{(index1)}}{-2}+\frac{displacement}{2}\right)$$

- Solution curve(j) figure1: rest energy of displacement discovery curve(a).

$$\left(displacement^{\frac{1}{0}}\right).\left(t,\frac{t^{(index0)}}{-2}+\frac{displacement}{2}\right)$$

Crossovers link displacement neighborhoods. Point(A) of every crossover, no matter how far removed from spin axis of (M_1) anchors two consecutive displacement neighborhoods (close and closer) of orbit space with the surface acceleration 1st second tile of (M_1) found by Galileo four centuries ago.

Galileo and 1st second tiles of a central force field will be explored in my S&T1.

Letters change in my constructions. We are dealing with changing neighborhoods. Displacement neighborhoods are a **CSDA** analytical standard, look the same regardless of (M_2) displacement from (M_1) spin. Neighborhood street signs for lines and curves of consecutive displacement communities I explore will necessarily be different. Crossovers identities (A, B, C) are a **CSDA** constant, just as (M_1) and (M_2) is and will not change.

Falling through a displacement(2) Crossover takes us to the nuclear cracks composing surface acceleration curves, but do they work sufficiently to penetrate and work Quantum Space ME beneath surface acceleration as well as they seem to cruise mechanical energy curves of Classic Big? Might happen, need spend time thinking and searching.

Falling through nuclear cracks or Exploring Quantum Space with the tools of Calculus. (figure2)

Let capture of fall through displacement(2) neighborhood fail. Fall along period time curve(b) of displacement(2) brings us to point$\left(B\colon\left(\sqrt{2}, 2^{\frac{1}{0}}\right)\right)$ connecting curve(a) rest energy via curve(d) with CF spin @$\left(\frac{1}{2}\right)$.

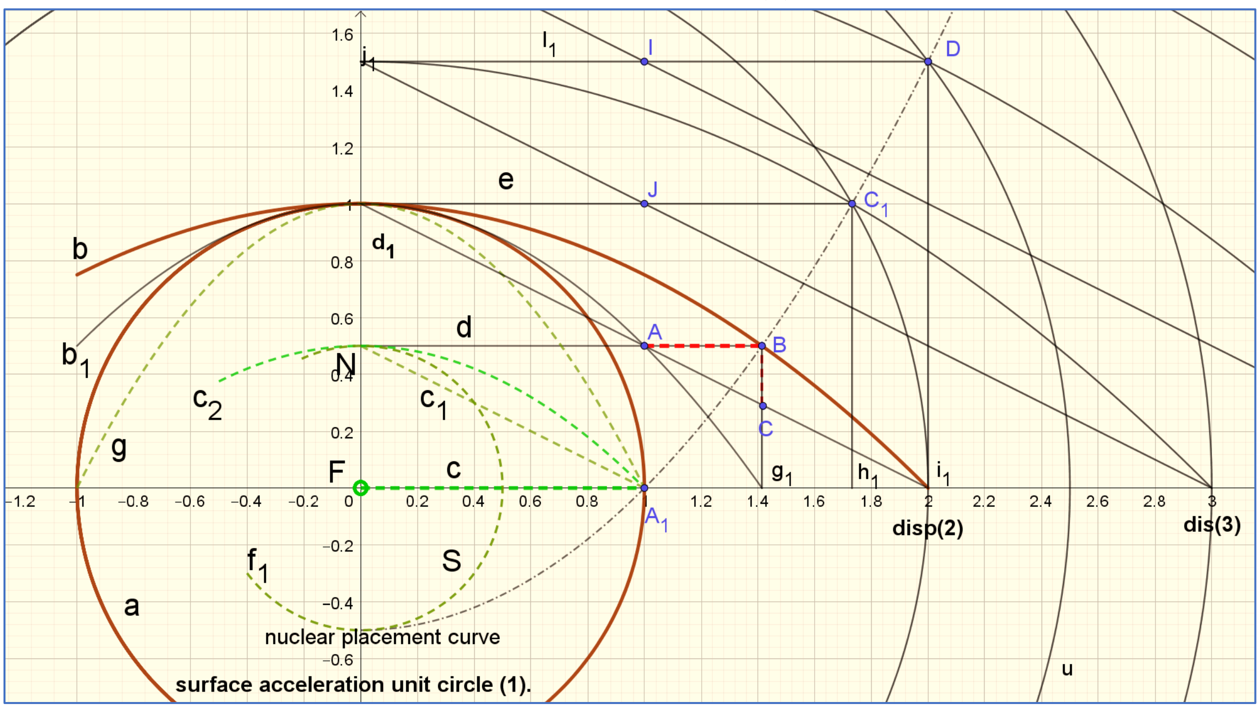


Figure 2: using a crossover map to fall from displacement neighborhood(3) to rest energy discovery curve(a); curve(d), via (C_1) and (B). Discovery curve(f_1), lies beneath surface acceleration curve(a), source discovery curve of displacement(2). Pathway to a Quantum world?

A **CSDA** unit one curve, as is (a), separates our infinities with surface acceleration curves. (M_1) surface boundary is Galileo's Uniform Surface Acceleration, stuck to the Earth sticky glue from the stuff inside curve(a). Orbit space, above and beyond surface accelerations of curve(a), is captured period motion of Sir Isaac Newton metered on period time curves.

An index(0) solution curve operating on Uniform Surface Acceleration curve(a), defines surface acceleration rest energy with respect to central force spin. Essentially, we fall from macro space Classic Big into micro space quantum small, finding $\left(\frac{1}{2}\right)$unit of (M_1) spin as an ME range limit of a new discovery curve (f_1). Surface Acceleration side of Curve(a), in a rest energy state, means no mechanical work being done top side. No (M_2) orbit or Uniform Acceleration happenings to be analyzed.

To get below curve(a) surface acceleration, I apply parametric index solution curve geometries against surface acceleration curve(a) of (M_1), construct rest energy path of (M_1) curve(d), and fall through the abundant nuclear space of (M_1) surface acceleration phenomena to a place in time and space where being becomes an inverse experience. Here's how to fall through the field connections of nuclear space.

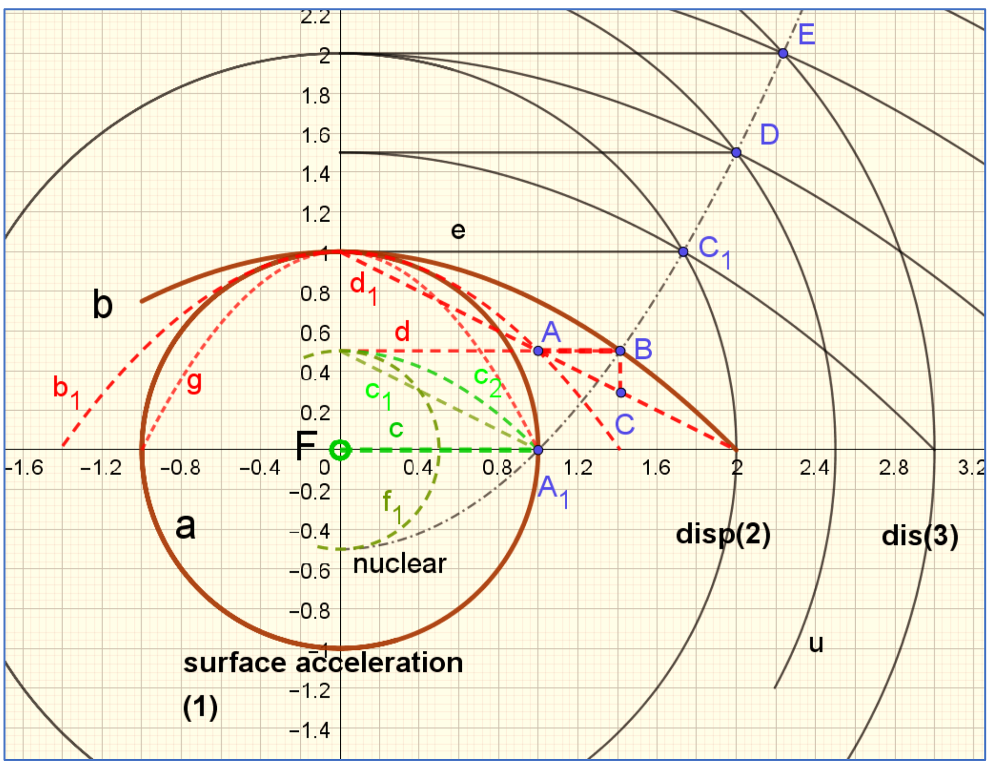


Figure 3: only one index(0) rest energy solution curve passes across Gfield central force surface acceleration curve(a). That is index(0) solution curve(d), rest parametrics of **CSDA** independent/discovery curve(a), surface acceleration curve of (M_1) and source discovery of displacement(2).

Rest energy curves of surface acceleration discovery inquiries are always a half step down field spin. They source from current discovery as (place of initial), connecting ‘initial’ discovery, via rest energy link (index(0) solution curves), with a new discovery curve $\left(\frac{\pi}{2}\right)$ spin place as (place of final).

Rest energy below surface acceleration is Quantum field happenings. Rest energy curves above surface acceleration belong with Classic Big happenings.

I apply index(0) solution curve to discovery(1) curve(a), using displacement integer(2) as placement numerator to find rest energy of discovery(1) at (spin level $\left(\frac{1}{2}\right)$): $\left(t, \frac{t^0}{-2} + \frac{2}{2}\right)$

I construct curve(f_1), the first discovery curve definition found by rest energy mapping: $\left(\frac{1}{2}\text{Cos}[t], \frac{1}{2}\text{Sin}[t]\right)$

We meet our first nuclear independent discovery curve (f_1), a proton. They can exist alone; however, I am in Mendeleev’s world and suspect this to be half an element, Protium. Where is our electron cloud?

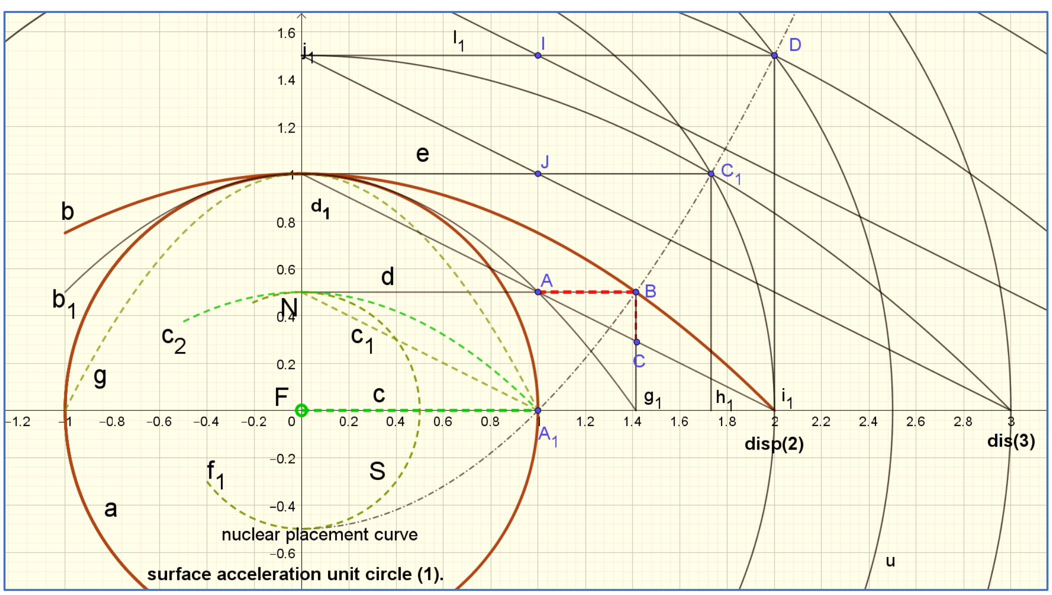


Figure4: Goin' nuclear with green. Exploring Quantum, ME in nuclear space beneath surface acceleration curve(a) using green.

This next set of index solution curves operate on Protium proton (f_1).

Let green set of curves be

first foray ever into nuclear Quantum space:

- Rest energy of (f_1), curve(c): $\left(t, \frac{t^0}{-2} + \frac{1}{2}\right)$. Is the domain of Protium, no range. Protium occupies integer1 space, half for nucleus and half for ecloud.
- Linear registration curve(c_1) with (f_1) spin: $\left(t, \frac{t^1}{-2} + \frac{1}{2}\right)$. Curve$(a)$ is now dependent on Z# becoming electron cloud.
- Binding energy curve(g) of Protium nucleus (f_1) and ecloud (a): $\left(\sqrt{(f_1)}\right)$ $\left(t, \frac{t^2}{-1} + \frac{2}{2}\right)$. Curve$(g)$ is relative connection of Big Space dependent period time curves(b). No longer link of (M_1) potential with (M_2) motion, now links binding energy of protium element, ecloud with nucleus.

Placement numerator(2) for curve(g), is taken from Big Space side of central force surface acceleration curve(a), discovery curve for domain displacement(2).

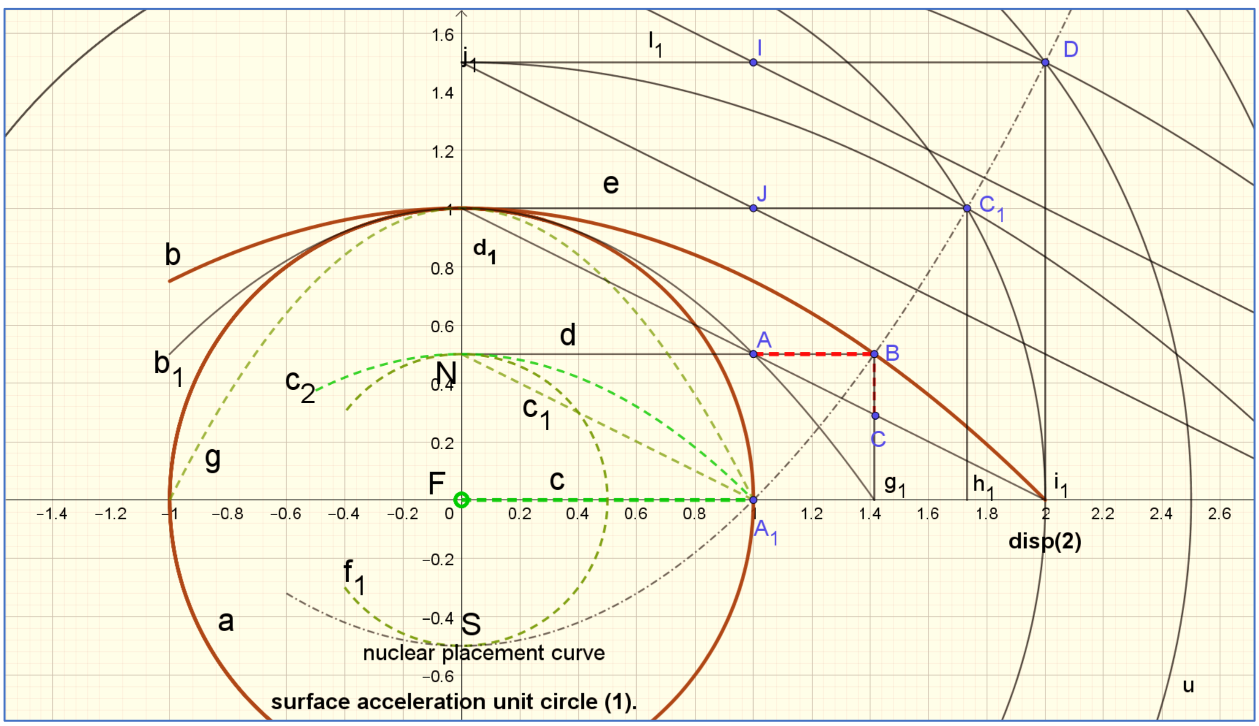


Figure 5: nuclear registration with surface acceleration

My index solution curves operating on (f_1); (c, c_1, c_2) link central force spin with Surface Acceleration curve of (M_1). An accretion portal for massive collections of matter in deep space and beyond. Relative connection of the Quantum World with Classic Big is mapped with co-nuclear placement curve $(+c_2)$ sourcing from proton South Pole.

I see a specific difference. Big Space is and has always been displacement. That space beyond influence of Galileo's Kinematics. Small Space is the world of placement. The working collection of kinematic ME. Those things together, nuclear, and those things apart, deep space separation of together collectives.

I will not cover nuclear geography, analytics, or dynamics here in this exploratory. This paper is about how I got there not what I found there. Found items are explored with S&T3.

Enough. Need to let my mind drain off excess stuff floating around in here.

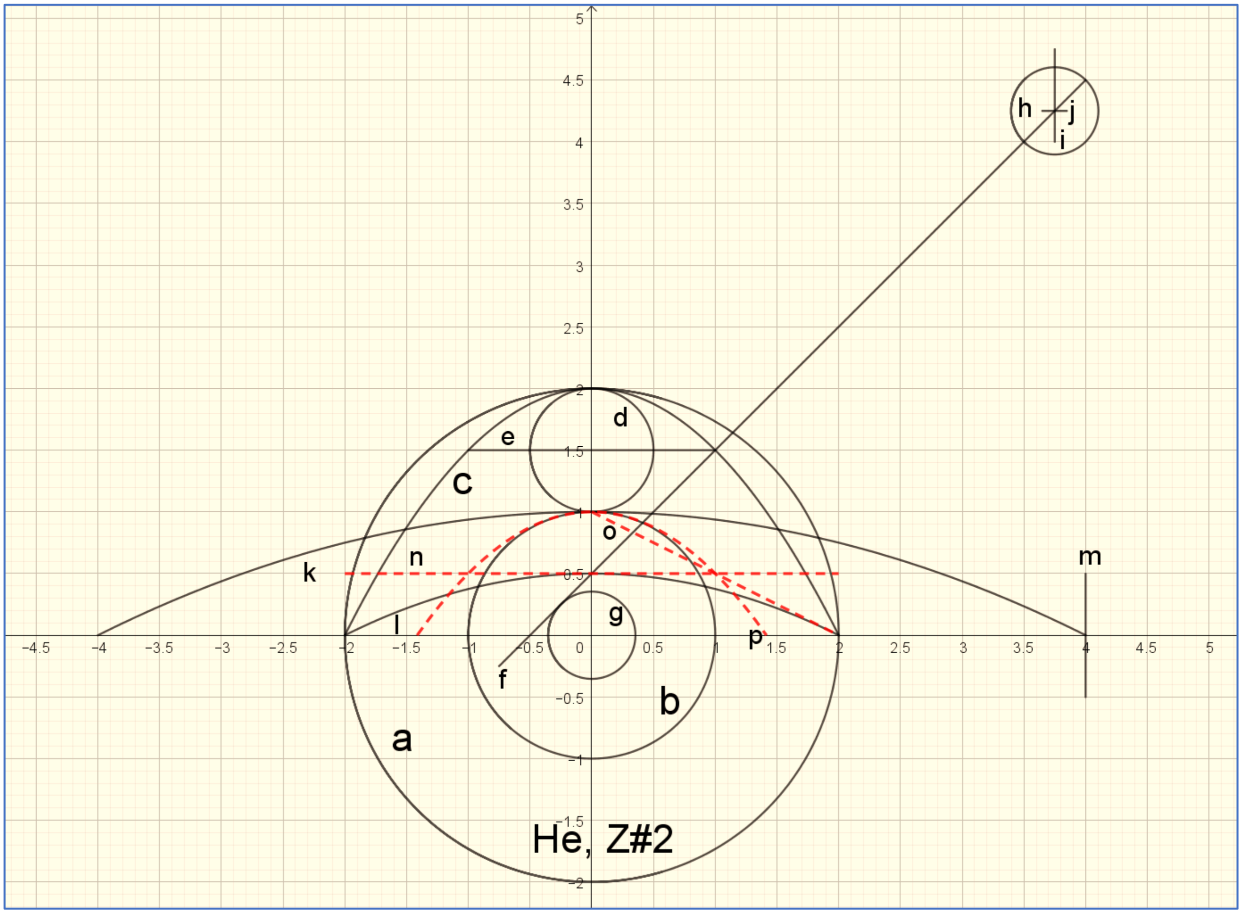
Intend to take a few weeks off for Thanksgiving and Christmas. Going to NJ.

As my nephew and godson (JH III) once told me. Keep it simple.

Intend to script two MP4's about Things(1 & 2) for production and posting 2023.

ALΣXANDΣR; CEO SAND BOX GEOMETRY LLC

I close with He, Z#2 geography.



Z#2 and displacement#2
ALΣXANDΣR

Name	Description	Caption
Curve a	Curve(2cos(t), 2sin(t), t, -5, 5)	Dependent curve; ecloud.
Curve c	Curve(t, t² / -2 + 2, t, -2, 2)	Binding parabola; ecloud to nucleus.
Curve b	Curve(cos(t), sin(t), t, -4, 4)	Place space for nucleus.
Curve d	Curve(0.5cos(t), 0.5sin(t) + 1.5, t, -4, 4)	neighborhood binding parabola (p).

Curve e	Curve(t, 1.5, t, -1, 1)	Latus redtum binding parabola
Curve g	Curve(sqrt(2) / 4 cos(t), sqrt(2) / 4 sin(t), t, -4, 4)	nucleus
Curve h	Curve(sqrt(2) / 4 cos(t) + 15 / 4, sqrt(2) / 4 sin(t) + 17 / 4, t, -4, 4)	Spin alignment bond ring
Curve f	Curve(t, (1 + 2t) / 2, t, -0.75, 4)	Tan normal with BP +latus rectum
Curve j	Curve(t, 17 / 4, t, 3.65, 3.85)	Ordinate bond ring center
Curve k	Curve(t, t^2 / -16 + 1, t, -4, 4)	Accretive appproach limits for rotation of He, Z#2 atoms. Big space latus rectum.
Curve l	Curve(t, t^2 / -8 + 1 / 2, t, -2, 2)	
Curve i	Curve(15 / 4, t, t, 4, 4.75)	Abscissa bond ring center.
Curve m	Curve(4, t, t, -0.5, 0.5)	approach limit for He on nuclear domain.
Curve n	Curve(t, t^0 / -2 + 1, t, -2, 2)	Nuclear rest energy curve.
Curve o	Curve(t, t^1 / -2 + 1, t, 0, 2)	Nuclear registration of atom with central force spin.
Curve p	Curve(t, t^2 / -2 + 1, t, -sqrt(2), sqrt(2))	Nucleus potential e curve.

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