Things(2) (12 pages, 2045 words)

I closed a Gfield fall experience (Things1) by falling through six average (M_1M_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_1M_2) orbit curves to map a visitor's plummet to (M_1) surface curve. Something like an inclined plane using parametric solar slope. 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) period time curves$(b\ and\ r)$ represent average energy curves of (M_1M_2). A closed potential system perturbing a visitor's fall through experience penetrating a gravity field (M_1M_2) closed neighborhood.

Since each **CSDA** discovery curve is specific to an average energy diameter in its neighborhood of (M_1M_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).

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

We begin our fall from orbit discovery(a) by constructing a Frenet Serret acceleration vector **N**, a terminal velocity hook from surface acceleration curve of (M_1).

Released from control of discovery(a) via rest energy of (a), curve(j); we accelerate toward spin axis of (M_1). At unit(1) range definition of spin potential, we find discovery curve(s) and its period time curve(r). The latus rectum chord of period time curve(r) is the average mechanical energy orbit diameter 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**.

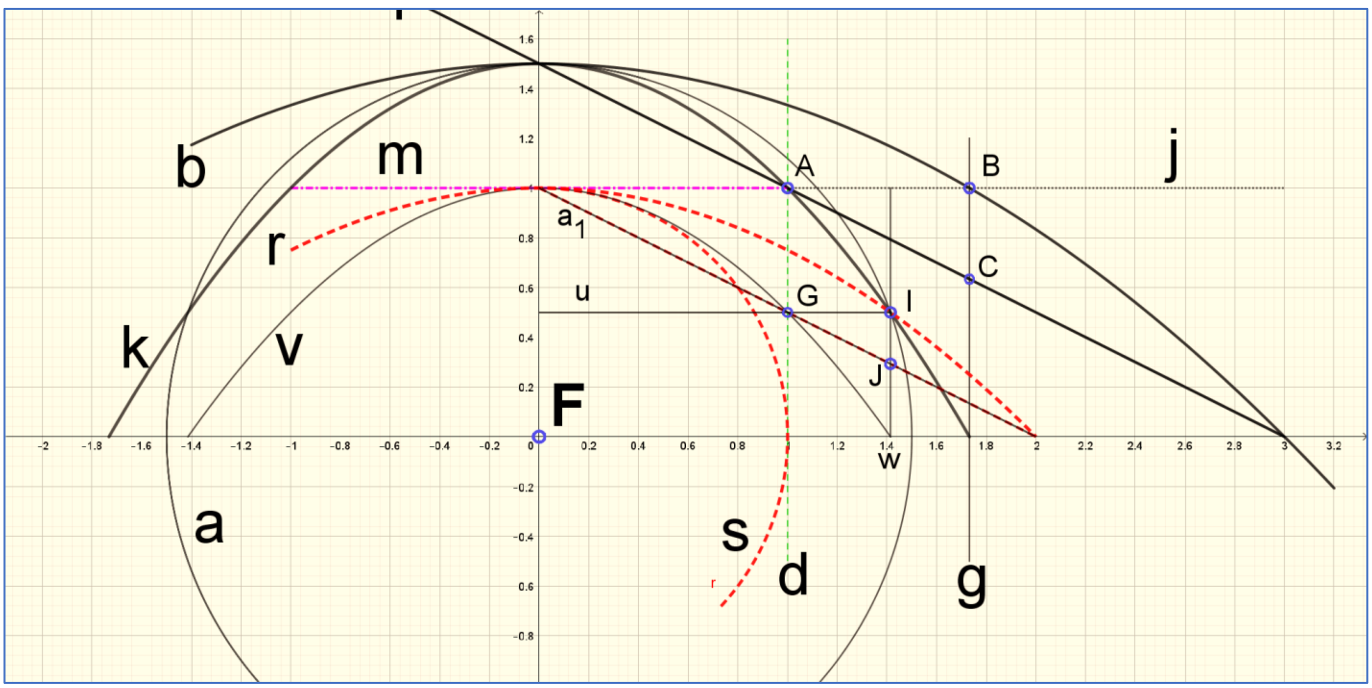


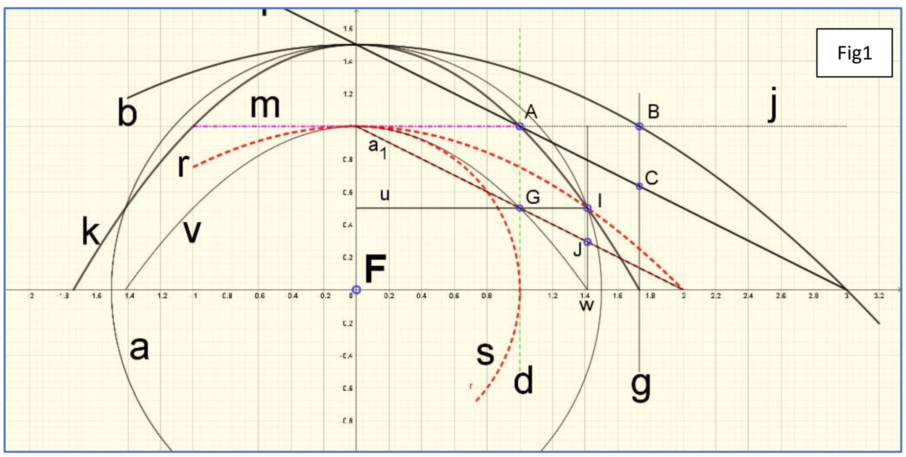
Figure 1: Gravity field map, fall from average energy displacement curve(3) to average energy displacement curve(2). (Gfield fall root3)

A RECAP:

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

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 consecutive closer neighbor displacement(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. Crossover $(GIJ; fig1)$ provides my map to do so, linking displacement(2) space with the surface acceleration curve of (M_1) via rest energy of discovery curve(s), curve(u).



A word about right triangles (ABC) and (GIJ). 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 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. The period time curve latus rectum coincident with the domain of **F**.

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

Refence figure(2); displacement(2): Exploring the surface acceleration curve of Central Force (M_1).

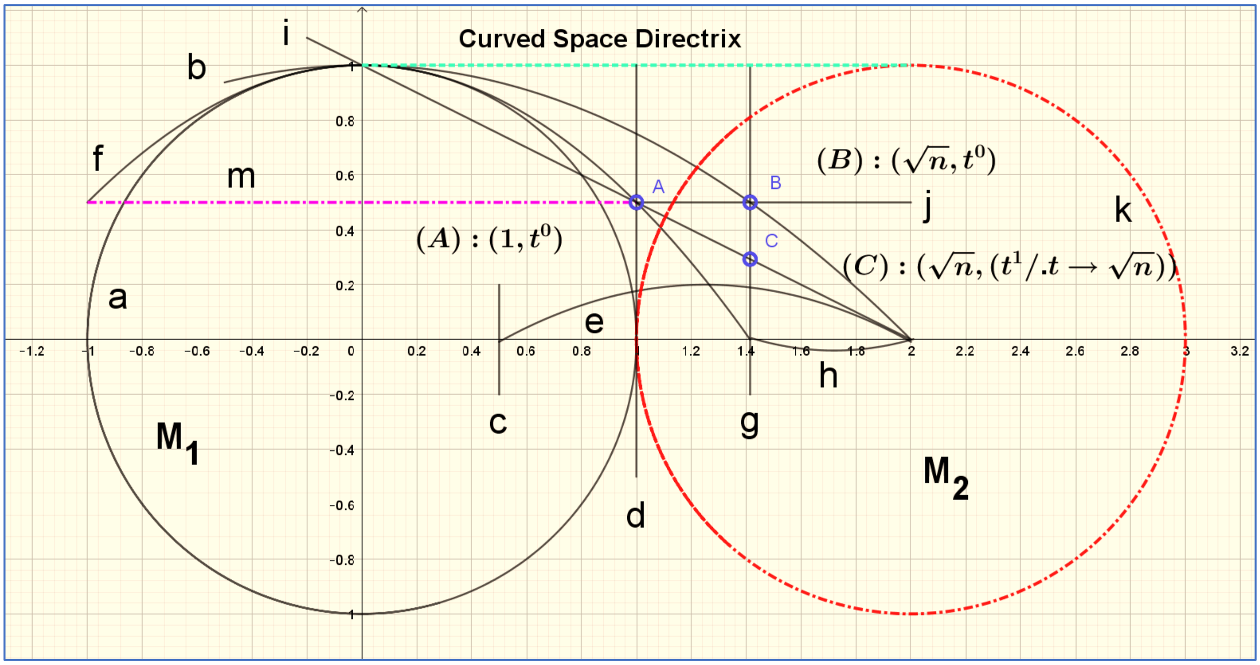


Figure 2: arriving at surface curve delineation of macro space and micro space, unity curve(a). (Gfield fall. crvspsqsprt(2).ggb)

- Index Solution Curve(f): figure2: degree(2) energy curve of Gfield potential existing on displacement(2) diameter. The central force **F** prime mover of (M_2) @ disp(2):

$$\left(displacement^{\frac{1}{2}}\right) \text{Curved Space Coordinates} \left(t, \frac{t^{(index2)}}{-2} + \frac{2}{2}\right)$$

- Index Solution Curve(i): figure2: 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.

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

- Index Solution Curve(j): figure2: rest energy of discovery curve(a).
  - $\left(displacement^{\frac{1}{0}}\right) csc \left(t, \frac{t^{(index0)}}{-2} + \frac{displacement}{2}\right)$

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 of orbit space (close and closer) with the surface uniform 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. Neighborhood street signs for lines and curves of consecutive displacement communities I explore will necessarily be different. Displacement neighborhoods are a **CSDA** analytical standard, look the same regardless of (M_2) displacement from (M_1) spin. Connecting crossovers identities (A, B, C) are a **CSDA** constant.

Falling through a displacement(2) Crossover takes us to the nuclear cracks composing surface acceleration curves, but will crossovers 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 above surface acceleration? Might happen, need spend time thinking and searching.

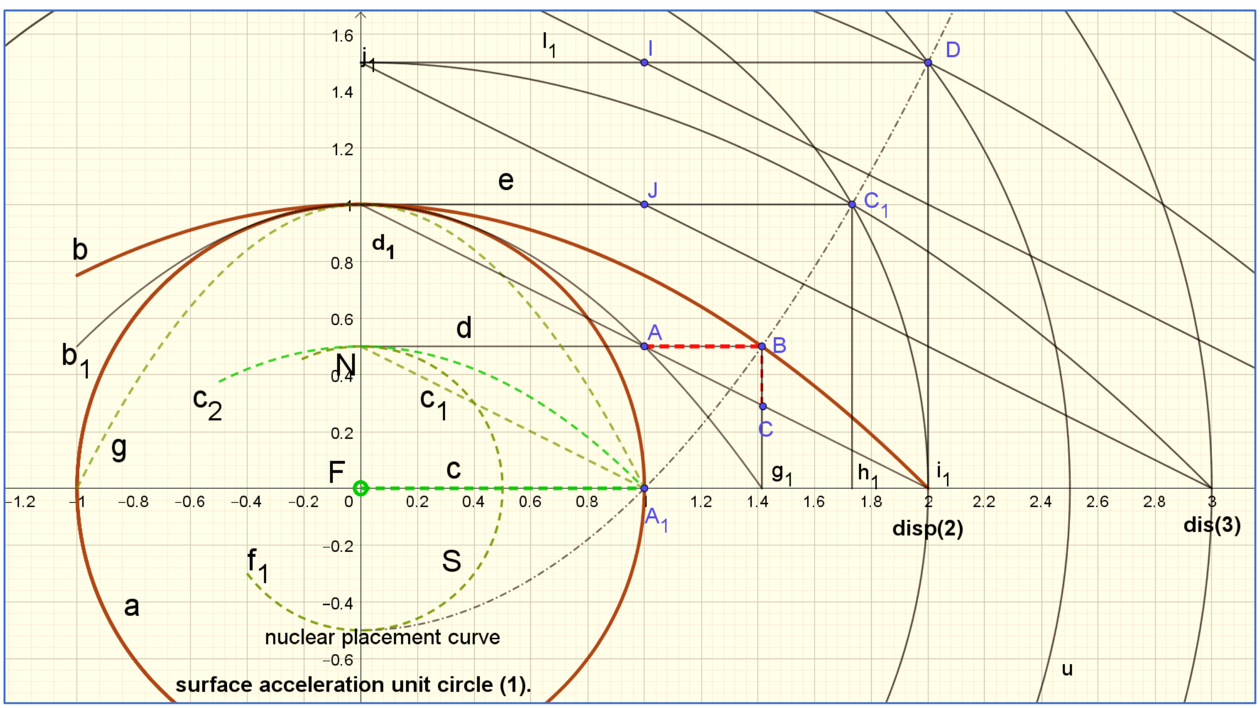


Figure3: Goin' nuclear with green. Exploring Quantum, ME in nuclear space beneath surface acceleration curve(a) using green. (blog.specifics. index0solutioncrv)

Falling through nuclear cracks or Exploring Quantum Space with the tools of Calculus. (figure3)

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

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 such is curve(b).

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). Above Surface Acceleration side of Curve(a), a rest energy state means no mechanical work being done top side. No (M_2) orbit *or* Uniform Acceleration Kinematic happenings to be analyzed.

To penetrate curve(a) surface acceleration, I apply parametric index solution curve geometries against surface acceleration curve(a) of (M_1), construct rest energy path of curve(a) connecting with spin of (M_1) via 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 Central Force Field Boundaries into connections of nuclear space.

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: $\left(\frac{1}{2}\mathrm{Cos}[t], \frac{1}{2}\mathrm{Sin}[t]\right)$

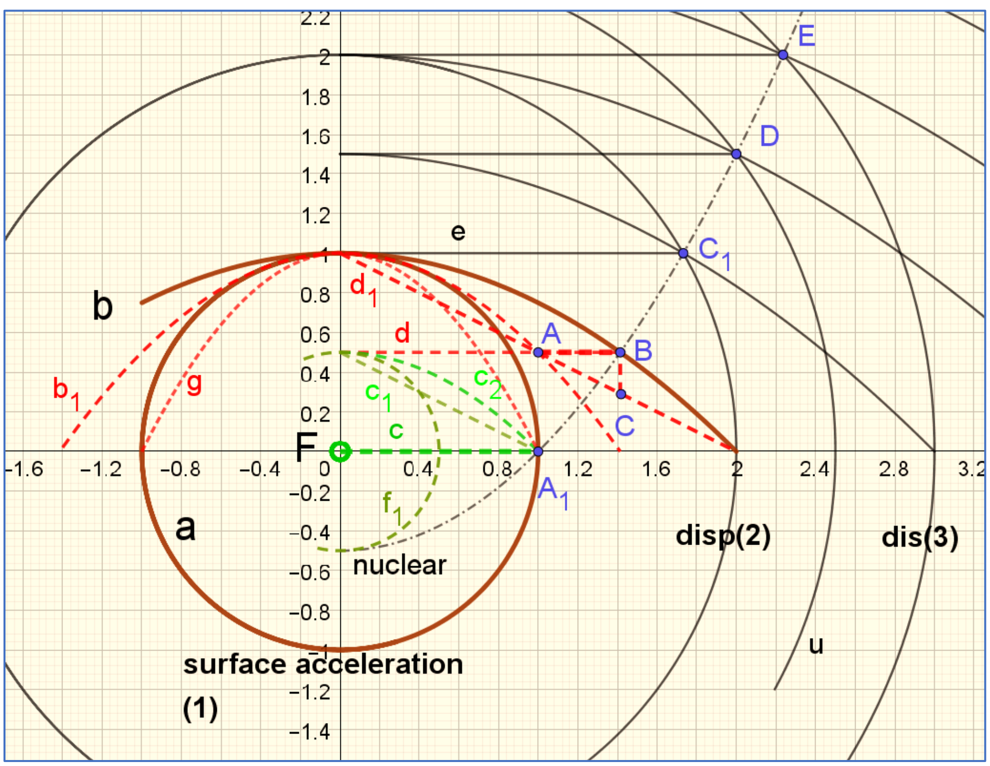


Figure 3 again: only one index(0) rest energy solution curve passes across Gfield central force surface acceleration curve(a). That is index(0) solution curve(d), rest parametrics of **CSDA** independent/discovery curve(a): surface acceleration curve of (M_1) and source discovery of displacement(2).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

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?

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

Let green set of curves be our 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 $\{Z\#\text{Cos}[t], \text{Z}\#\text{Sin}[t]\}$. With ecloud comes Quantum range. Setting independent parameters with nuclear potential, a degree(2) curved space, dependent parameters with electron cloud.
- Curved space coordinate of Protium. Binding energy curve(g) of Protium nucleus (f_1) and ecloud (a) of Protium:
    - $\{1, \sqrt[2]{1}\} \leftarrow csc \rightarrow \left(t, \frac{t^2}{-1} + \frac{2}{2}\right)$

Curve(g), quantum element dependent binding curve of ecloud and nucleus, work as $(M_1 M_2)$ 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.

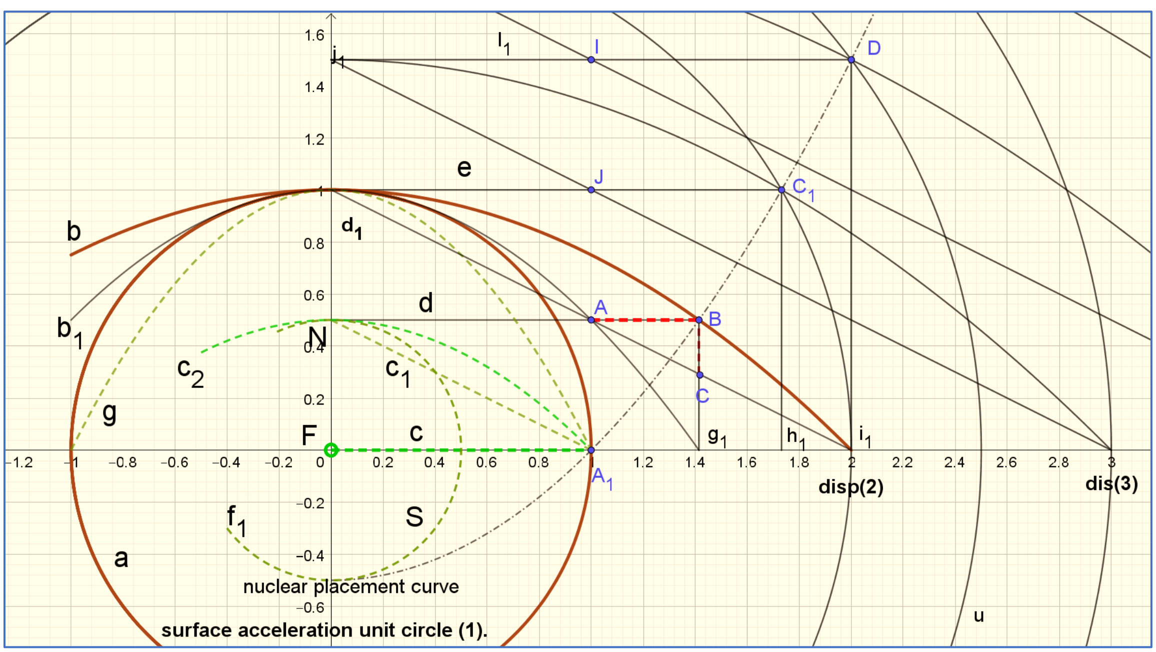
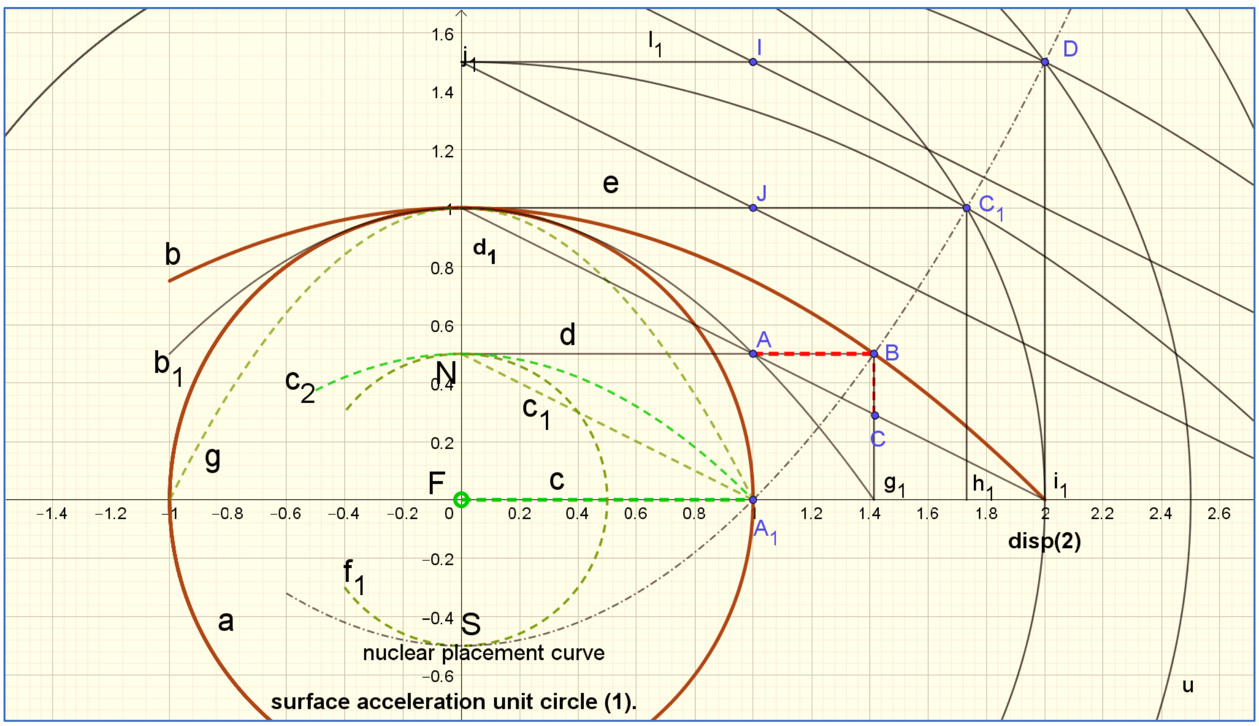


Figure 3 again: (M_1) Source Primitive nuclear *composition* registration with surface acceleration of (M_1).

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

My index solution curves operating on (f_1); (c, c_1, c_2) link nuclear central force spin with Surface Acceleration curve of (M_1) using (M_1) surface curve as displacement curve. Gfield collective of stuff inside is spherical. Nuclear placement curve provides accretion window for massive mechanical collection of matter in deep space and beyond. This portal provides return influence of the Quantum World with Classic Big mapped with positive slope nuclear placement curve sourcing from proton South Pole, symmetry partner of negative slope potential curve(c_2).



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 fixed 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. Findings are explored with S&T3.

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

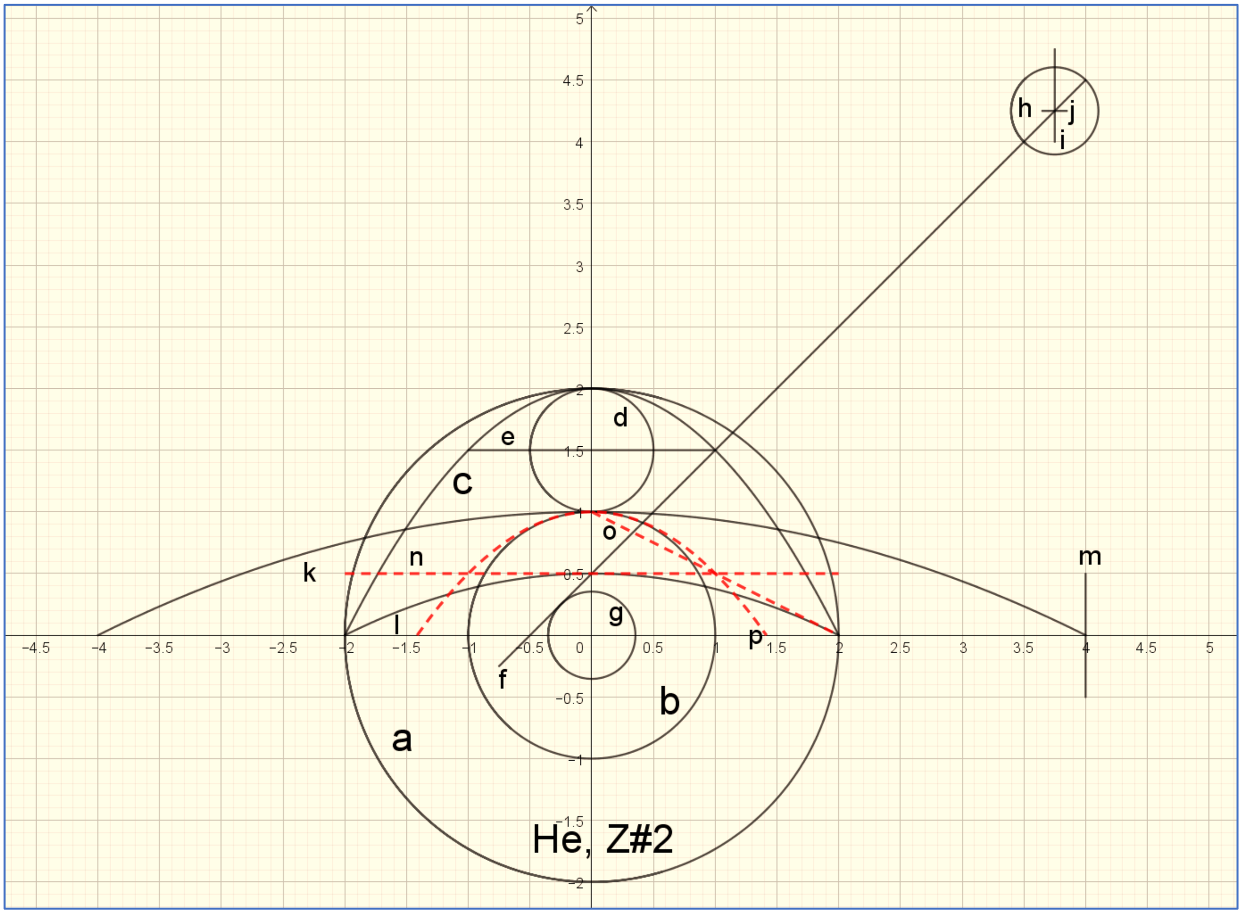
Intend to take a few weeks off for Thanksgiving and Christmas. Going to NJ.

As my nephew and godson (JH III) once told me. Keep it simple (not easy to do!).

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
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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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