## 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 $\left(B:\left(\sqrt{2}\right.\right.$, curve $\left.\left.(a)^{\frac{1}{0}}\right)\right)$ 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 $\left(M_{1}\right)$ spin as an ME range limit of a new discovery curve $\left(f_{1}\right)$. 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 $\left(M_{1}\right)$, construct rest energy path of curve $(a)$ connecting with spin of $\left(M_{1}\right)$ via curve $(d)$, and fall through the abundant nuclear space of $\left(M_{1}\right)$ surface acceleration phenomena to a place in time and space where being becomes an inverse experience. Alice in Wonderland Stuff, hello Grace Slick and Jefferson Airplane. Here's how to fall through the Central Force Field Boundaries into connections of nuclear space.

Fig3: 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 (it's) displacement integer(2) as placement numerator to find rest energy of discovery ( $a$; integer 1 ) at (spin level $\left(\frac{1}{2}\right)$ ):

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

I construct curve $\left(f_{1}\right)$, the first discovery curve definition found by rest energy mapping:

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

We meet our first nuclear independent discovery curve $\left(f_{1}\right)$, 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?


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 $\left(M_{1}\right)$ and source discovery of displacement(2). This, (curve(a)), is Galileo's surface acceleration curve.

This next set of index solution curves operate on Protium proton curve $(h)$ fig(4). Let green set of curves be our first index solution foray into nuclear SpaceTime. Let Rest energy of protium proton ( $1^{\text {st }}$ discovery on CF spin), mapped from point $(D)$ of displacement(2); curve $(h)=0$.

$$
\left(\frac{t^{\text {index }}}{-2}+\frac{\text { displ }(1)}{2} / . \text { index } \rightarrow 0\right) ; \quad\left(-\frac{1}{2}+\frac{\operatorname{displ}(1)}{2}\right)=0 .
$$

Rest energy of protium has fallen to (0 units range) on CF spin axis. Protium proton as a discovery(curve) is itself mapped using point (D) of displacement(2) to find rest energy of surface acceleration curve $(a)$. Rest energy curves source from discovery curves and their displacement integers. Let curve ( $h$ ) be Z\#1 proton. Last relative S\&T placement/discovery of curve $(h)$ will be unity curve(a), pure surface acceleration explained by Galileo. We are no longer in Sir Isaac Newton's S\&T2. We have arrived on surface curve of $\left(M_{1}\right)$. We now use surface acceleration numerator(1) as position in space placement term. We have in figure4:

- Rest energy Curve $(c):\left(\frac{\text { tindex }}{-2}+\frac{\text { displ(1) }}{2} /\right.$ index $\left.\rightarrow 0\right) ;\left(-\frac{1}{2}+\frac{\text { displ(1) }}{2}\right)=0$. Range is 0 , but displacement (surface accelerations) event is at domain +one. Curved space coordinates become $(1,0)$
- Registration Curve $\left(c_{1}\right):\left(\frac{t^{\text {index }}}{-2}+\frac{\text { displ(1) }}{2} / \cdot\right.$ index $\left.\rightarrow 1\right)$;

$$
\left(t, \frac{\text { displ }}{2}-\frac{t}{2}\right) ;
$$


-1slope event intercept is $\left(\frac{1}{2}\right)$ spin unit range connecting domain displacement(1) with nucleus spin.

- curve $\left(c_{2}\right)$; system potential. $\left(\frac{\text { tinex }}{-2}+\frac{\text { displ(1) }}{2} /\right.$ index $\left.\rightarrow 2\right)$; $\frac{\text { displ }}{2}-\frac{t^{2}}{2}$



Figure 4: beneath Galileo's Uniform Surface Acceleration curve (a) we find our first Z\# proton.

Degree(2) parabola with vertex at $\left(\frac{1}{2}\right)$ spin range. Marks CSDA LR potential on nuclear domain $(-1 \leftrightarrow+1)$.

Let the nuclear latus rectum chord I need to construct my CSDA analytical machine for Quantum analytics coincide with protium rest energy found below surface
curve (a). Let my CSDA latus rectum chord be the property of micro infinite world of curvature. My quantum nucleus latus rectum base is the foundation of our elements constructed in nuclear micro infinity. Held forever within the unity curve separation of our infinities, residing with the population group known as curvature.

A perfectly spherical proton, curve $(h)$ fig4, providing a CSDA LR reference space upon which to build Mendeleev elements.

Let the +LR be the electron cloud radius, determined by Z .
Protium's electron cloud becomes surface acceleration curve (a). Electron clouds are now dependent on independent nucleus $\mathrm{Z} \mathrm{\#}$.

## REVERSIBLE CONNECTIONS

Let fig4 points (A,B,D, and C) provide Gfield displacement curves of Sir Isaac Newton, a map for discovery and discovery rest. Providing access into and out of closed neighborhood potential, eventually leading to surface acceleration curve of $\left(M_{1}\right)$ curve $(a)$. I have shown how one can fall through the nuclear composition structuring surface acceleration curves of $\left(M_{1}\right)$.

Let the proton $S$ curve $(l)$ of protium connect with macro infinite space. This return to macro infinity lets massive collections of protium dust collect in regions of deep space using Gfield ME.

Elements in the quantum world of Earth also collect. Elements and molecules happen massive collections providing human perception of our mountains and oceans giving form to our God given Earth. They do so with nuclear curve(I) quantum connection with CF Gfield square space ME happenings.

I see specific differences sharing my life with central force fields, space, and time. Big Space is and has always been displacement. That space beyond influence of Galileo's Kinematics. A place for open togetherness. Small Space is the world of placement, a confined togetherness. Those things together, the nuclear aggregate, and those things apart, deep space separation of amalgamated 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. ALIXANDIR; CEO SAND BOX GEOMETRY LLC

## My construction of Protium. The predominant one in God's Creation.

Let curve $(a)$ be the protium nucleus.
Let curve $(d)$ be electron cloud of protium.
Let curve $(e)$ be the binding parabola of an element, the energy required to keep nucleus and ecloud together.


Let $[(+$ latus rectum, $(F B)]$ be rest energy of protium.

- Rest energy Curve $(F B):\left(\frac{t^{\text {index }}}{-2}+\frac{\text { displ(1) }}{2} / . \operatorname{index} \rightarrow 0\right) ;\left(-\frac{1}{2}+\frac{\text { displ(1) }}{2}\right)=0$.
- Registration Curve $(i):\left(\frac{t^{\text {madex }}}{-2}+\frac{\text { displ(1) }}{2} /\right.$ index $\left.\rightarrow 1\right) ;\left(t, \frac{\text { displ }}{2}-\frac{t}{2}\right)$;
- curve $\left(c_{2}\right)$; system potential. $\left(\frac{t^{\text {madex }}}{-2}+\frac{\text { displ(1) }}{2} / \cdot\right.$ index $\left.\rightarrow 2\right) ; \frac{\text { displ }}{2}-\frac{t^{2}}{2}$


## I close with He, Z\#2 geography.



Z\#2 and displacement\#2
ALEXANDER

| Name | Description | Caption |
| :--- | :--- | :--- |
| Curve a | Curve $(2 \cos (\mathrm{t}), 2 \sin (\mathrm{t}), \mathrm{t},-5,5)$ | Dependent curve; ecloud. |
| Curve c | Curve $\left(\mathrm{t}, \mathrm{t}^{2} /-2+2, \mathrm{t},-2,2\right)$ | Binding parabola; ecloud to nucleus. |
| Curve b | Curve $(\cos (\mathrm{t}), \sin (\mathrm{t}), \mathrm{t},-4,4)$ | Place space for nucleus. |


| Curve d | Curve $(0.5 \cos (t), 0.5 \sin (t)+1.5, t,-4$, <br> 4) | neighborhood binding parabola (p). |
| :---: | :---: | :---: |
| Curve e | Curve(t, 1.5, t, -1, 1) | Latus redtum binding parabola |
| Curve g | $\begin{aligned} & \text { Curve(sqrt(2) / } 4 \cos (t), \operatorname{sqrt}(2) / 4 \\ & \sin (t), t,-4,4) \end{aligned}$ | nucleus |
| Curve h | $\begin{aligned} & \text { Curve(sqrt(2) / } 4 \cos (\mathrm{t})+15 / 4, \\ & \operatorname{sqrt}(2) / 4 \sin (\mathrm{t})+17 / 4, \mathrm{t},-4,4) \end{aligned}$ | 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( $\left.\mathrm{t}, \mathrm{t}^{2} /-16+1, \mathrm{t},-4,4\right)$ | Accretive appproach limits for rotation of $\mathrm{He}, \mathrm{Z} \mathrm{\# 2}$ atoms. Big space latus rectum. |
| Curve I | Curve( $\left.\mathrm{t}, \mathrm{t}^{2} /-8+1 / 2, \mathrm{t},-2,2\right)$ |  |
| 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( $\left.\mathrm{t}, \mathrm{t}^{0} /-2+1, \mathrm{t},-2,2\right)$ | Nuclear rest energy curve. |
| Curve o | Curve(t, $\left.\mathrm{t}^{1} /-2+1, \mathrm{t}, 0,2\right)$ | Nuclear registration of atom with central force spin. |
| Curve p | $\begin{aligned} & \text { Curve( } \mathrm{t}, \mathrm{t}^{2} /-2+1, \mathrm{t},-\mathrm{sqrt}(2) \text {, } \\ & \text { sqrt(2)) } \end{aligned}$ | Nucleus potential e curve. |

Created with GeoGebra

