

Reading from the SandBox

Hello world:

(readings from the sandbox.com), a new website/blog concerning methods to construct mechanical energy curves of two central force fields.

Your 1st incursion into the Sand Box monograph explores a computer contrivance I've invented to explore space curves. The tool I use to explore S&T squares I call a Curved Space Division Assembly (**CSDA**). I use a **CSDA** to construct Parametric Geometry Dynamics of Space Time permeating our knowledge base.

Let's get started

Reading from the SandBox

This is a Sand Box Geometry 1st reader for Middle School and HS STEM students diving for the first time, into space&time of our being. This is not prepared for esoteric elite comprising the education/professional community; I've been writing them for 10 years. They remain unremarkable. They should and will find interest in the worldwide education SpaceTime paradigms of which I write. These writings are certainly a 21st Century Worldwide STEM accelerator.

BEGINNINGS

Wednesday, December 22, 2021

Hello World. Welcome.

This is my Blog: Introductory 'Philosophical Considerations of Being' from the Sand Box. A place to go for **Not so Plane Geometry**.

The following will explore a Curved Space Division Assembly, acronym (**CSDA**).

This is **not** heavy stuff. I write my philosophical perception of being using machine tech platforms for STEM students and their teachers. My tools are Wolfram, GeoGebra, and Texas Instrument n -spire.

I use parametric geometry from these three machine platforms to construct two central force fields, nuclear and gravity.

I invented my Curved Space Division Assembly (**CSDA**) to create a standard platform analytics for both fields. I study Central Force Time-Transitions, the fingerprints of motion; constructing G-field motion of M_2 about M_1 , and Motive energy of Quantum Thermodynamics; the phenomena of heat, the fingerprints of vibration; what happens when atoms sweat or become very, very, cold.

Follow me for the means and methods to construct the analytic platform needed to explore the Parametric Geometry of Central Force Curved Space.

ALXANDΞR; CEO SAND BOX GEOMETRY LLC

The science of curved space parametrics. A STEM accelerator.

November 28
2021

A parametric tool for curved space analytics of two central force mechanical energy curves, Nuclear and Gravity.

A Presentation of
the Parametric
Geometry
exploration of
Central Force
Curved Space
mechanical
energy.

Began: Sunday, November 28, 2021.01:13.

12/30/21; 00:12. Pages, 9. Words, 1678.

Edited: 2/19/22.02:19. Pages, 9; 1700 words.

Edited: 2/19/22.02:19. Pages, 11; 1700 words.

If we select the timeline Galileo as that point in human history where we recognized our Earth is not the center of Creation; we can begin with Space and Time Square¹ (S&T1). Let me suggest two more S&Ts as significant milestones of the human knowledge base. (S&T2) would be Sir Isaac Newton and his Universal Law of Gravity. Followed by (S&T3); late 19th Century and early 20th Century collective development of Quantum Thermodynamics.

I believe our being is comprised of three space and time squares. If we focus on one then two are obscured. To find a congruent registration experience for the Space and Time phenomena of Central Force Fields we live with, we need Parametric Curved Space Geometry.

A SAND BOX GEOMETRY PRESENTATION

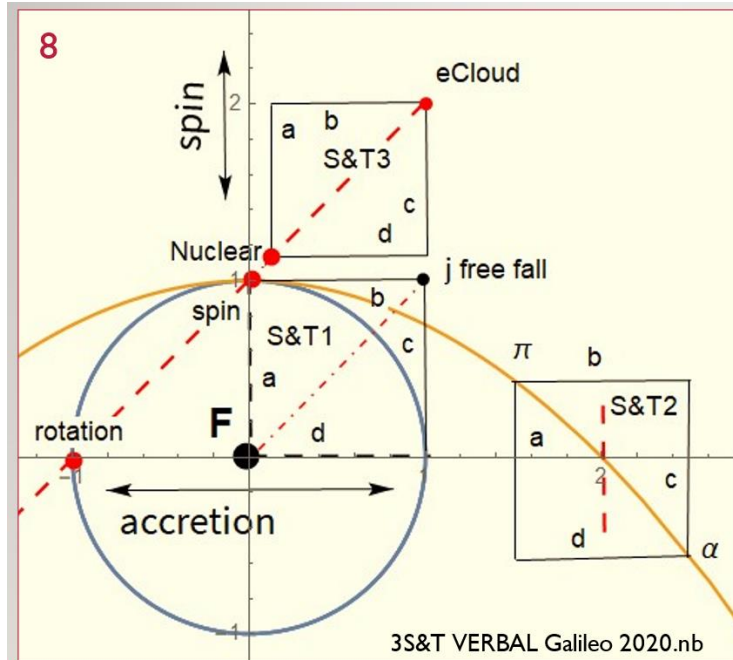
Three space and time squares of NATURES CENTRAL FORCE	December 3, 2020
This paper concerns means and parametric geometry methods of construction for three space and time squares of human experience.	Space and Time Squares; the curved space meter of Central Force Induced square space motion.

S&T1: Galileo; Constant Acceleration Space and Time.
S&T2: Sir Isaac Newton; Changing Acceleration Space and Time.
S&T3: Quantum Small; Periodic Table, Space and Time of Atoms.

Reading from the Sand Box 2/27/2021

Congruent Registration: my registration is similar to a scatter plot effort. But Central Force Field points assembled with such an effort will not require a linear demarcation to find an average analytical slope of a collected scattered event. For these points, to exist in our space-time experience of being, exist and can only exist relative with Central Force Field spin and rotation of their place in space.

Sand Box Geometry perception of three space time manifestation of two central Force Fields. Nuclear and Gravity (changing accelerations and constant accelerations).



PARAMETRIC GEOMETRY of MOTIVE ENERGY AND TIME

S&T1: (j) is free fall corner position in G-field constant acceleration space. (Constant Acceleration; Galileo Galilei).

S&T2: (π) is perihelion (high e) and (α) is (low e) aphelion Limits of perpetual motion of changing acceleration space-time. (Changing Acceleration; Sir Isaac).

S&T3: Is nuclear thermodynamic motive energy experience Temperature space time. (Late 19th and early 20th Century collective; Quantum Level Thermodynamic Experience).

from Three spacetime squares of Nature

2/27/2021

Figure 1: Basic CSDA conjecture of three S&T square. S&T1; Galileo, S&T2; Sir Isaac Newton, S&T3; 19th and 20th Century Collective; Quantum Thermodynamics.

I use the word (conjecture) because I know for a fact we don't know everything about our place in space. Let alone God's utility of time.

Please note: all three SpaceTime Squares of our being share the same spin axis and plane of rotation.

This monograph is presented in three parts:

- Part1: Using Curved Space Analytical Machine (CSDA).
- Part2: Vector properties of Central Force Gravity Field.
- Part3: Central Force Properties of Mendeleev's Periodic Table.

Part1 Section1

I suspect the easiest way to explain **CSDA** machine parametrics, is to demonstrate a GeoGebra **CSDA** composition.

Parametric geometry dynamics of G-field Central Force is to see the parametric machine in action. URL is my GeoGebra Cloud account.

<https://www.geogebra.org/m/gsdvbt8h>

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

Part1, section1A

Computer Based mechanical contrivance to construct Scalar and Vector properties of Curved Space Parametric Geometry. A Sand Box Geometry Curve Space Division Assembly; acronym: **CSDA**.

CSDA INDEPENDENT CURVE:

```
ParametricPlot[{1Cos[t] + 0,1Sin[t] + 0}, {t, -5,5},  
PlotRange -> {{-2,2}, {-1, 3/2}}
```

Machine code is of the same form as any other platform code. No one has special presentation parameters for constructing a Unit Circle.

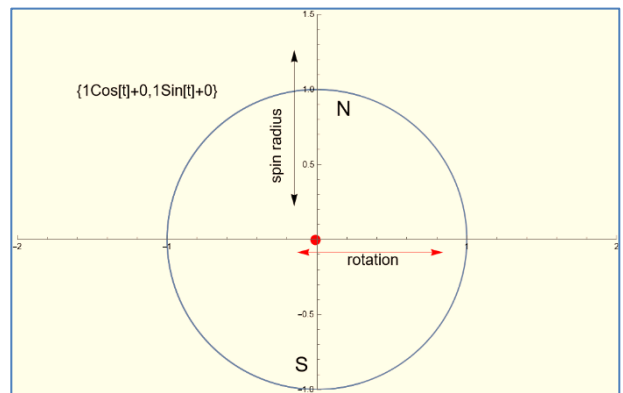


Figure 2: CSDA independent curve.

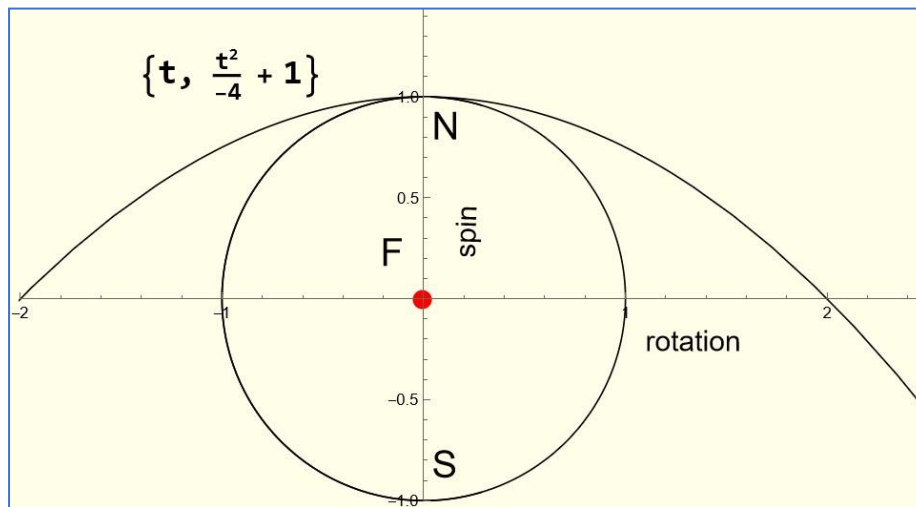
From Google: The Unit Circle has a radius of 1. Where the center of the circle is the origin on a graph. Jusy what a Central Force construction needs! The unit circle is source of trigonometry dating back to the 2nd millennium. This stuff been kicking around for 4200

years. Though not quite as deep as Apollonius delved into it around 200 years Before Christ writing Conics on papyrus.

Let's visit Mathematica and change coefficients and exponents and observe what parametric changes can induce on lines and curves. (GTG; basic CSDA 2022)

CSDA DEPENDENT CURVE:

```
ParametricPlot[{{1Cos[t] + 0,1Sin[t] + 0}, {t, t^2/(-4) + 1}}, {t, -5,5},
PlotRange -> {{-2, 5/2}, {-1, 3/2}}]
```



I call the parabola a 'unit parabola' because the action of this curve is controlled by the radius of the unit circle, hence my moniker 'unit parabola'.

Don't ask Google the age of a 'unit parabola'. I'm the first human to use 'unit' as a

coefficient to the conic parabola borne from an Apollonian cone diameter clutching the section parabola vertex. Makes a unit circle and its unit parabola a dynamic duo; a parametric geometry function suitable to explore mechanical energy of central force fields we live with.

The most important chord lies in the plane of rotation and is called the Latus Rectum. It lies parallel with the directrix, a line not used in my constructions. I favor what I have named 'a curved space directrix'. Limits range of Gravity Field central force mechanics making spin axis view oblate due to Centripetal accretion.

I use the 1st and 2nd Quad in my construction and identify the LR chord as (+) side of spin or (-) side of spin.

Feel free to alter **CSDA** platform parametrics provided by your machines. Play with the numbers and change parametric space. No need to go freaky and use light years. I always use 1st Quad analytics, only need the first ten integers. First ten willwork with light years, just use parsecs as units per integer.

Reading from the SandBox

My next lesson plan will be:

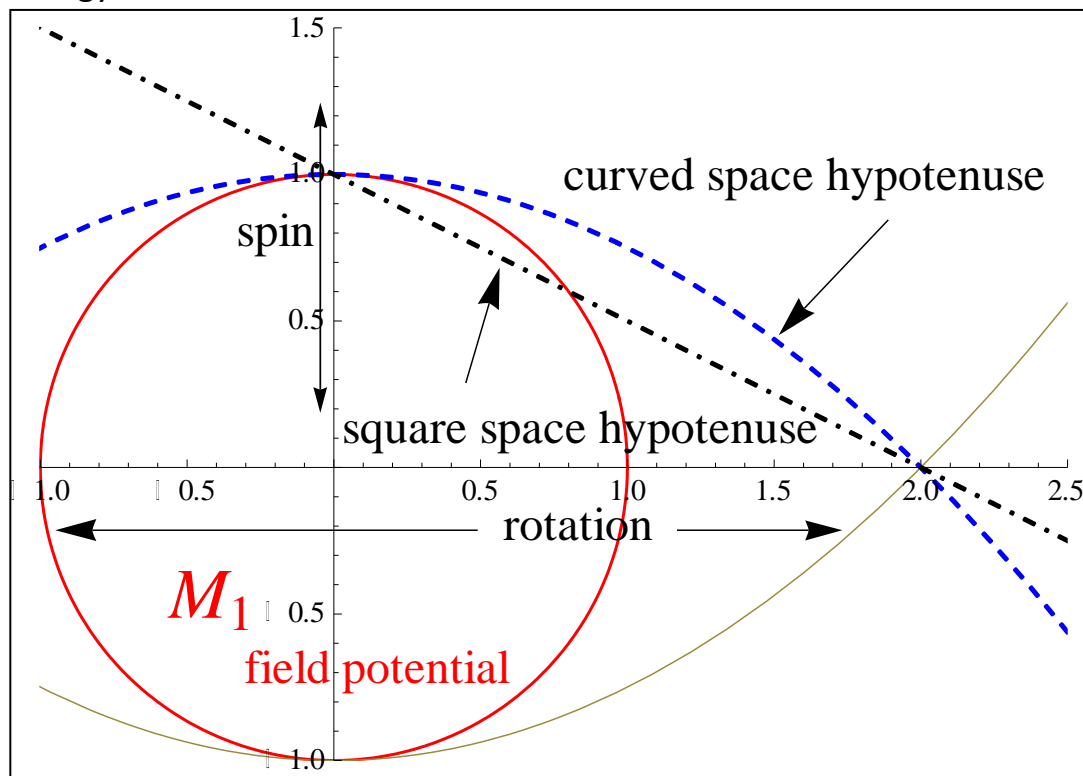
Section2; Scalar properties; constructing integer roots on the Cartesian Number Line.

I will construct curves finding the $(\sqrt[2]{9})$ and confirm solution curves with a linear abscissa at the $(\sqrt[2]{9})$.

I hunted long and hard for the construction of $(\sqrt[2]{2})$ and what I found was more than methods for construction of roots. ΑΛΞΑΝΔΕΡ

CAGE FREE THINKIN' FROM THE SAND BOX

The square space hypotenuse of Pythagoras is the secant connecting $(\pi/2)$ spin radius $(0, 1)$ with accretion point $(2, 0)$. I will use the curved space hypotenuse, also connecting spin radius $(\pi/2)$ 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.

ALEXANDER; CEO SAND BOX GEOMETRY LLC