## A SAND BOX GEOMETRY PRESENTATION

Three space and time squares of NATURES CENTRAL FORCE	D	ecember 3, 2020
This paper concerns parametric geometry methods construction for three space and time squares of human experience.	of	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.

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### SPACE & TIME BEGGININGS

The link below has a very popular image of the G-field curve of space. The image is a fabric of space laid out as a Cartesian Plane with a distorted sink caused by a heavy mass/volume ratio of M<sub>1</sub> at center. My constructions will put a motive energy footprint onto the sink, a parametric geometry picture of Central Force G-field spin of potential and accretive motive energy operating across three-dimensional orbit space of  $(M_2)$ 's. Parametric geometry will demonstrate collection properties of mass; both Big (classic) and Small (quantum), as a function of central force mechanical energy curves working our 3-space (up, down, and around).

The read is also enlightening.

https://www.quantum-field-theory.net/space-time-curvature-relativity/

THE PARAMETRIC GEOMETRY OF THREE DISTINCT SPACE AND TIME SQUARES SOURCED FROM NATURAL MECHANICAL ENERGY OF TWO CENTRAL FORCE FIELDS: GRAVITY AND NUCLEAR.

S&T1: Galileo; Constant Acceleration Space and Time. S&T2: Sir Isaac Newton; Changing Acceleration Space and Time. S&T3: Thermodynamic Quantum Small; Periodic Table, influenced Space and Time of Atoms by changing (Q); heat.



# WHAT IS A CSDA?

- DIVISION OF SPACE INTO TWO INFINITIES.
  - MACRO INFINTY
    - Realm of Radius of Curvature
  - MICRO INFINITY
    - Realm of Curvature

For any radius of curvature in Macro-Space, one and only one curvature value can exit in Micro-Space

- TWO CENTRAL FORCE ENERGY CURVES
  - POTENTIAL ENERGY (influence)
  - MOTIVE ENERGY (influenced)

#### GEOMETRIC GEOGRAPHY OF A SBG CSDA



#### PP 3S&T, 3S&T VERBAL USB

To construct a Parametric Geometry function, we assign calculus terms to **CSDA** curves. Let (a) be the independent curve, and (b) be the dependent curve. (F) Is the central force, (c) a Central force position vector, and Point (A), a Cartesian motive energy map of central force (**F**); (position, position energy). A: (r, f(r)).

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7 A CSDA will manufacture two hypotenuses, one curved and one linear, linking square space and curved space. Spin axis of a CSDA is one unit of independent curve and rotation plane of CSDA produced is two unit's dependent curve.

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 (position, position energy) and time of position as an event distribution of central force G-field mechanical energy causality of potential and motion 15





#### PARAMETRIC GEOMETRY of MOTIVE ENERGY AND TIME

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

S&T2:  $(\pi)$  is perihelion (high e) and  $(\alpha)$  is (low e) aphelion. Limits of perpetual  $(M_2)$ orbit motion of changing acceleration space-time. (Gfield changing Acceleration; Sir Isaac).

S&T3: Is nuclear thermodynamic motive energy experience. Temperature&SpaceTime. (Late 19<sup>th</sup> and early 20th Century collective; Quantum Level Thermodynamic happenings).

### Click on link for dynamic **CSDA** demonstration of Sir Isaac Newton's S&T2

You need choose a tool for your use, I've been using GeoGebra Classic 5. (02/2021)

https://www.geogebra.org/download

### https://www.geogebra.org/m/uuruc2xg

I've spent near 25 years exploring G-field mechanical energy. Only recently have I labeled Sir Isaac Newton's **CSDA** as S&T2. I know now that there are three.

It is for this reason S&T2 is first up because all my analytics were born there. Alex

AL<sub>ZXAND<sub>Z</sub>R; CEO SAND BOX GEOMETRY LLC COPYRIGHT ORIGINAL GEOMETRY BY THE SANDBOX Sand Box Geometry LLC, a company dedicated to utility of Ancient Greek Geometry in pursuing exploration and discovery of Central Force Field Curves.</sub> 10

# END of introductory ceremonies.

#### ALXXANDXR; CEO SAND BOX GEOMETRY LLC

Reading from the Sand Box