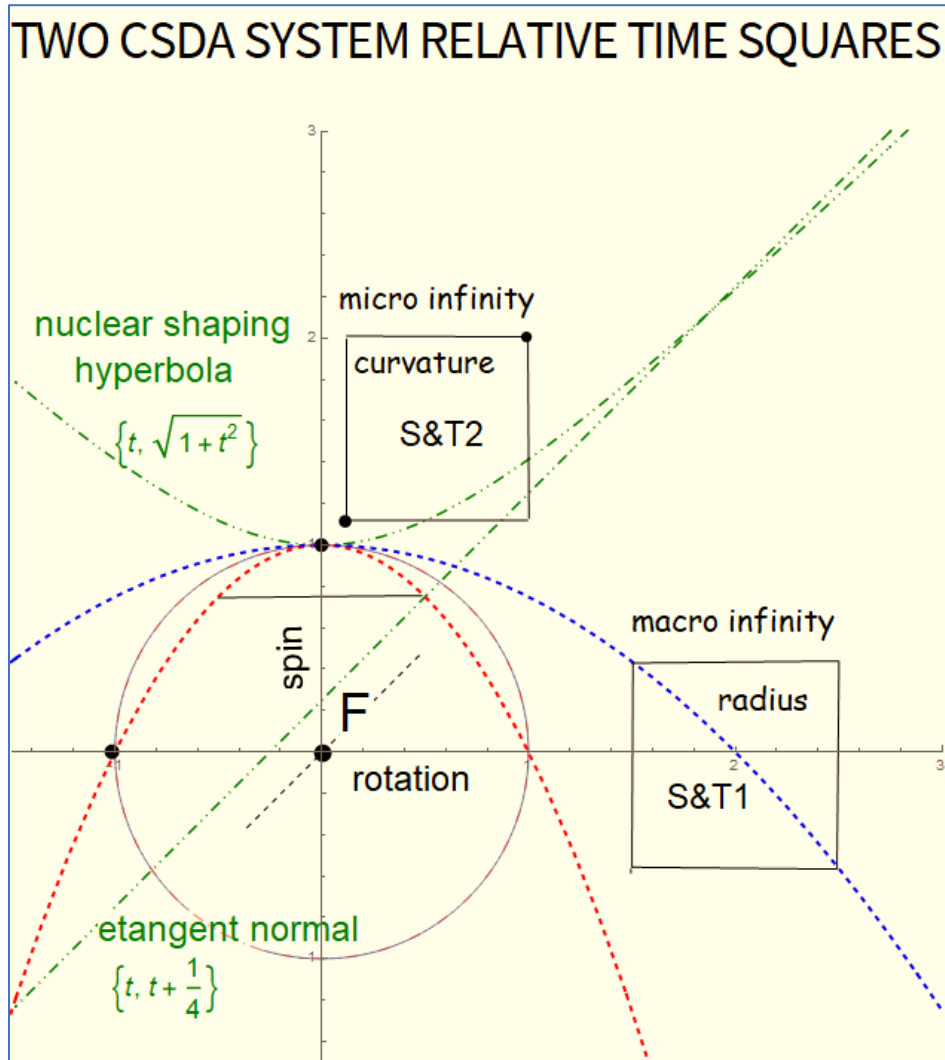


One week from today I take stage.

Decided to post preliminary descriptive narration on nuclear thermal disturbance by latent heat and philosophical 'how' transition of an element population occurs.



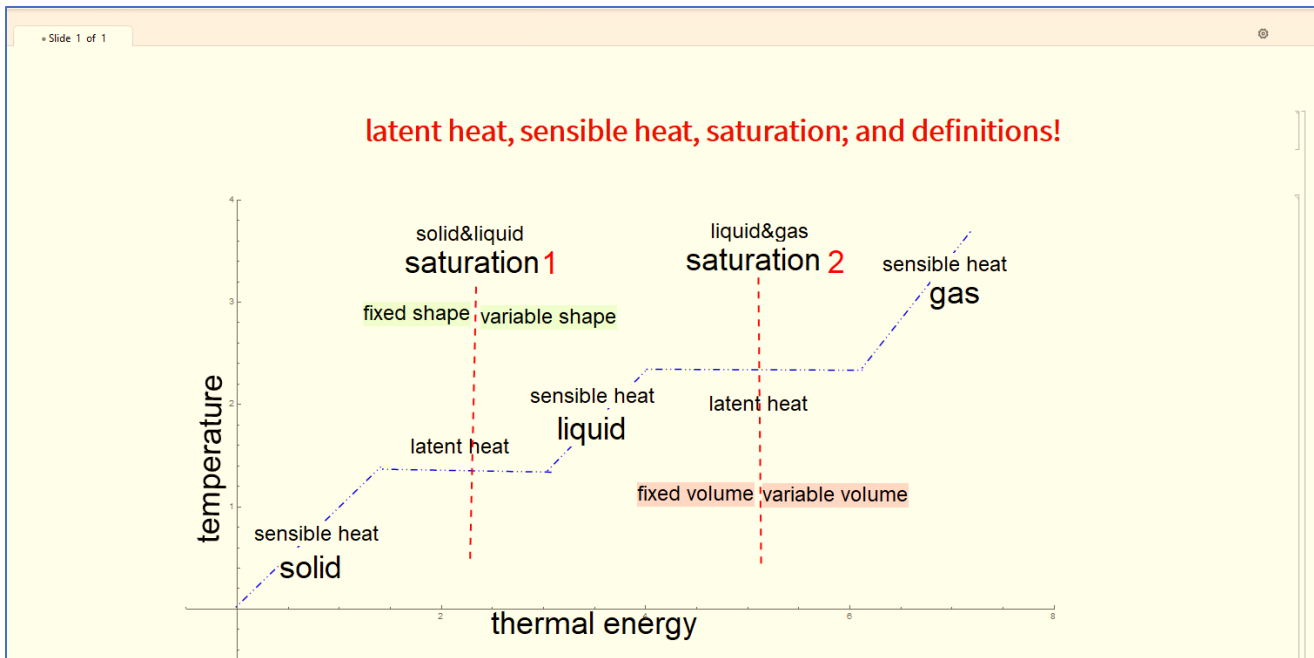
I start with Space & Time Square2, abbreviated as S&T@ in dialogue.

SLIDE 9

I work two system relative CSDA Space and Time Squares. One for Micro infinity, residence of curvature (quantum small), and one for macro infinity, radius of

curvature (classic big). NOTE; two dependent parabola curves, one red and one blue, unify spin and rotation across both infinities. RED FOR MICRO SPACE; spin/rotation; and BLUE FOR MACRO SPACE spin/rotation). TWO INFINITIES SHARING spin/rotation space. S&T2 has two new curves. a first quad energy tangent normal and a nuclear shaping hyperbola. Squaring asymptotes of hyperbola locate nuclear center. These two curves are used extensively constructing electromagnetic bond.

I use two color fonts to signal time on slide and time of return to font.



### SLIDE 10: latent heat, sensible heat, saturation; definitions

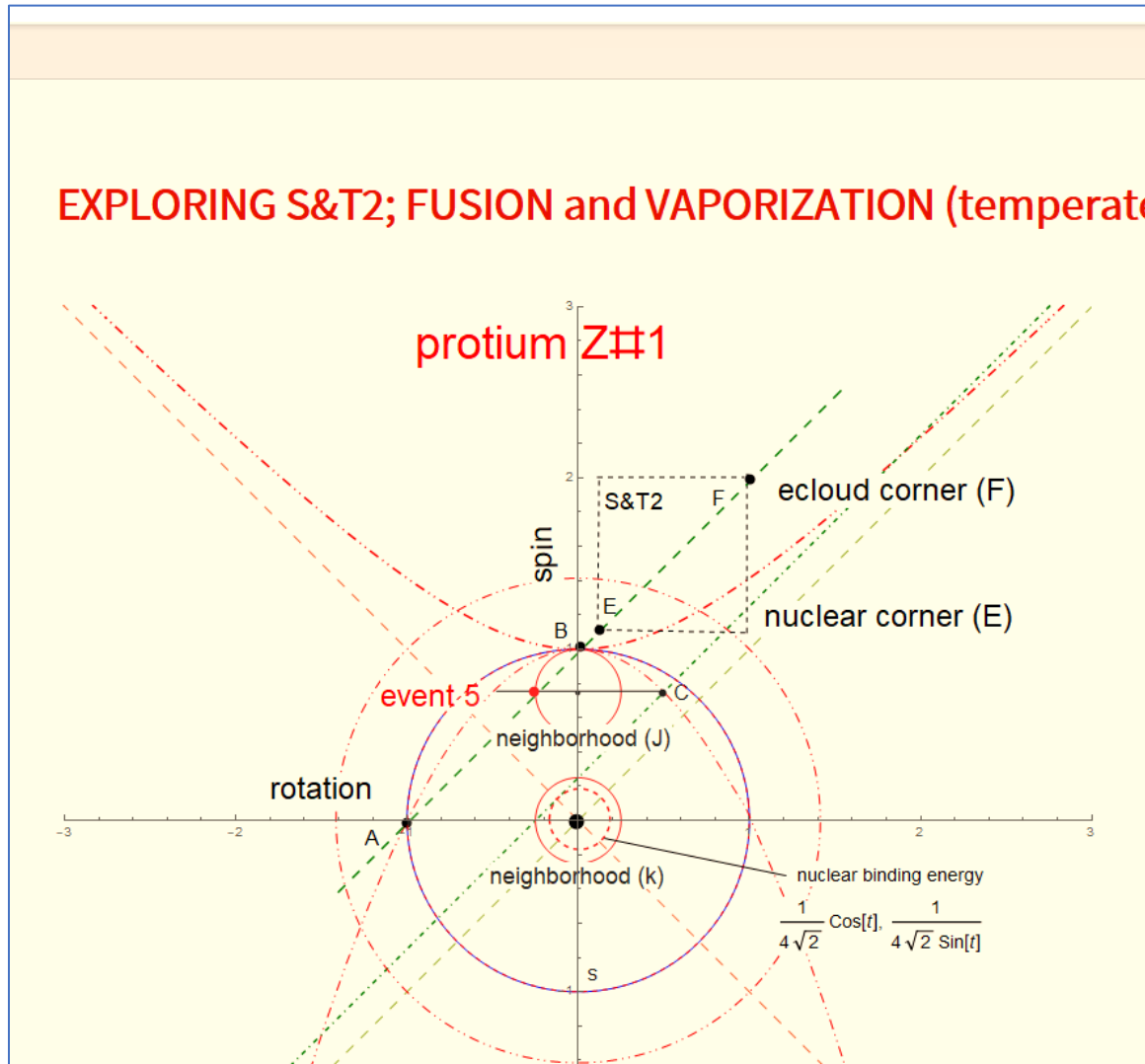
Bonding of two elements will require temperate cooperation. This slide defines terms I will use to monitor nuclear thermal arrangement.

Sensible heat can be construed as an elementary step function of calculus. **These are slope of state solid and slope of state liquid.** To climb or fall **1-degree temp on slopes of state requires 1 calorie of thermal energy, in or out, to get it done.** One-degree temperature up or down requires one-unit thermal energy up or down.

Direct attention to both plateaus. From the beginning to end of either plateau thermal energy is still being absorbed or relinquished. This heat is called latent heat. Latent heat cannot be sensed as it is energy required by the nucleus to leap the bounds of perceived state.

Though we cannot meter latent heat, we can watch it as evidenced by saturation (glass of ice water). Saturation is a quasi-mix of solid and liquid or liquid and gas.

The two red lines meter chronological medium of saturation events. Saturation event 1 **CHANGES** fixed shape of a solid into variable shape of liquid **AND** marks the place in time and space for ½ solid and ½ liquid saturation. SATURATION EVENT 2 **CHANGES** fixed volume of a liquid into variable volume of gas **AND** **MARKS** the place in time and space for ½ liquid and ½ gas saturation.



SLIDE 11: EXPLORING SPACETIME SQUARE2; FUSION, VAPORIZATION, STATE  
 S&T#2 has a linear diagonal connecting nuclear corner (E) with ecloud corner (F).  
 This diagonal produced links rotation, spin, with S&T2 Quantum corners.

- I use this colinear geography to meter nuclear latent heat happenings.
- Note 5<sup>th</sup> colinear event 5 on closed neighborhood (J) shaped with **INITIAL FOCAL RADIUS** (p) of binding parabola.... **USE NEIGHBORHOOD** (J) to sense latent heat intensity wracking nuclear binding energy curve in (neighborhood K).
- **J does so** by sensing temperature registration from rotation, spin, and S&T2 quantum corners @ event5. If nuclear thermal disturbance reads fusion or vaporization environ, the atom is transition ready.
- A word about closed neighborhood (J&K) **THEY are congruent**. They're shaped with initial focal radius (p) of the binding parabola, **an open curve**. **THE HASHMARK CURVE** in neighborhood (K) is the Nuclear binding energy curve, **a closed curve**. Two distinct curves that happen to share the same activity; binding. A Binding parabola is open and holds ecloud about nucleus. Nuclear binding energy curves are closed curves, packing protons. I find the radius of the nuclear binding energy curve to be  $(p \times \text{compression ring}^{-1} \times Z\#)$ . Split foci of shaping hyperbolae provide the parametric radius to construct the spherical compression force shaping an atom. For protium, the nuclear binding energy curve in (K) is  $(\frac{1}{4\sqrt{2}} \text{Cos}[t], \frac{1}{4\sqrt{2}} \text{Sin}[t])$ . A latent heat thermometer records nuclear thermal registration.

I skip to slide (15) with end dialogue constructing nuclear latent heat thermometer to conclude nuclear transition of state.

SLIDE 12-15: construct lithium latent heat thermometer

Let the heavy Cyan, Teal line be a LHT congruent with atom spin. The thermometer is linear congruent twice with an atom spin axis. Once when transition flashes between solid and liquid (saturation event1) and once when transition flashes between liquid and gas (saturation event2). Nuclear Thermal energy disturbance will move LHT off nuclear center, along plane of rotation, to

ecloud limits. **1...SLIDE 14**: When moving to or from liquid state, LH

thermometers register temperate stress seeking...**2... SLIDE 14: SEEKING FIVE**

COLINEAR IDENTITIES... signaling vibration and oscillation chaos sufficient to transition perceived state for **SINGLE** atom.

3there is a ... 6th colinear event. This hyperbola meters latent heat nuclear stress. The STRESS HYPERBOLA ASYMPTOTE has an interesting intercept with nuclear LH thermometers:  $\left(\text{abscissa}; \frac{Z\#}{Z\#-1}, \text{ordinate } \frac{Z\#^2}{Z\#-1}\right)$ ; for Li Z#3;  $\left(\frac{3}{2}, \frac{9}{2}\right)$ .

using event 5 colinear registration, the sixth event signals transition readiness of **ONE** atom, Group resonance, of an element population, can only occur when **ALL** atoms experience nuclear stress hyperbola asymptote **INTERCEPT** with their **INTERNAL** LH thermometer., THEN AND ONLY THEN, will an entire element population flip perception of state.

Why such concern with nuclear temperature?

Let the temperate environ of this slide be 1750°K. I need to bond two lithium atoms. THE STRONGEST BOND ALIGNMENT IS SPIN. I need latent heat saturation event 2 happening between liquid and gas, cooled down to  $\cong 1000^\circ\text{K}$ . to precipitate and maintain double bond environ for two atoms.

melting point: 453°K, 356°F, 180°C;      boiling point: 1615°K,      2447°F,      1342°C

