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Abstract-

This is to describe a theory developed by Elliott Prather about the following topics;

- What actually occurs when we witness a gravitational, electromagnetic, weak nuclear or strong nuclear force.
- Why light appears to travel at a constant velocity from different vantage points.
- The seemingly random behavior of "photons" in the dual slit experiment.
- How heat and time happen. (Separately)

Primary Theory-

I postulate that the universe approaches infinite both in size and definition. All points in space can be clearly defined in binary fashion as either occupying matter or not. Neither matter nor energy can be created or destroyed. Gravity and time are caused by spatial relativity and not a distortion of space-time. C is not the speed that light travels, rather a measure of time it takes a particle to acclimate to an electromagnetic influence. Quantum uncertainty is caused by the unique position of a particle at the time a force is applied. Entropy remains constant in any isolated space.

Gravity

All objects are expanding as a result of infinitesimally small collisions of the matter contained within. Segments of objects with higher densities of matter, have more (near) collisions and therefore have a greater acceleration of their expansion rates. With all objects in the universe trying to expand, a phenomenon I refer to as spatial relativity takes place. This means that an expanding object, will not notice the expansion of another object expanding at the same rate. However, the two objects will appear to move toward each other. This is what we perceive as gravity. Objects with greater mass, have proportionally higher accelerations in their expansion rates which relate to proportionally higher gravitation towards other objects. This is also conceivable with the other fundamental forces, each force presenting a unique pattern of expansion, or lack thereof, found in correspondingly unique sections of space containing similar patterns of matter. The illusion of dark energy as well as the perceived accelerating expansion of deep space is caused by the fact that the expansion rate of the known universe is greater than the expansion of our interactive reality (primarily the earth).

Light

Light is the effect that an oscillating electromagnetic force has on another object. Since space contains matter at an infinitesimally small level, the actual time it takes before one object interacts with any other in the universe approaches zero. Thus resulting in what we would best consider the speed of light to approach infinity. The consistency of 299,792,458 m/s is derived from the length of time it takes a typical field of electrons to accelerate to the relative light frequency range as propelled by force from the emitting substance. As the distance between two materials is increased, the force is lessened, thereby decreasing the acceleration of oscillation proportionally. This is what causes the illusion of "traveling light" and why its witnessed velocity is constant despite the reference frame. No matter is transferred during the light interaction, but with the increase in energy, the rate of expansion of the receiving object increases. This results in increasing its perceived gravitational force which translates into the observed increase in mass.

Quantum Uncertainty

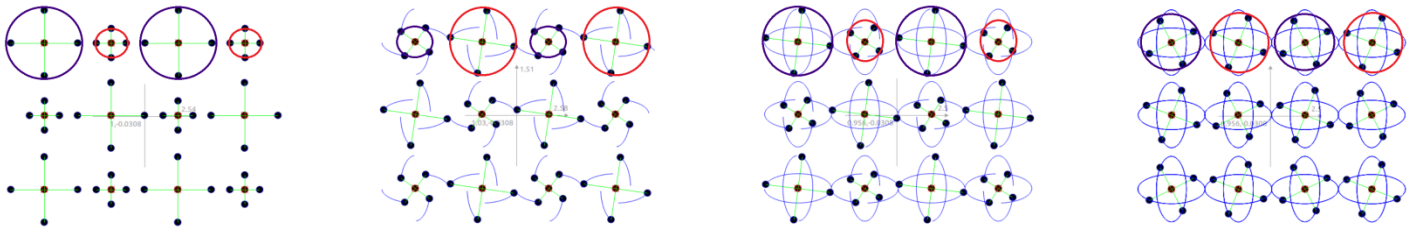
With quantum physics, we are only able to observe what we can interact with. The use of bosons to measure the transfer of motion via the fundamental forces can easily mislead one to believe that "objects" are being transferred from one place to another. When light is "transmitted" to an open field (dual slit experiment), force is evenly distributed between all particles in the field. The flaw is, in order to determine what area the energy was transferred to, we detect the point on the field where an electron is ejected from. When the energy is transferred from the emitter, each atom within this field is going to have an electron in a different position in orbit. Depending on the position of the electron in orbit, the electron may fly off, may be slowed down or may be unaffected. This is what creates the illusion of randomness in the experiment. Not only is the emitter interacting with the atoms within the field, but all of the atoms in the field are interacting with one another as well. This, by way of statistical distribution, is what creates the familiar wave form that is achieved in the experiment.

Entropy

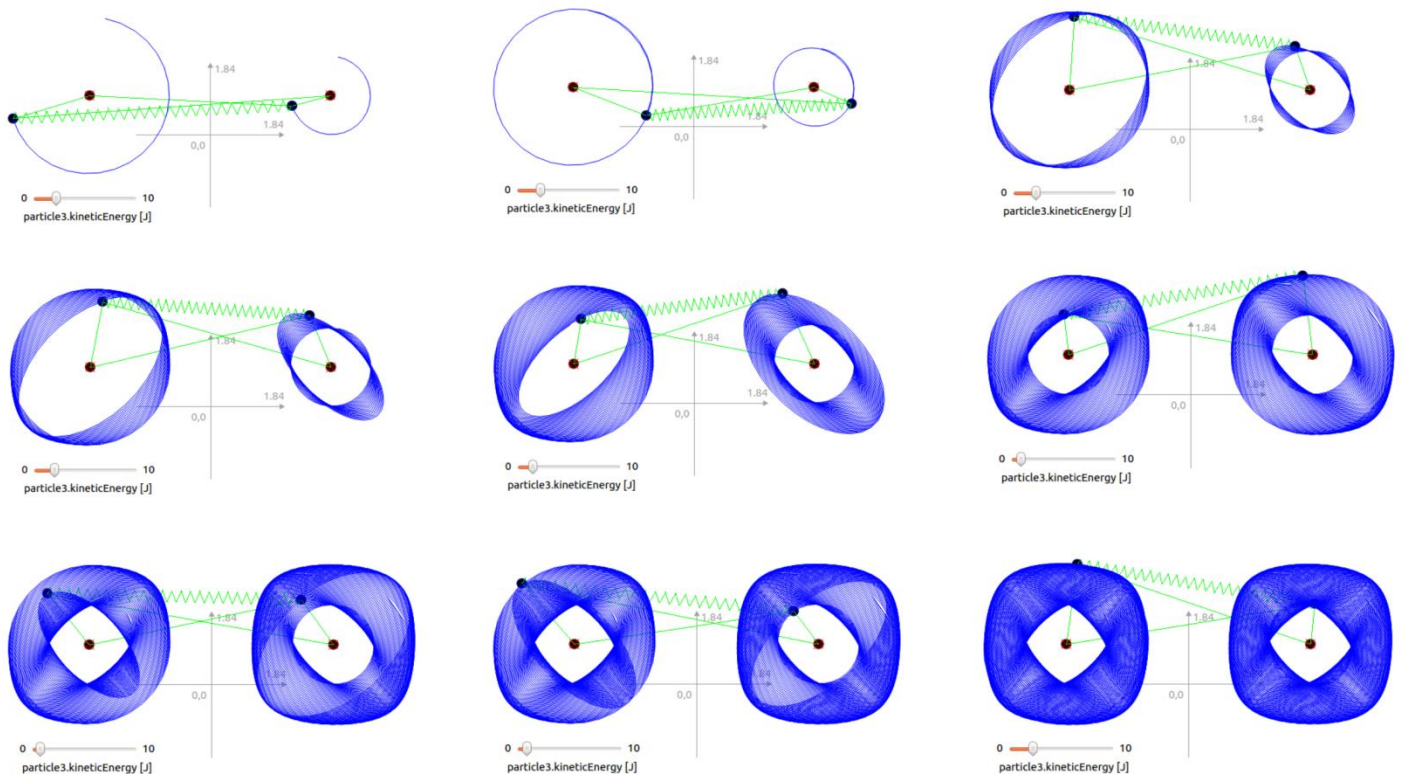
The value of entropy of any isolated space remains constant over time, from a math perspective, a constant no solution. I believe the true nature of temperature to be an extrinsic value, since it, much like quantum bosons, can't be measured without being affected. The pure definition of temperature can't be defined without setting a limit to the minimum size of space that can be clearly observed during the measurement. My primary theory also postulates an infinite definition being required of any observed matter arrangement in space which would result in infinite thermodynamic microstates as well.

Jialency

Jialency refers to the theorized oscillation of forms of internal energy or enthalpy, stored within the orbits of electrons, between atoms and atoms adjacent to them. Jialency can also be observed on a macroscopic level with similar orbiting bodies. Since "heat" is a term that was created to describe the flow of thermal energy from one material to another, Jialency can be a better term to use when referring to a specific type of enthalpy, specifically the "potential for heat" in a single substance. The illustrations below are models of 12 Beryllium atoms interacting with each other in this manner. The first four atoms in each set include a ring that identifies the electron radius at a specific instant. The theory of Jialency postulates that, in a substance with a temperature, each atom has an expanding/contracting cycle that is 180 degrees out of phase with the atoms that are directly adjacent to it. When an atom's electrons are at the lowest peak of their cycle, the overall radius of the atom is at its lowest, the atom occupies the lowest volume, the electron's kinetic energy is at its greatest, the electron's potential energy is at its lowest and the adjacent atoms are experiencing the highest peak of the cycle. When the electrons are at the highest peak of their cycle, the overall radius of the atom is at its highest, the atom occupies the greatest volume, the electron's potential energy is at its greatest, the electron's kinetic energy is at its lowest and the adjacent atoms are experiencing the lowest peak of the cycle. The increased eccentricity translates into a larger amount of kinetic/potential energy that is shifted back and forth rapidly between the two sets of atoms, which in turn translates into a larger amount of total enthalpy stored across the entire substance. The magnitude of this cycle, as well as the eccentricity of the electron orbit, is directly proportional to the substance's temperature.



The above illustrations are intended to provide a fundamental example of how two sets of atoms are needed for jialency to be present without dramatically altering the structure of the substance. The structure illustrated is intended to exhibit why Jialency would be an efficient manner of storing thermal energy.



The above illustrates Jialency between two Hydrogen atoms. Placement of charged particles causes an assimilation force to equalize kinetic energies while not affecting potential energy shifts. This results in an enthalpy shift back and forth. In the Jialency of Hydrogen atoms, there is a specific EMF equal to the revolution time and an Energy Radiation Frequency equal to the Jialency rate of oscillation.

Time Dilation

Time dilation is caused when an object is subjected to acceleration. When this exposure to acceleration occurs, the expansion rate of the object is temporarily increased which results in all reactions occurring within the object to take a longer period of time to be completed. This accelerated expansion results in a slower frame of reference by the outside environment. With gravity being defined by the Simple Theory of Spatial Relativity, this effect is also observed when objects are introduced to a perceived gravitational field. Since Spatial Relativity defines the effects of gravity as an acceleration of objects, the same effects of time dilation are felt on objects within a perceived gravitational field.

The increased expansion rate occurs when the electron orbit paths, within the atoms making up the Jialency of a substance, increase their eccentricity as a result of an outside force being applied. As the eccentricity of the orbit paths increase, the effective distance of repulsion between adjacent atoms is influenced to increase. An influence to increase causes the accelerated expansion rate of the substance. As the force to the substance causing the acceleration is reduced, the eccentricity of the orbit paths decrease and the acceleration rate of expansion is reduced in the substance.

Thought experiments-

Gravity thought experiment

Imagine for a moment, that there is no such thing as gravity. There is no magical force that causes matter to be attracted to other matter in some mystical way that we can only seem to explain by imagining that a non-tangible thing, such as space-time, contorts to satisfy our observations. What would happen if there were no gravity? I would imagine that things would simply just start falling apart. Some particles would randomly collide, which would cause clusters of matter to begin expanding. The more tightly packed the matter, the more likely the collisions would be, therefore the expansion of clusters that are denser would be relatively faster, right? So, what would this look like? Would an expanding head, on an expanding body, standing on an expanding earth, look out into the night sky and see an expanding meteor floating gently in the air? Or, would the accelerated expansion of the earth press firmly on the expanding feet, that are trying to stay still, while the expanding head, witnesses that same expanding earth, grow closer to encountering the expanding meteor? Could our perception of gravity simply be us observing the variances in acceleration of expansion caused by the collision of matter in areas of space with various densities?

Light thought experiment

Imagine for a moment, that what we interpret as light, is simply the oscillation of electromagnetic force in one object, sensed by another object, which in turn is accelerated to oscillate at the same magnitude. Nothing travels from one object to the other and force itself is sensed instantly. For an example, let's use two scaled up model hydrogen atoms. Imagine both have electrons with an orbit time of 1 second. One has a magnitude (from proton to electron) of 1 foot, the other with a magnitude of 1 inch. Imagine these models are placed 50 feet apart in a simulation to illustrate the transfer of energy (light) from one to the other. The instant the simulation begins, the magnitude of the first object starts to decrease as the magnitude of the second object begins to increase. Let's also say that a naked eye observer can only notice a magnitude of greater than 3 inches to be interpreted as "light". Since the second object gradually increases its magnitude, the observer would falsely conclude that the time it took for the "light" to travel the 50 feet is equivalent to the amount of time it takes for the second object to gain the 2 inches of magnitude required to be noticed. If this same simulation is done at a distance of 100 feet, the force will be half, as well as the time it takes the second object to reach observable magnitude, as well as the observers perspective of the time it takes for the "light" to travel the 100 feet. This would draw the observer to conclude that the light has a constant observable speed that doesn't change from any reference point.

Dual slit thought experiment

Imagine for a moment two sheets of film that are 1 atom thick and composed of carbon atoms. These special sheets of film are used in a single/double slit experiment. One sheet is used for the back reception wall to detect where the EMF is transmitted, the other to serve as the barrier which contains the slits for the experiment. A single hydrogen atom is used as the emitter source of light for the experiment. In both the single and double slit experiments, the hydrogen atom has a much higher magnitude than all of the various carbon atoms, but is oscillating at the same frequency. The greater magnitude of the hydrogen atom creates a slight increase in the magnitude of all the carbon atoms involved in the experiment. The orbits of the electrons in the carbon atoms themselves also have an effect on both each other and the electrons of the other carbon atoms. If you picture just two atoms effecting one another, you will notice their electrons have a natural tendency to be evenly dispersed and opposite polarity orientation depending on how many atoms are involved. This degree of separation in the frequency phase of the carbon atoms is what causes each individual carbon atom in the field to be uniquely effected by the transmitting hydrogen atom. This means that when the experiment begins and the amplitude of the hydrogen atom is gradually increased, it is only a matter of time before one of the electrons, on one of the carbon atoms, gains enough magnitude to break free of its nuclear orbit. The factor that determines which electron breaks, from which atom, is not based on the position of said atom relative to the emitter, but rather the coincidental position of said electron during the beginning of the phase of orbit of the emitter electron. The phase offset between the emitter hydrogen electron and field of receiving carbon electrons, which is a randomly determined factor, is what determines how much amplitude is transmitted to each independent carbon atom electron, translating into which atom ejects an electron first in a simulation of the experiment, translating into where the apparent light reception is perceived first, explaining the illusion of a single photon being shot randomly when intuitively EMF is a broad range force.

Mass of light thought experiment

Imagine for a moment, you are witnessing a solar eclipse. Let's say the sun is 1,000,000 miles in diameter and 1,000,000,000 away. Let's also say that the moon is 1000 miles in diameter and 1,000,000 miles away. Geometrically, when the solar eclipse occurs, the moon should perfectly block the line of sight of the sun, but when it occurs, a thin ring of light is noticed around the edge of the moon. This has been previously explained by claiming that the light itself has mass, which is effected by the gravity of the moon and creates a curved beam of light to create the ring effect. If we imagine that gravity does not exist and that gravity is an illusion created by the expansion of objects, the ring effect illusion can also be effectively explained, while allowing light to be transmitted in a perfectly straight line and leaving "space-time" un-contorted. This can be realized by understanding the propagation of light as a chain of an enormous number of energy transfers through different segments of matter smaller than any particle we are able to recognize. As this energy is transferred from cluster to cluster, each cluster grows with size causing what appears to be an ever expanding ray of light. This is what allows a vast number of independent transfers of light to appear curved in the presence of expanding segments of matter, or what appears to be mass.

The Photon Block Experiment-

I have proposed that light does not travel in packets of light such as photons, but rather is an instantaneous or near instantaneous force that exhibits a perceived time of travel as a result of the amount of time it takes a receiver to acclimate to the radiation level of the emitter. If my theory is true than an emitter that is switched on and off at a higher rate than it takes for "c" to travel to the receiver should not be effected by a blockade in the line of sight, a significant distance away, that is in phase with the pulses of the emitter. If photons do travel at c in packets, an emitter that is switched on and off should not be effected by a block in the path that is opened and closed at a great enough distance to not effect packets that would have reached the blockade in time for them to be allowed to pass through.

This experiment should determine if light is something that actually travels at a specific velocity or rather a instantaneous or near instantaneous force that takes a given amount of time before it is detected.

The experiment will consist of an emitter of light and a light detector. The emitter will be directed at the detector and the two will be placed a significant distance from one another. A solid object will be situated to rotate in the path of light in a manner that would block anything that would be "traveling" through the space at or below c, but allow something traveling greater than c to pass through.

The object will look like long narrow fan. The blades will have a trailing edge that overlaps with the leading edge of the next blade when viewed from the direct front. This means that when the fan is rotating at a very slow rate and a laser is pointed at the fan blades from the front, it's beam will be blocked by a blade at all times. When the fan is spun at a very high rate, it will spin in a manner that if an object were to pass through at the speed of light and pass the leading edge of a blade to the right at 1nm, the blade would continue to move with the object and the object would remain 1nm from the blade until it reached the trailing edge of the blade where it would then exit the containment of the fan blades. My proposal is that when a laser is pointed at the fan in this manner and the fan is spun, the detector will not be able to detect any photons from the emitter. If photons traveled as packets at the speed of c, the detector should detect the full scope of the emitter.

After this is determined, another fan will be put into place. This fan will have blades that are not curved at all. When viewed from the front, the blades will barely be noticeable. When this fan is spun at a high rate and an object enters the blades at the same orientation as the first fan, that object would not have enough time to travel from the front of the fan to the rear without being interrupted by the collision of one of the blades from the side. My hypothesis is that the amount of light that is measured by the detector while the fan is at rest will equal the amount of light that is measured while the fan is spinning at a velocity that should be interrupting all things that are traveling at or below c.

If the first experiment shows no detection of light and the second shows no decrease in the detection of light, I will conclude that electromagnetic force travels much faster than the previously determined speed of light and that "c" as we know it, is inaccurate.

Conclusion-

This article's primary purpose is to serve as record of introduction the authors theories to the scientific community.