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RESEARCH ARTICLE

NEW METHODS FOR TIME CORRECTION OF ENERGY, MOMENTUM, AND HEISENBERG UNCERTAINTY PRINCIPLE

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ABSTRACT

Time correction is a new approach that explains a fourth dimension parameter value of time that is now capable of being calculated for special relativity and energy plus momentum (Agravat 2012 A). New methods are derived in this article about calculation for time correction or wavelength based methods, as well as Newton's linear momentum, and a newer time correction method based on ellipses. The proof of the photoelectric effect is shown by a new method. Derivations of complex equations related to the rate times time equation are demonstrated for quantum mechanics and special relativity based on a new method, time correction and energy correction (Agravat 2012 A) for relativistic energy are rendered. Heisenberg Uncertainty Principle is explained for time correction with derivations and graphics.

Key words: Energy Correction, Special Relativity, Time Correction, Heisenberg Uncertainty Principle, Momentum

INTRODUCTION

The new method for time correction from the author is based on measuring variables already described in De Broglie's waves, lambda based momentum (Agravat 2012 A), and photoelectric effect. The method involves time correction or time dilation. First the author derives the Special relativity equation based on time correction. V-c/c based in "Time Correction Energy and Momentum" also produced a value in magnitude or power slower by - 4.67E-5 (Carroll, 2011) while others say faster than speed of light by 10-5. The formula includes E_c or energy correction (Agravat 2012) and the new time correction (Agravat 2012 A) method. Lorentz contraction states there is a symmetry transformation. Einstein states there was no absolute time or space in accordance with Newton. However the author is deriving time correction based method for special relativity on the author's time and energy correction method (Agravat, 2012 A) while not violating the independence of speed of light of Einstein. Below is the derivation of $E=mc^2$ based on time and energy correction with Newton's linear momentum and the authors time and energy correction method.

$$t^2 = \frac{m(2*\pi*r)^2}{E}$$

$$= \sqrt{\frac{mvt \quad 2*\pi*r}{mc^2}}$$

$$t = \sqrt{\frac{mvtd}{mc^2}}$$

$$t = \sqrt{\frac{Ptd}{E}}$$

$$t = \sqrt{\frac{\frac{htd}{\lambda}}{\frac{hc}{\lambda}}}$$

$$t = \sqrt{\frac{htd \ \lambda}{\lambda \ hc}}$$

$$t = \sqrt{\frac{td}{c}}$$

$$t = \sqrt{t*t}$$

$$t^2 = t^2$$

$$\sqrt{\frac{td}{c}} = \sqrt{\frac{Ptd}{E}}$$

$$\frac{1}{c} = \frac{P}{E}$$

$$\frac{E}{c} = P = mc$$

$$E = mc^2$$

METHODS

Proper Time

In reference to proper time (wikipedia), or the change in time with reference to two events as measured by a clock in CERN, OPERA 2011, the below relationship is derived to explain the relationship between change of time, and energy. The new methods for time correction, energy, and momentum, shown in figure 3, depict a right triangle relationship. Based on the estimate of a right triangle proof (Agravat, 2012), the author proceeds to estimate a new parameter by velocity in terms of time based on quantum mechanics terms. Instead of the x, y, z, plane with time, the author incorporates the new lambda method for wavelength (Agravat, 2012 A).

$$t = \frac{2\pi r}{c}$$
$$t = \sqrt{t^2}$$
$$\sqrt{t^2} = \frac{2\pi r}{c}$$
$$t^2 = \left(\frac{2\pi r}{c}\right)^2$$
$$v = \frac{(2\pi r)}{t}$$

Elliptical Energy and Momentum

$$P_\omega = \frac{4m*(\pi*v)}{t}$$
$$t = \pi x \sqrt{\frac{m}{E}}$$
$$t^2 = \frac{(\pi x)^2 m}{E}$$
$$E = \frac{(\pi x)^2 m}{t^2}$$
$$Et = \frac{t(\pi x)^2 m}{t^2}$$
$$Et = \frac{mc}{t^2}$$
$$E = \frac{P}{t^3}$$
$$P = Et^3$$
$$E_e = \frac{P_N}{t^3}$$
$$P_N = E_e t^3$$
$$t = \sqrt[3]{\frac{P_N}{E_e}}$$

$$t = \sqrt{\frac{m\lambda}{hc}}$$
$$\sqrt{\frac{m\lambda}{hc}} = \sqrt{\frac{P_N}{E_e}}$$
$$\frac{m\lambda}{hc} = \frac{P_N}{E_e}$$
$$E_e = \frac{P_N hc}{m\lambda}$$
$$E_e = \frac{mchc}{m\lambda}$$
$$E_{e\lambda} = \frac{mchc \quad 8mc \quad \pi^2}{mh}$$
$$E_{e\lambda} = \frac{P^2 c\, 8\pi^2}{m}$$
$$E_{e\lambda} = mc^3 8\pi^2$$
$$P_{e\lambda} = \frac{E_{e\lambda}}{c^2 8\pi^2} = mv$$

$$E_e = \frac{P_N}{t^3}$$
$$P_N = E_e t^3$$
$$\lambda_p = \frac{h}{8mc\,\pi^2}$$
$$t = \sqrt[3]{\frac{P\lambda_p}{hc}}$$
$$t = \sqrt[3]{\frac{P\lambda_p}{hc}}$$
$$t = \sqrt[3]{\frac{Ph}{hc\; 8mc\;\pi^2}}$$
$$t_\lambda = .5\sqrt[3]{\frac{1}{c\pi^2}}$$
$$\frac{t_\lambda{}^3}{8} = \frac{1}{c\pi^2}$$
$$c_\lambda = \frac{8}{t_\lambda{}^3\pi^2}$$

$$\lambda_{pe} = \frac{h}{2mc\;\pi^2}$$

$$P = \frac{2m(\pi AB)^2}{R_c t_{c\sim}{}^2}$$
$$\lambda_{pe} = \frac{t_{c\sim}{}^2}{2m(\pi AB)^2}$$

The Lambda (p) Method of Momentum and Photoelectric Effect Proof

For linear momentum, the new expression for and the new derivation is closer and brings the estimate of Newton off by a factor of 4: 1) 2.04 E-44 2) and 3.25E-45 without time correction with 2pir correction velcoties. The time corrections are .00348 s and .00642 s with the $\boldsymbol{\lambda}_p$ method (Agravat 2012A). The new elliptical energies are from wavelengths are: 1) 5.8E-31 Kg Km3/s3 and 2.34 E-33 kg km3/s3 different from special relativity energies (by units as well) of Einstein for 2pir velocities. For time elliptical correction measures and velcoties of 299778 and 47710 km/s, the momentum from wavelengths are approximately: 1) 8.17E-44 kg km/s 2) and 1.30 E-44 kg km/s that are very close to Newton's estimate and elliptical corrections. The new formulae for the elliptical method for wavelength based calculations are above. The proof of the photoelectric effect with the lambda based wavelength method (Agravat 2012 A) is demonstrated next. Included are substitution steps for time and relationships of momentum with the new method.

$$\sqrt{.5}\, c = \frac{(\pi AB)}{t_{c\sim}}$$

$$c^2 = \frac{2(\pi AB)^2}{t_{c\sim}^2}$$

$$P = \frac{2m(\pi AB)^2}{t_{c\sim}^2}$$

$$Pc = \frac{2mc(\pi AB)^2}{t_{c\sim}^2} = \frac{hc}{\lambda}$$

$$\lambda = \frac{hct_{c\sim}^2}{2mc(\pi AB)^2}$$

$$t \sim \sqrt{c}$$

$$\lambda = \frac{hct_{c\sim}^2}{2mc(\pi AB)^2} \; of \; \ldots \; Pc$$

$$t_{c\sim}^2 \sim \frac{2mc(\pi AB)^2 \lambda}{hc}$$

$$Pc = \frac{2mc(\pi AB)^2 hc}{2mc(\pi AB)^2 \lambda} = \frac{hc}{\lambda}$$

$$Pc = \frac{hc}{\lambda} = E$$

Elliptical Energy and Momentum a Time Correction Derivation

$$t^2 = \frac{m(\pi AB)^2}{E}$$

$$t = \sqrt{\frac{m(\pi AB)^2}{E}}$$

$$t_{tdc} = (\pi AB)\sqrt{\frac{m}{E}}$$

$$t \sim \frac{(\pi AB)}{c}$$

$$t_{ec} = \frac{(\pi AB)}{c}$$

$$v_{ec} = \frac{(\pi AB)}{t_{ec}}$$

$$E_{ec} = \frac{m(\pi AB)^2}{t_{ec}^2}$$

$$Et = \frac{mt(\pi AB)^2}{t^2}$$

$$Et^3 = mt(\pi AB)^2$$

$$Et^2 = m(\pi AB)^2$$

$$Et^2 = mD^2$$

$$E_{ec} = \frac{mD^2}{t^2}$$

$$E_{sr} = Pv = \frac{mD^2}{t^2}$$

$$P_{ec} = \frac{mD^2}{vt^2}$$

$$P_{ec} = \frac{mD^2}{vt^2}$$

$$Et = \frac{PD}{t^2}$$

$$P_c = \frac{Et^3}{D}$$

Newton's Momentum for Time Correction Proof

$$t_c = \frac{(\pi ab)^2}{c}$$

$$E_{ec} = \frac{m(\pi AB)^2}{t_c^2}$$

$$E_{ec} = mv^2$$

$$E_{ec} = P * v$$

$$P = \frac{E}{v}$$

$$P = mv$$

Velocity, Energy, Momentum, Time Correction

The energies corresponding to time correction for time dilation are: 1) 2.45E-38 kg km2/s2 2) 6.23E-40 kg km2/s2 for the two respective velocities of time correction for 2pir. For the elliptical correction, velcoties are 291, 677.03 km/s and 47,695 km/s the for time corrections .007653 and .0480 seconds. The speed of neutrinos being so close to the speed of light is now more subject to instrument error. The slower speeds are less different for elliptical correction vs. the faster velocity for the neutrino. The Graphics show that elliptical time is much more conservative a measure for given data, t=8.42E-17 seconds for data in Opera experiment. Time based on quantum mechanics in terms of correction is about 547.51 seconds or 9.125 minutes or about or slightly greater than the time it takes for sunlight to come from the earth to sun by about 47 seconds or .91 percent difference. Time correction for ellipse yields a value of .00765 s for velocity 299778 km/s and .0153 s for circle. For 47710 km/s the correction is .0480 s (ellipse) and .0961 s (circle). The new method shows linear momentum and the new expression for momentum for momentum based on 2pir time correction and the possibility of energy of time correction based on elliptical orbit and the proof of linear momentum (classical) based of Newton are same. The values are 8.18E-44 kg km/s and 4.42E-40 kg*km/s for Newton's method and the new proof for 2pir velcoties and elliptical corrections are 8.18E-44 kg km /s and 1.30 E-44 for elliptical velocity corrections that are similar. P_c behaves differently 1.59E-53 and 6.26E-52 kg km/s for the elliptical time corrections that is they are slower for higher velocities and more for slower velocity which represents an anomaly for a "momentum paradox" for time correction because the slower velocity and P_c is nearly equivlanet yet greater than momentum shown at higher velocity without time correction than Newton and relativistic momentum (Tables 2 and 5).

Table 1. Energy of Conservation and Elliptical Method

Method (Ellipse)	Energy(kg km2/s2)	V(km/s)	R(km)	$T_{\Omega,\lambda}$	P_N
T1=max	9.81E-38	299778	730.085	.00765	8.18E-44
T1=less	2.49E-39	47710	730.085	.04800	1.30E-44
T2=max	1.18E-37	299677	730.085	.00348	8.18E-44
T2=less	3.48E-38	477695	730.085	.00642	1.30E-44

Table2: Special Relativity Method

Method	$E_{(SR)}$	V(km/s)	R(km)	Time	$P_{(rel)}$
T=max	2.45E-38	299778	730.085	-	8.46E-42
T=2pi	6.21E-40	47710	730.085	-	1.33E-44
T=max	2.45E-38	299677	730.085	-	2.95E-42
T=2pi	6.21E-40	47695	730.085	-	1.32E-44

Table 3: Angular Energy and Lambda Based Momentum of Agravat

Method (Ellipseλ)	Energy(kg km2/s2)	V(km/s)	R(km)	$T_{\Omega,\lambda}$	$P_{Rel,e\lambda}$
T=max	9.81E-38	299778	730.085	.00765	8.46E-42
T=slow	2.49E-39	47710	730.085	.04800	1.33E-44
T=max	5.80E-31	299677	730.085	.00348	8.18E-44
T=slow	2.33E-33	47695	730.085	.00642	1.30E-44

Table 4: Special Relativity and Angular Momentum

Method (Ellipse)	$E_{(2pir, EC)}$	V(km/s)	R(km)	$T_{\Omega,\lambda}$	P_{Ω}
T=max	9.81E-38	299778	730.085	.00765	8.18E-44
T=slow	2.49E-39	47710	730.085	.04800	1.30E-44
T=max	5.80E-31	299677	730.085	.00348	8.19E-44
T=slow	2.33E-33	47695	730.085	.00642	1.31E-44

Table 5: Energy, Velocity, and P_cTime Corrections

Method (Ellipse)	E_{SRTDC}	V(km/s)	R(km)	Tc_{Ω}	$P_{(\lambda e,c)}$
T=max	1.86E-44	299778	730.085	.0153	8.18E-44
T=slow	5.08E-42	47710	730.085	.0961	1.30E-44
T=max	1.87E-40	299677	730.085	.00765	9.50E-52
T=slow	1.29E-38	47695	730.085	.04800	1.75E-51

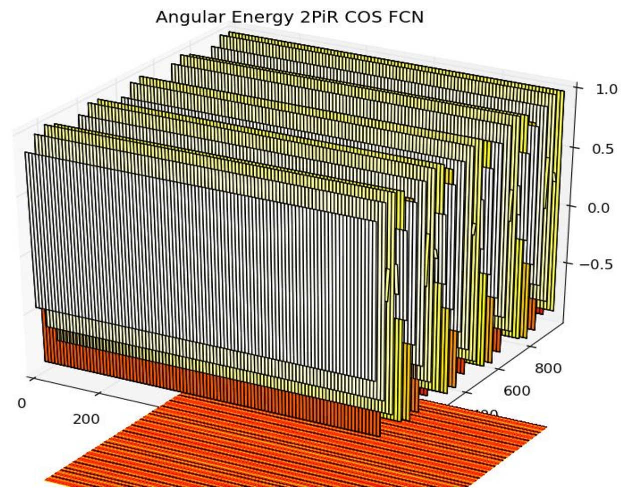

Figure 2: Angular Energy 2PiR

Figure 2 the second plot reflects changes in energy for times t and t_{2pi} for the two times vs. velocities 299778 km/s and 47710 km/s for change in time for angular corrections.

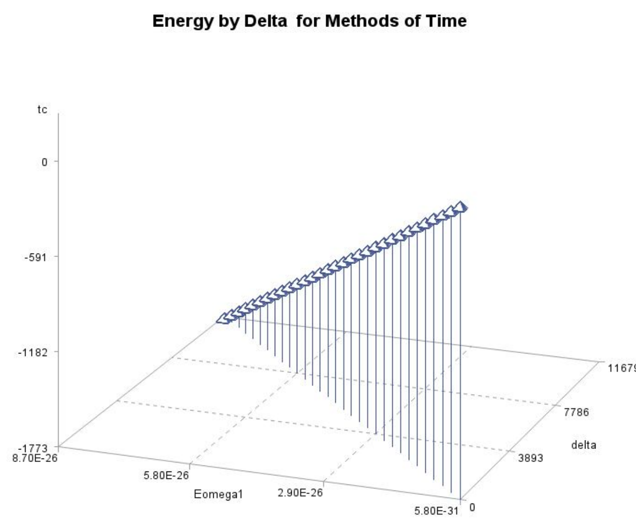

Figure 3: Time Correction and Elliptical Energy

RESULTS

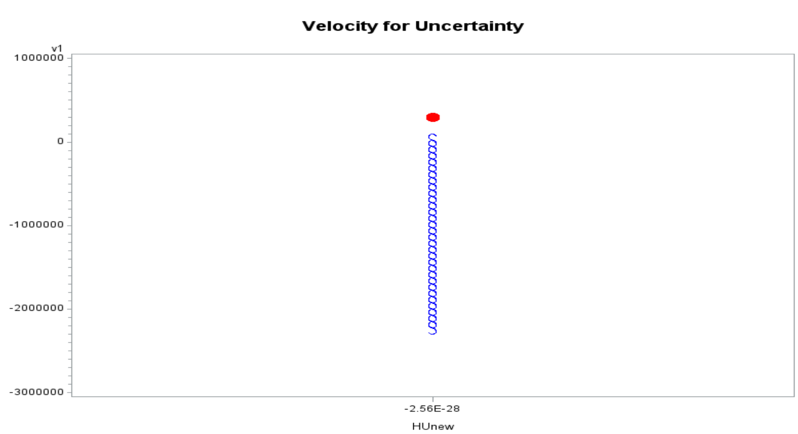

Figure 1: New Uncertainty (Time Correction) and Velocity Maximum

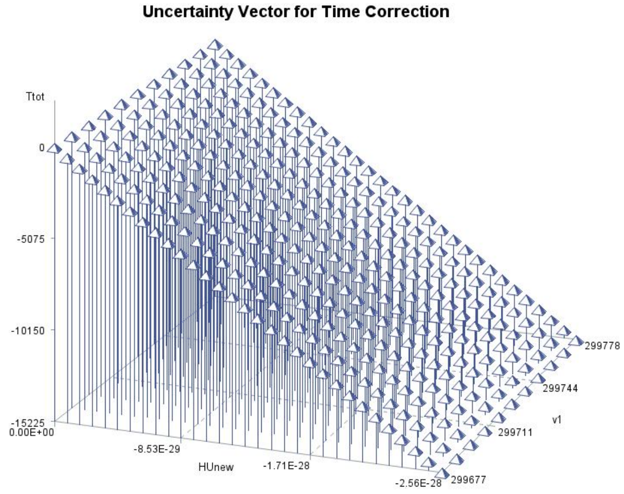

Figure 4: New Uncertainty Principle and Time Correction

DISCUSSION

Uncertainty Principle and Time Correction

In addition, the plot of maximal velocity by time correction for change in time correction displays a right triangle with elliptical energy. The right triangle estimate method can be used to approximate the parameter of the third leg, potentially distance or distance squared because the relationship of rate times time equals distance (SAS 9.3) (A similar relationship holds for uncertainty vectors (differences of energy 1 and energy2 for difference of tc by $tc_{2\pi}$) time total for velocity1). The time correction for Uncertainty principle for angular energy correction for time and change in time correction tc also demonstrates the same right triangle relationship where the difference between energies for velocity maximum for time correction; however, the magnitude is larger for HU new the Uncertainty principle and negative and less in magnitude vs.

$$\Delta E * \Delta t > \frac{\hbar}{2\pi} \sim 5.2E-35 \text{ or}$$

$$P(c) = \frac{1/m - c}{1 - c}$$

$$\ln P(c) = 3 \ln C$$

$$c^3 \sim m$$

$$at : time = 0$$

$$E = mv^2 + mv + 2mv^2 + 3mv^3$$

$$E = 3mv^2 + mv + 3mv^3$$

There may be a prediction that and impact the law that objects in motion will continue to be in motion until acted upon Newton's first Law, since change of time is negatively correlated (see Table 6).

Table 6: New Newton's First Law and Relationship with Negative Time Squared

PARAMETERS				
Velocity	299778 km/s	47710km/s	299677 km/s	47695
Time	.0153	.0961	.00765	.048
FORCE	-2.67E-42	-6.78E-44	-1.07E-41	-2.71E-43

$$F = m \frac{\partial v}{\partial t}$$

$$v = \frac{D}{t} \rightarrow \frac{\partial}{\partial t}\left(\frac{D}{t}\right) = \frac{-D}{t^2}$$

$$F_c = -\frac{mD}{t_c^2}$$

$$F_{2\pi c} = -\frac{mD}{t_{2\pi c}^2}$$

$$F_{ec} = -\frac{mD}{t_{ec}^2}$$

$$F_{2\pi ec} = -\frac{mD}{t_{2\pi ec}^2}$$

The force in question for neutrino with velocity 299778 km/s, t= .0153 and 730.085 km is less strong than the force of the corresponding elliptical momentum for time correction values calculated. The relative values of the same momentum corrections differ by 2π squared. Furthermore, gravitation potential energy laws as well as Newton's universal gravity laws may be rewritten for time correction:

$$F = -\frac{Gm_1 m_2}{r}$$

$$\frac{v\partial}{\partial t} = \frac{-D}{t^2} \rightarrow t^2 \sim \frac{-D}{\frac{v\partial}{\partial t}} \therefore \frac{-D}{\frac{-D}{t^2}} \sim t_c^2$$

$$D = -\frac{v\partial}{\partial t} t_c^2 \rightarrow R \sim -\frac{v\partial}{\partial t} t_c^2 \therefore R = \frac{t_c^2 D}{t^2} \rightarrow D$$

$$\therefore r \sim vt_c$$

$$F = -\frac{Gm_1 m_2}{r}$$

$$F_{new} = -\frac{Gm_1 m_2}{vt_c}$$

$$F_{Gnew} = -\frac{Gm_1 m_2}{(vt_c)^2}$$

about 1E-34 estimate of Heisenberg Uncertainty principle for neutrinos! One may stipulate that there is a proportional change for change in energy time's change in time (v1) for velocity 1 to change in energy for velocity 1. Also if energy of special relativity of time dilation correction is used then the estimate is negative but very large ~ -9 E+6. The plot of Uncertainty principle for the new Time Correction produces an S symbol for parameters velocity and the New Uncertainty Principle for Time Correction (HU new) in Figure 1 at maximal velocity plotted.

Contributions to Uncertainty Principle

The proposition is that time of 0 results in P(c) ~c3 (Agravat 2012) in Agravat's algorithm and a probability proof by the author (Agravat 2011). Hence, the energy formula approaches $12mv^2$ +mv as defined in the series demonstrated previously. The velocity is proportional to mass. If substituted, then $3mv^3$ plus an increase in energy and momentum for o and I approaching 3 as in the natural log of c in the demonstration.

As time slows down collisions may happen with regards to energy and independence assumption of the time equation contributes to slow down and result in collisions. Hence the idea that one may not know the position and momentum at all times can be explained! For energy change and certain relations to independence, there will be an increase in energy yet slowdown at o and i=3 making it hard to know the position and momentum at all times because of the likelihood of motion.

$$t = \sqrt{\frac{P(c) - c^3}{\exp^{1+c}}}$$

$$0 = \sqrt{\frac{P(c) - c^3}{\exp^{1+c}}}$$

$$0 = \frac{P(c) - c^3}{\exp^{1+c}}$$

$$P(c) = c^3$$

$$E = mv^2 + mv + 2mv^2 + 3mv^3$$

$$E = 3mv^2 + mv + 3mv^3$$

$$at: time = 0$$

$$E = 3mv^2 + mv + 3mv^3$$

$$E = 3mv^2 + mv + 3mP(m)$$

$$E = mv^2 + mv + 2mv^2 + 3m(\frac{\frac{1}{v} - m}{1 - m})$$

$$\frac{\partial}{\partial v}(E) = mv^2 + mv + 2mv^2 + \frac{3m}{v^2 - mv^2} + \frac{3mv}{v - mv}$$

$$\frac{\partial}{\partial v}(E) = \frac{3mv^2}{v^2 - mv^2} + \frac{mv}{v^2 - mv^2} + \frac{3m}{v^2 - mv^2} + \frac{3mv^2}{v^2 - mv^2}$$

$$\frac{\partial}{\partial v}(E) = \frac{3mv^2}{v^2 - mv^2} + \frac{mv}{v^2 - mv^2} + \frac{3m}{v^2 - mv^2} + \frac{3mv^2}{v^2 - mv^2}$$

$$\frac{\partial}{\partial v}(E) = \frac{6mv^2 + mv + 3m}{v^2 - mv^2}$$

The change is that for 3 states, the derivative of energy is proportional to terms of momentum, energy of relativity, and mass at time equal to 0. If time is not equal to 0, then in the change there is energy, momentum, plus an mv^3 term. The difference may relate to probability as a factor. Probability implies that if one exists, the other state may not be at that point. Energy is statistically significant with velocity hence the derivative with respect to velocity becomes important (Agravat 2012 A). If probability is possible, this scenario results in change in energy, mass, and momentum with respect to energy loss and a velocity term squared. The ratio of the two conditions, energy for i and o for the energy equation summation term from 1 to 3 for special relativity to time at zero, for energy shows that the term becomes greater than 299887.

$$\text{E} = E = 3mv^2 + mv + 3mv^3$$

$$\frac{\partial}{\partial v}E = 6mv + m + 9mv^2$$

$$\Delta Leg \sim \sqrt{\frac{leg}{hypotenuse} + hypotenuse^2 + 1}$$

$$\boldsymbol{c_i \approx c}$$

$$\boldsymbol{\Delta c_i = \sqrt{\frac{a}{c} + c^2 + 1}}$$

$$\boldsymbol{\Delta c_i^2 = \frac{a}{c} + c^2 + 1}$$

$$\boldsymbol{\frac{a}{c} = c_i^2 - (c^2 + 1)}$$

$$\boldsymbol{\frac{a}{c} = -1}$$

$$\boldsymbol{a = -c}$$

Energy and Momentum Anomaly for Special Relativity and Time Correction

As predicted in a discussion on Corollaries of Uncertainty Principle the discussion of disorder and energy implies that energy is less when motion such as momentum is more (Agravat, 2012 A) in relations to laws of thermodynamics too with regards to the special relativity energy of time dilation. When defining Heisenberg Uncertainty principle in terms of change in position with change in momentum, for increase of momentum in a system may predict decrease of energy that is also a factor with change in time. This is supported when there is one action and there is an equal and opposite reaction. This scenario is for energy and momentum because momentum increases more than energy relative to velocity based on time correction for energy of special relativity for time dilation demonstrated in discussion subsequently. One may have to define what order or disorder is to understand entropy that is about the amount of disorder in a system. For more momentum there is loss of energy that may follow thermodynamics and support a new axiom that as momentum increases energy decreases does not conflict that energy is neither created nor destroyed (first law of thermodynamics) based on special relativity and time dilation measures shown later. If there is little disorder, than 1) there may potentially be a relative increase of both energy and momentum 2) if momentum increase is less more energy is possible for more potential because this is for slower time and velocity for time correction based on the elliptical method of the author and potentially more disorder and based on potential to work as is demonstrated when the respective time is 0.

Energy of Time Correction for Work at Time =O

$$\frac{m^n}{X} \sim E \sim m^n v^2$$

$$n \ln m - \ln X \neq n \ln m + 2 \ln v$$

$$-\ln X \neq 2 \ln v$$

$$\exp^{\ln \frac{1}{X}} = \exp^{2 \ln v} \therefore v^2 = v^2$$

$$\frac{m^n}{2X}$$

$$n \ln m - 2\ln X = n_{sr} \ln m + 2\ln v$$

$$n \ln m - \ln X - n_{sr} \ln m - 2\ln v$$

$$(n_{tdc} - n_{sr}) \ln m - \ln X$$

$$(n_{tdc} - n_{sr}) \ln m - \ln X$$

$$\exp^{(n_{tdc} - n_{sr}) \ln m} - \exp^{\ln X}$$

$$m^{(n_{tdc} - n_{sr})} v^2$$

$$(n_{tdc} - n_{sr}) \ln m + 2\ln v$$

$$m^{n_{tdc} - n_{sr}} v^2$$

$$\frac{m^{n_{tdc} - n_{sr}}}{2X} \sim mv^2$$

$$n_{tdc} \ln m - 2\ln X \sim \ln m + 2 lmv$$

$$n_{tdc} \ln m - \ln X - n_{sr} \ln m - \ln X = \ln m + 2\ln v$$

$$(n_{tdc} - n_{sr}) \ln m - \ln X = \ln m + 2\ln v$$

$$m^{(n_{tdc} - n_{sr})} v^2 = \ln m + 2\ln v$$

$$m^{(n_{tdc} - n_{sr})} v^2 - \ln m + 2\ln v$$

$$E = \frac{mD^2}{\Delta t^2}$$

$$v_{tdc} \sim \frac{\Delta t \sqrt{E}}{t_c}$$

$$m^{(n_{tdc} - n_{sr})} v^2 - imv^o$$

$$n_{tdc} = 1 \rightarrow n_{sr} = 0 \rightarrow o = 0 \rightarrow i = 0$$

$$\Rightarrow m^{(1-0)} v^2 - im\ v^o$$

$$\therefore E = mv^2 - im\ v^0$$

$$or$$

$$E = \sum_{i=0, O=0}^{i=\infty, O=\infty} mv^2 - im\ v^0$$

$$or \ ...$$

$$E_{tdc} \Delta t \sim E_{sr} t$$

$$t \sim \frac{E_{tdc} \Delta t}{E_{sr}}$$

$$\frac{mD^2 \Delta t}{\Delta t^2} \sim E_{sr} t$$

$$E_{sr-tdc} \sim \frac{mD^2}{\Delta t\ t}$$

$$E_{tc-tdc} (2\pi r)_{max} \sim 1.86 E - 44\ kgkm\ 2/s2$$

$$E_{tc-tdc\ 2\pi} \sim 5.08 E - 42\ kgkm\ 2/s2$$

$$E_{tc-tdc\ (\pi AB)^2 max} \sim 1.87 E - 40\ kgkm\ 2/s2$$

$$E_{tc-tdc\ 2\pi} \sim 1.29 E - 38\ kgkm\ 2/s2$$

$$\frac{Qm}{X} \sim m^{n_{sr}} v^o ;$$

$$Q \ln m - \ln X = n_{sr} \ln m + o \ln v$$

$$m^Q v^2 = m^{n_{sr}} v^o ; if\ - n = 0$$

$$if\ : Q = 1 \ldots and\ ..o = 1 \rightarrow mv$$

$$if\ : Q = 1 \ldots and\ \ldots o = 2 \rightarrow mv^2$$

$$if\ : Q = 1 \ldots and\ ..o = 3 \rightarrow mv^3$$

$$E = \sum_{O=1}^{\infty} mv^{n+o}$$

For this energy form that relate s to time dilation for circle is proportional to 2pi and far less than energy of special relativity; however for ellipse energy is proportional to 2pi and greater than for special relativity. The results are 1.86E-44 J, 5.08E-42 J, 1.87E-40 J, and 1.29E-38 J for the circle and ellipse models for equation $E_{tc-tdc} \sim \frac{mD^2}{\Delta t\ t}$ respectively for velocities 299,677 and 447695 km/s. For the ellipse method the energy of maximal velocity is approximately same as special relativity that does have a time correction and correlation that Einstein did not expect; however the lower velocity has higher energy for this energy form that relate to time dilation. The energies shown are lower for lower velocities than compared to special relativity.

Energy of Time Correction

$$\frac{t^2 v^2}{\Delta t^2} \sim v^2$$

$$\frac{m}{X} \sim v^2 m \sim \frac{mt^2 v^2}{\Delta t^2}$$

$$E \sim v^2 m \sim \frac{mt^2 v^2}{\Delta t^2}$$

$$E \sim v^2 m \sim \frac{mt^2 v^2}{\Delta t^2}$$

$$E \sim \frac{mD^2}{\Delta t^2}$$

$$E = \frac{(\pi ab)^2 m}{\Delta t^2}$$

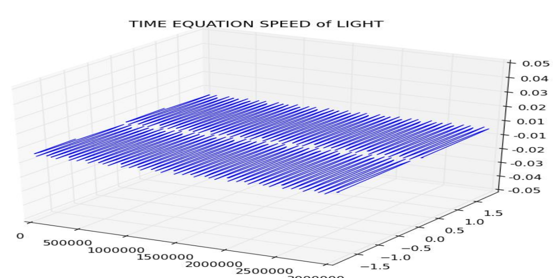

Figure 5: Time, Speed, and Symmetry

The time can be formulated as square root of velocity in a transformation that shows symmetry of this dark matter (Figure 5). Visible light is expected to have both waves and particle nature (Moskowitz 2012). Despite the ellipse being used for the orbit being different from circular orbit the estimates of energy are roughly same. If tc final is kept (.0153 s and .0961 s) the comparison is 2.45E-38 vs. 2.45E-38 and 6.21E-40 vs. 6.23E-40 kg km2/s2 for E_{sr} vs. E_c based on the X derivation (Agravat 2012 A). Energy may be proportional to mass times distance squared divided by time correction squared. This proof is different from traditional physicist, who based their proof on energy (E=mc2) on force time distance and hence mass times distance over time squared (The Physicist, 2011) or mc^2. In addition, the energy for special relativity equation shows another relationship for the right triangle relationship where energy is proportional t_c, and change in time (for velocity of neutrinos, and time correction (Agravat 2012 A)).

Energy of Time Dilation vs. Energy of Special Relativity and Time

$$(t^2) E_{sr} \sim E_{td} \Delta t_{td}^2$$

$$E_c = \frac{m(2\pi r)^2}{t_c^2}$$

$$E_c \sim \frac{mD^2}{t_c^2}$$

$$E_{td} \approx \frac{mD^2}{\Delta t^2}$$

$$E_c \sim E_{td}$$

Energy of time dilation is proportionate to time correction and therefore proportional to energy of special relativity for the elliptical orbit at maximal velocity. The intermediate form of the equation for energy of time dilation involves a form of special relativity but the author suggests that experiments be done to determine the character of this energy 2.45E-38 J. Finally, new laws are added for neutrinos for time correction and velocity equation:

Velocity Laws for Time Correction

$$1)\ v_1 t_c \approx v_2 t_{c2\pi}$$

$$2)\ v_2 = \left(v_1 - \frac{t_{c2\pi}}{t_c}\frac{(\pi AB)^2}{v_1}\right)\frac{t_c}{t_{c2\pi}},$$

- The velocity x time correction maximum is equal to the 2pi transformation of velocity x time correction of 2pi.
- Velocity maximum - (time correction 2pi over time correction) x (Delta t or time correction of ellipse over velocity) x (time correction over time correction 2pi.

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Appendix

Hypotenuse Axiom

The author discusses a proof of time possible as in a pendulum that may explain how complex numbers may play a part in time. The square root of a/c = i a complex number that is part of the algorithm in the hypotenuse axiom. If one segment is proportionate to the other, than the big one is approximately according to the following relation as shown according to a right triangle plot:

$$\Delta Leg \sim \sqrt{\frac{leg}{hypotenuse} + hypotenuse^2 + 1}$$

$$c_i \approx c$$

$$\Delta c_i = \sqrt{\frac{a}{c} + c^2 + 1}$$

$$\Delta c_i^2 = \frac{a}{c} + c^2 + 1$$

$$\frac{a}{c} = c_i^2 - (c^2 + 1)$$

$$\frac{a}{c} = -1$$

$$a = -c$$

$$\frac{c - c_i}{c_i} = c_i$$

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