the general science journal

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Version: 12th June 2013 – 13th June 2013
Updated 9th October 2015

Special relativity and particle coiling

Abstract: The Original McMahon field theory was developed and written over a period of almost 14 years, between the 31st of December 1996 and the 20th February, 2010. As time goes on, I am constantly coming up with more data to add to it- data that explains observations made in the real world. Here, I use the McMahon field theory to explain why we don't observe particles travelling faster than light- because velocities greater than light are dilated back down to light speed by special relativity. This happens via coiling. Einstein, in his genius, has given us an equation to demonstrate that coiling occurs at speeds close to light and above which are dilated back down to light via coiling, without even realizing it. It is an honour to be the first person to demonstrate it in this paper.

Theory:

Special relativity applies to particles or masses moving close to the speed of light, which is the case for electrons moving as electrical current in a wire, as shown in the paper: **McMahon, C.R. (2015)** *"Electron velocity through a conductor*". Thus, special relativity applies to such particles, which allows us to observe special relativity in the real world as the magnetic field. Thus, through the magnetic field, McMahon field theory explains that particles moving near the speed of light appear as energy fields.

First, allow me to present a new understanding of energy, as already presented in McMahon field theory: Theoretical unification of relativity and quantum physics, thus methods to generate gravity and time. (2010).

This theory begins explaining the nature of light using an example of electrons moving through an electrical wire. Since the velocity of these electrons can be considered as at or near the speed of light, we can assume that they are affected by both time dilation and length contraction, effects predicted by Albert Einstein's famous theory of relativity.

Let's perform a thought experiment: Let's imagine a stretched out spring. Let the straight stretched out spring represent the path of electrons moving in an electrical wire. Now, since length contraction occurs because of relativity, the electron path is affected. As a result, the straight line path of the electron is compressed. This is the same as allowing a spring to begin to recoil. As a result, the straight line path of the electron begins to become coiled. I call this primary coiling. This is the effect length contraction has on mass as is approaches the speed of light and is dilated by length contraction. When a particle such as an electron reaches the speed of light, it becomes fully coiled or fully compressed, and Einsteins length contraction and time dilation equations become equal to zero and "undefined". This particle, now moves as a circle at the speed of light in the same direction it was before. If this particle tries to move faster still, it experiences secondary coiling. Ie: the coil coils upon itself, becoming a secondary coil. This is why energy is observed on an Oscilloscope as waves: we are simply looking at a side on view of what are actually 3-dimentional coiled coils or secondary coils. Waves are not simply 2 dimensional; rather, they are 3 dimensional secondary coils. It was easy for scientists of the past to assume waves were 2 dimensional in nature, as the dimensional calculations and drawings for relativity were carried out on flat pieces of paper which are also 2-

dimentional. The human imagination, however, is able to perform calculations in multiple dimensions. Now, let's consider the effect of time dilation.

When an electron approaches the speed of light, according to relativity, it undergoes time dilation. What does this actually mean? I believe this is the effect: time dilation allows a body, particle or mass- in combination with the effects of length contraction, to exist in multiple places at the same time. This is why we observe magnetic flux. Electricity is composed of high speed electrons, so these electrons would be affected by time dilation and length contraction. As a result, the electron is both inside the electrical wire, and orbiting around the wire as magnetic flux (because of full primary coiling at the speed of light). Magnetic flux is the combined effect of length contraction and time dilation on the electron. The coiling effect is why electrical wires carrying electricity exhibit magnetic fields- the electron path is compressed into coils, and time dilation permits the electron to occupy multiple positions at the same time, which is why magnetic flux is detected as coils at different distances from the electrical wire. Please refer to figure 1 on the following page.

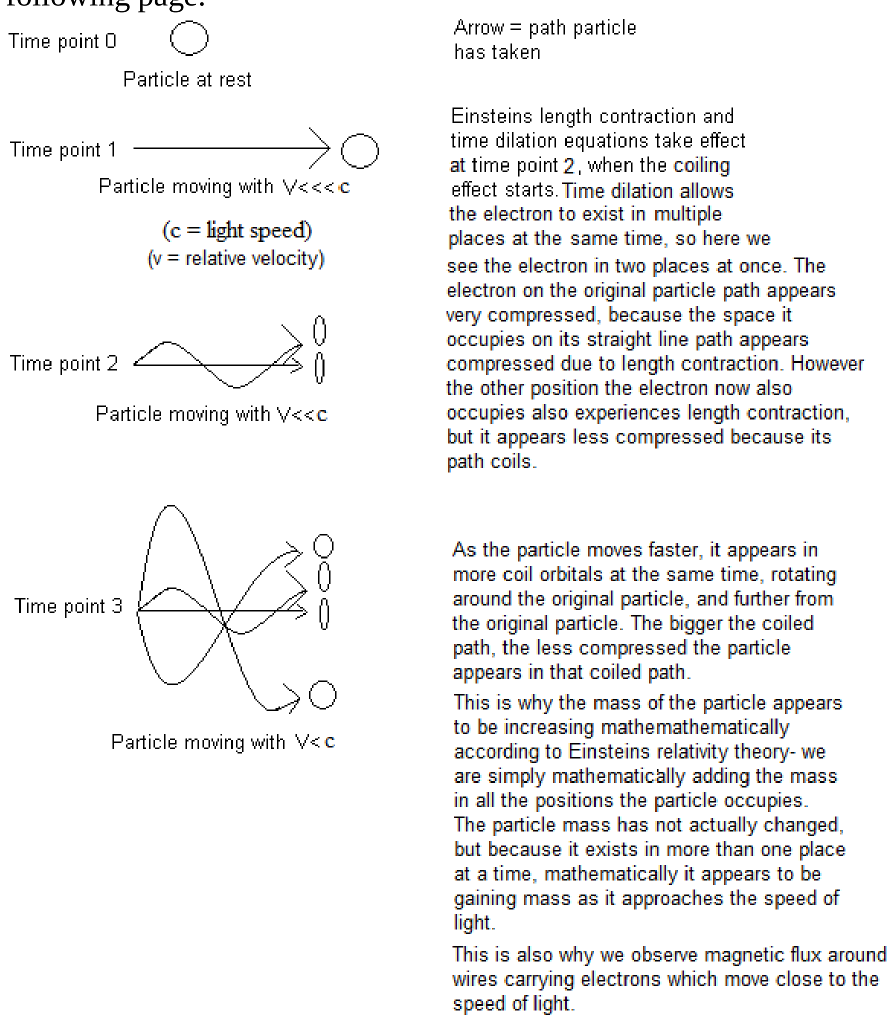

Figure 1: particle relativity- Taken from the McMahon field theory (2010): What we observe as relative stationary observers of a particle as it travels faster.

However- the McMahon field theory goes on to explain much more, including the electromagnetic spectrum- hence light, which I will briefly cover now. Refer to figure 2 below:

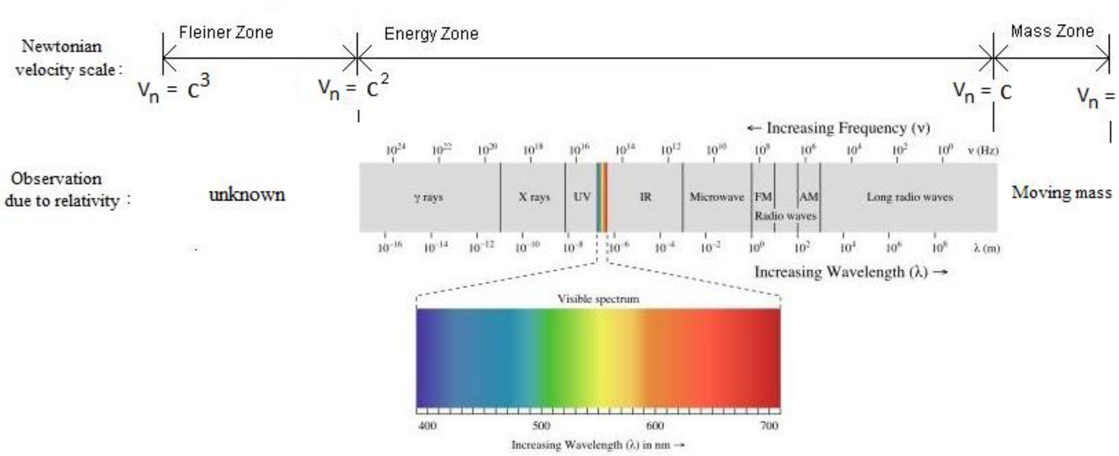

Figure 2: How an electron is observed at different Newtonian speeds: modified from the McMahon field theory (2010): Here, we see that as an electron moves with increasing speed according to Newtonian physics (although the speed we observe is dilated back to that of light because of relativity as in figure 4) and becomes a coil because of relativity, as the electron speed is increasingly dilated back to light it is observed as different types of energy. This is because the electron becomes more coiled (more velocity dilation) as it tries to move faster, so we say that the frequency increases and wavelength decreases. In this diagram, let the value of true, un-dilated Newtonian velocity due to relativity be Vn as in figure 4, and let the velocity of light be equal to c. I believe that electrons are on the boarder of mass and energy, so in the diagram above electricity would be at the point where Vn=c. If the electrons in electricity tried to move faster, they would be compressed further into a secondary coil to become long radio waves, then AM radio waves, then FM radio waves, then microwaves, then Infra-red (IR), then X-rays, then y-rays. Hence, the electromagnetic spectrum is nothing more than an electron dilated by different magnitudes of relativity. <u>Other particles, such as protons and neutrons, will also have their own spectrums, which may be different or similar to that of the electron.</u>

From Figure 2, we see that if electricity or electrons in an electrical wire tried to move faster, the electrons path would be compressed further, making it coil upon itself again creating secondary coiling or a coiled coil path. Hence it would be further affected by length contraction. As a result, the electron will be observed as different forms of energy. In the figure above, we see that an electron is considered as mass when it has an undilated velocity or Newtonian velocity between 0 and c. If an electron tries to travel faster than this, it enters the energy zone, where the electron path becomes fully compressed and moves as a full primary coil or circle which undergoes secondary coiling or coils upon itself. A particle moving as energy or a secondary coil has an un-dilated velocity or Newtonian velocity range between c and c^2. In this range, the particle now experiences secondary coiling, so the coil now coils upon itself. Figure 3, taken from the McMahon field theory (2010), also explains what happens if an electron tries to move faster than C^2: The secondary coiled or coiled coil path becomes overly dilated, and the length contraction effect becomes so great that the particle now undergoes tertiary coiling- ie it becomes a coiled coil coil. As a result, because of excess coiling the particle becomes undetectable or unidentifiable. These undetectable states are what are known as dark matter and/or dark energy. See figure 3.

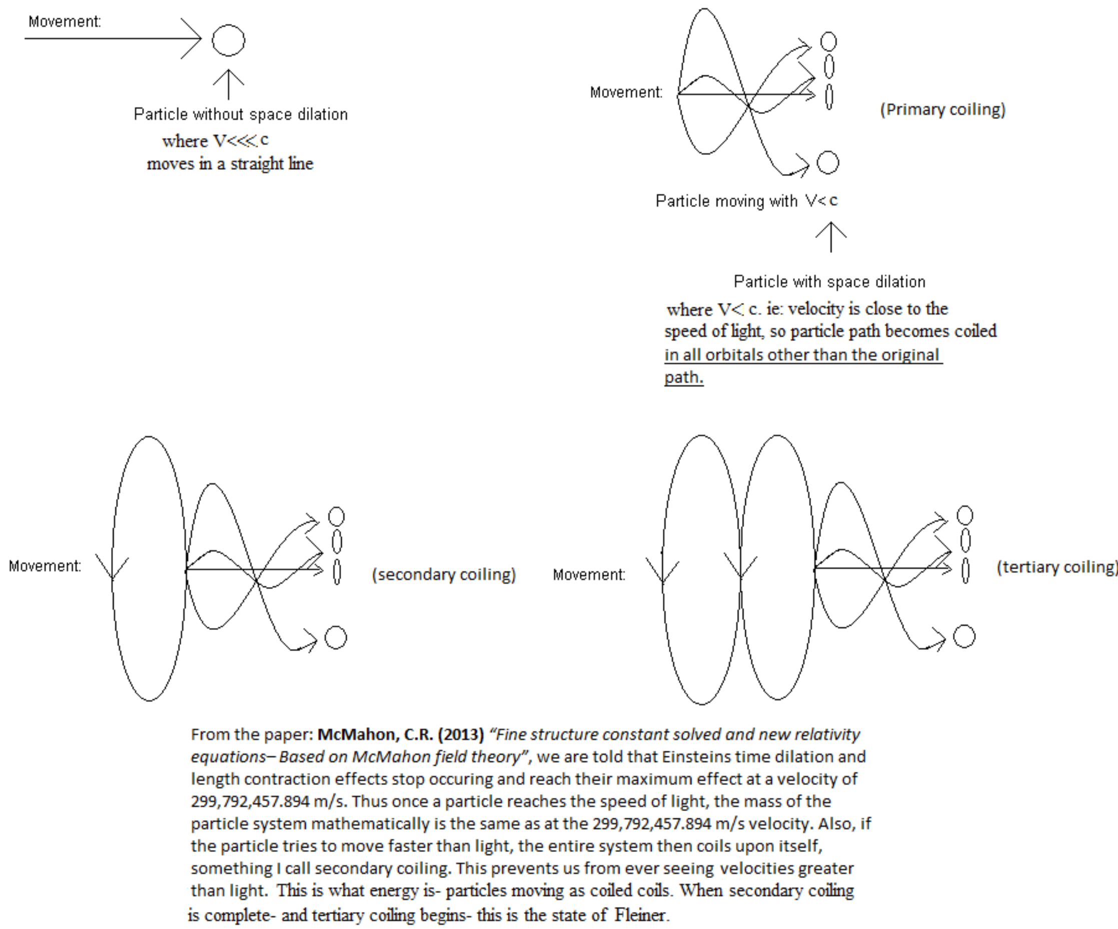

Figure 3: The actual affect Einsteins relativity theory has on the movement of a particle, causing it to first appear as mass during primary coiling, then energy during secondary coiling, and Fleiner during tertiary coiling, during which it becomes dark matter or dark energy. Einstein was unaware of this.

Now, we must consider conventional science of the current day. Conventional oscilloscopes are used for energy only. Therefore, the "waves" we see on oscilloscopes are in fact, the side views of secondary coils and higher degrees of coiling. Once full primary coiling is achieved, the fully compressed primary coil remains as it is, but with more momentum it begins to coil upon itself, which is secondary coiling. Thus, "wavelength" and "frequency" according to the science of this day are measurements from the reference point where a full primary coil forms.

Lets consider McMahon field theory (2010). From the McMahon field theory, we realize that magnetic flux arises due to the length contraction and time dilation of the electron.

We observe this flux differently depending on the Newtonian velocity of the electron (ie: the electromagnetic spectrum in figure 2). Keep in mind that relativity prevents observers from measuring the true velocity (Newtonian velocity) of the electron- relativity dilates velocities greater than light back down to the speed of light. Refer to figure 4 below.

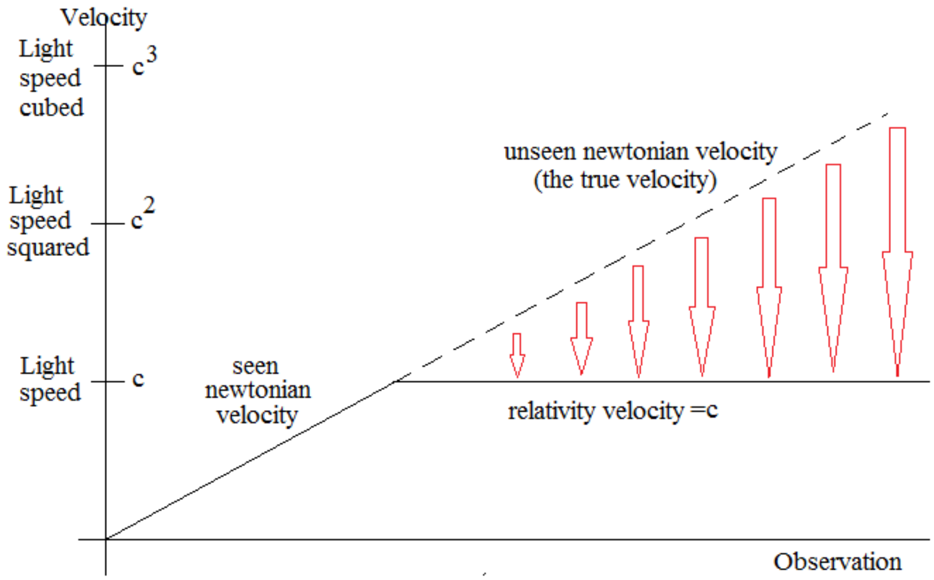

Figure 4: The dilation of the true velocity or Newtonian velocity by relativity. Here, we see that the dotted line represents the true velocity of particles travelling faster than the speed of light, but relativity dilates this velocity down to the speed of light which coils the path of the particle, so observers don't ever see particles travelling faster than light. The degree of velocity dilation is represented by the red arrows. Hence, the solid lines represent that which is seen, but the dotted line, which is the true velocity above light, is unseen due to dilation by relativity.

Now, figures 1 and 3 depict the length contraction effect on the electron, but the length contraction effect occurs simultaneously with the time dilation effect, which causes the electron to exist in multiple places along-side itself at the same time. As a result, as a particle approaches the speed of light, the original electron remains in its original linear position, but it also exists tangentially to itself, which rotates around its original self.

From figure 5 in A), we see a stationary electron in a wire. If this electron moves to the other end of the wire at speeds much less than N, or C for us on Earth, the particle obeys the laws of Newtonian Physics. In B), we see our electron now moves through the wire with a speed of c, so as discussed earlier it undergoes full primary coiling, which results in the appearance of a magnetic field (the magnetic field is the primary coiling) so it obeys the laws of relativity. From Einstein, when the electron moves at a speed where V=c, t'= undefined (time dilation = undefined) and s'= 0 (length compressed to zero). This means that to us, the particle no longer experiences time as in Newtonian physics, and now moves as a full primary coil or circle which propagates along with a speed equal to c. Because t'=undefined, the electron is able to be in more than one place at a time. Because s'=0, the particle is seen to move as a full primary coil or circle, which moves along the wire, always with a relative speed equal to c. this means that the electron is both inside the wire, and orbiting around the wire in multiple orbits multiple distances from the wire at the same time.

These "ghost or flux particles" which are all one particle that exist in different places at the same time, are responsible for the strange observations and theories made in quantum physics. These theories arise from the fact that ghost particles appear in their experiments involving high speed particles, such as the double slit experiment, and physicists cannot explain what they observe.

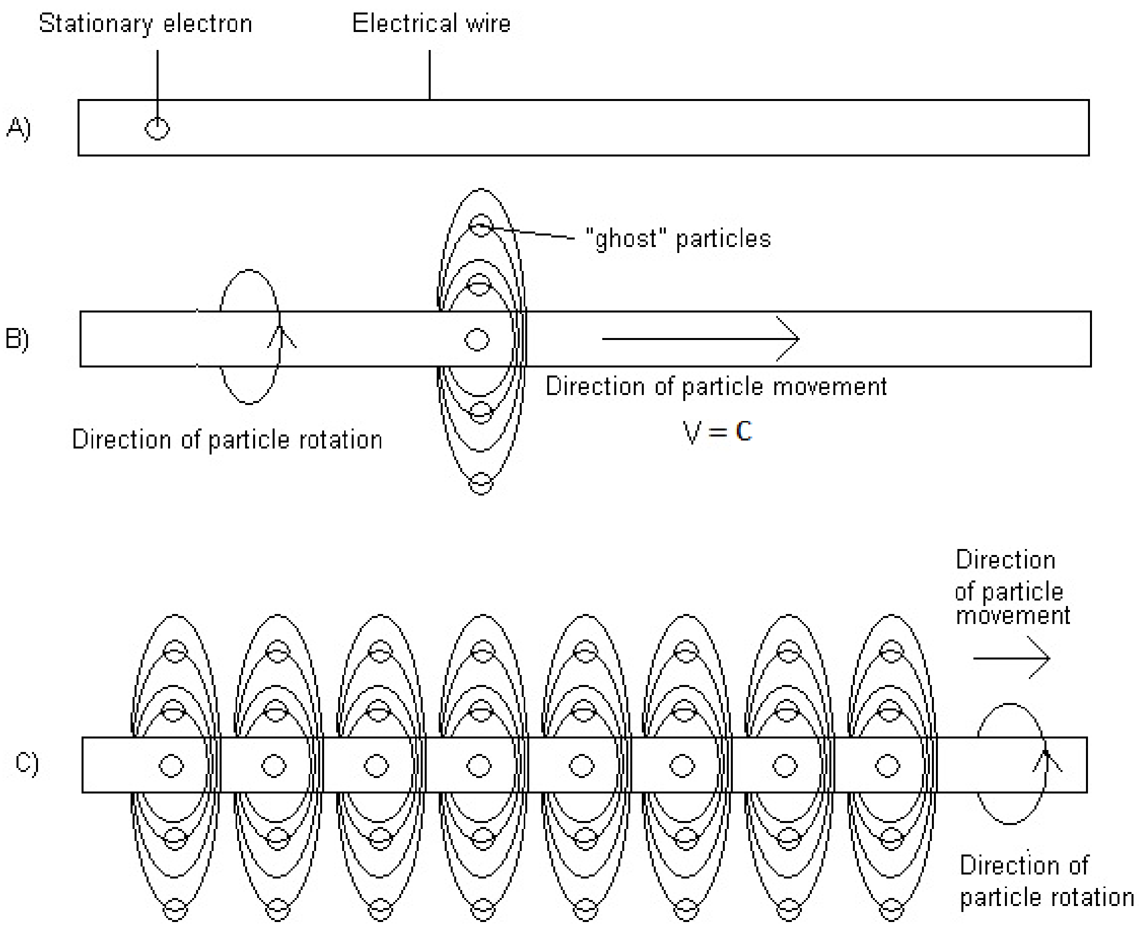

Figure 5: In A), we see a stationary electron in a wire. If this electron moves through the wire at speeds far below c, then the particle simply moves in a straight line through the wire, and no magnetic field is observed.

In B), our electron is now moving at c, so space dilation is occurring, causing the electron to now move as a circle (full primary coil) rather than in a straight line. As a result, the entire primary coil is always seen to move at a relative speed of c. However, the particle is experiencing maximum time dilation, t'=undefined. As a result, relative to us as stationary observers, the electron is in more than one place at the same time. In fact, the electron is both inside the wire, and orbiting around it in multiple orbital positions at the same time. As a result, we observe a magnetic field around the wire, which is just the electron orbiting around the outside of the wire. This is explained in section II table 1 of the McMahon field theory. When a particle is seen in more than one place at the same time, I call this a ghost or flux particle.

In C), the situation described in B) is exactly what is observed when electricity moves through an electrical wire. Note that conventional current moves in the opposite direction to electron flow.

From figure 5, we see that the original moving electrons we observe as electricity still exist inside the wire, but the length contraction and time dilation effects allow these electrons to simultaneously exist tangentially to their direction of movement outside the wire.

Now, I will present Einsteins special relativity equations for a moving particle.

Considering Einsteins relativity theory, at the speed of light the time and length contraction experienced by a particle becomes:

$$t' = t/(1-V^2/c^2)^{1/2}, \text{ given } V<C \text{.......... equation (1)}$$
$$s' = s(1-V^2/c^2)^{1/2}, \text{ given } V<C \text{.......... equation (2)}$$

where t'= relative time experienced by moving object
t= relative time experienced by stationary object
s'= relative horizontal space experienced by moving object
s= relative horizontal space experienced by stationary object
V= Relative velocity of moving object
c = speed of light

So, at the speed of light, s' = 0, so the path of the particle is compressed to a full primary coil, and t' = undefined (can't divide by 0), meaning that the particle occupies many positions at the same time, so it appears that many particles are present, but in fact it is the same particle in many places at once.
Once a particle reaches the speed of light and forms a full primary coil, this coil remains unchanged because it cannot compress any further. So, if momentum is gained by the particle, it will begin to undergo secondary coiling, where the coil becomes a coiled-coil to ensure the observed speed of light remains constant. McMahon field theory (2010) tells us that when a particle moves within the Unseen Newtonian velocity (Vn as in figure 4) range between c and c^2, we observe it as a secondary coil, or what current physics calls energy. Different momentum values result in different energy forms being observed, so basically the entire electromagnetic spectrum is simply an electron with different energy values moving as a secondary coil.
Einsteins equations were derived for a particle moving as a mass (ie: $v < c$). Therefore, we will have to take into consideration what happens to the particle when it moves as energy, (ie: $c \leq Vn \leq c^2$), where ***Unseen Newtonian velocities (Vn) as in figure 4***, between c and c^2 cause secondary coiling, hence relativity makes these velocities appear constant to stationary observers (= c).
Firstly, consider equation 1. When the Newtonian velocity of a particle is equal to light, equation 1 becomes equal to "undefined", because the particle now appears as a full primary coil, composed of many different sized coils because of full time dilation. In other words, the particle now exists in multiple places (thousands of places) at the same time, so the concept of time as we know it (1 object in 1 place at a time) doesn't apply for

Newtonian speeds equal to light and greater. In fact, to be clearer I should note that time dilation causes the particle to exist in multiple places at the same time, but at the speed of light it reaches the maximum value allowable by primary coiling.

Therefore, we can say:

t' = "undefined", given, $Vn \geq c$, ………. equation (3)

For equation 2, when a particle moves at the speed of light, the full path of the particle is compressed into a primary coil, composed of many different sized coils because the particle is in multiple positions at the same time due to maximum time dilation. Secondary coiling occurs after this speed. Here we are dealing with compression of length resulting in coiling to the second degree, where we always observe the particle moving with speed "c" due to relativity, which masks its true Unseen Newtonian velocity. Therefore, lets extend the limits of equation 2.

$$s' = s(1 - Vn^2/c^2)^{1/2},$$

for $c \leq Vn \leq c^2$, and where:

s' = 0 or si = indicates the formation of a full primary coil,

s' = [si x "A"] = full primary coil with some "A" secondary coiling

s' = [si x c] = full primary and full secondary coiling

Here I will provide some example calculations using equation 2, which deals with secondary coiling, and explain what it means.

Lets consider a particle moving horizontally when its Unseen Newtonian velocity Vn, = c (as in figure 4), which is just before secondary coiling starts. Here equation 2 becomes:

$$s' = s(1 - Vn^2/c^2)^{1/2}$$
$$s' = s(1 - c^2/c^2)^{1/2}$$
$$s' = s(1-1)^{1/2}, \text{ thus:}$$
$$s' = s(0)^{1/2},$$
$$s' = 0$$

Since s' = 0, this indicates a full primary coil is present, but no secondary coils are present. This (s' = 0) is because Einsteins relativity considers horizontal motion across the page only, and not coiling into the page. Thus the observer would see a primary coil with no secondary coiling, and would state that the whole system moves with a horizontal velocity equal to light, or c. note: when s'=0 or s'=si it's because coiling dominates, rather than simple straight line horizontal movement as with slower speeds.

Lets consider when Unseen Newtonian velocity $Vn=0.5c^2$ (as in figure 4). Here equation 2 becomes:

$$s' = s(1 - Vn^2/c^2)^{1/2}$$
$$s' = s(1 - [0.5c^2]^2/c^2)^{1/2}$$

$$s' = s(1-0.25c^2)^{1/2}$$

Since here c = 299,792,458 m/s, this becomes:

$$s' = s(-2.24688794684 \times 10^{16})^{1/2}$$

note: since conventional calculators can't take the square root of a negative number, we will use $i = -1^{1/2}$

$$\text{ie: } s' = s(-1 \times 2.24688794684 \times 10^{16})^{1/2}$$

$$s' = si \times (2.24688794684 \times 10^{16})^{1/2}$$

$$s' = si \times 149896229$$

if we want to express the value 149896229 in terms of c, we have:

$$s' = si \times 149896229 \times [c/299792458]$$

$$s' = si \times 0.5c$$

Since here we have [s' = si x 0.5c], si means a full primary coil is present, and the 0.5c value means 0.5 times the length light travels in one second is being compressed to cause secondary coiling. Thus the observer would see a full primary coil with some secondary coiling, and would state that the whole system moves at a horizontal velocity equal to light, or c. The "i" value also means we are now considering motion into the page, rather than across the page as with Einsteins conventional special relativity.

Lets consider when Unseen Newtonian velocity $Vn=c^2$ (as in figure 4). Here equation 2 becomes:

$$s' = s(1-Vn^2/c^2)^{1/2}$$

$$s' = s(1-[c^2]^2/c^2)^{1/2}$$

$$s' = s(1-c^2)^{1/2}$$

Since here c = 299,792,458 m/s, this becomes:

$$s' = s(-8.98755178737 \times 10^{16})^{1/2}$$

note: since conventional calculators can't take the square root of a negative number, we will use $i = -1^{1/2}$

$$\text{ie: } s' = s(-1 \times 8.98755178737 \times 10^{16})^{1/2}$$

$$s' = si \times (-8.98755178737 \times 10^{16})^{1/2}$$

$$s' = si \times 299792458$$

if we want to express the value 299792458 in terms of c, we have:

$$s' = si \times 299792458 \times c/299792458$$

$$s' = si \times c$$

Since here we have [s' = si x c], this means both full primary and full secondary coiling are present. Thus the observer would see a full primary coil with full secondary coiling, and would state that the whole system moves at a horizontal velocity equal to light, or c due to relativity. The "i" value also means we are now considering motion into the page, rather than across the page as with Einsteins conventional special relativity.

Note: Einsteins equation for length contraction (equation 2) can also be used for tertiary coiling. We just raise the limit to the 3rd power. This gives:

$$s' = s(1-Vn^2/c^2)^{1/2}$$

given $c^2 \leq v \leq c^3$, and where:

s' = [si x c] = indicates the formation of both full primary and full secondary coiling,

s' = [si x c x "A"] x = full primary and full secondary coiling with some "A" tertiary coiling

s' = [si x c x c] = full primary, full secondary and full tertiary coiling.

Basically, you can determine what will be observed by raising the limits of equation 2 to any power, to determine any degree of coiling, although tertiary coils and higher level coiling are not all observed with modern equipment. Thus, to determine what will be observed for any particle velocity, we use:

$$s' = s(1-Vn^2/c^2)^{1/2}, \text{ given } c^{z-1} \leq Vn \leq c^z \text{……… equation (4)}$$

s'= relative horizontal space experienced by moving object

s= relative horizontal space experienced by stationary object

Vn= Unseen Newtonian velocity of moving object (refer to figure 4) (if it were undilated by relativity)

c = speed of light

z = degree of coiling

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