

The twin paradox resolved with McMahon field theory (2010)

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 resolve the famous twin paradox- a scenario whereby special relativity equations are used to determine time dilation, thus for one twin time passes more slowly.

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 it 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 Einstein's 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. I.e: 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-dimensional 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-dimensional. 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.

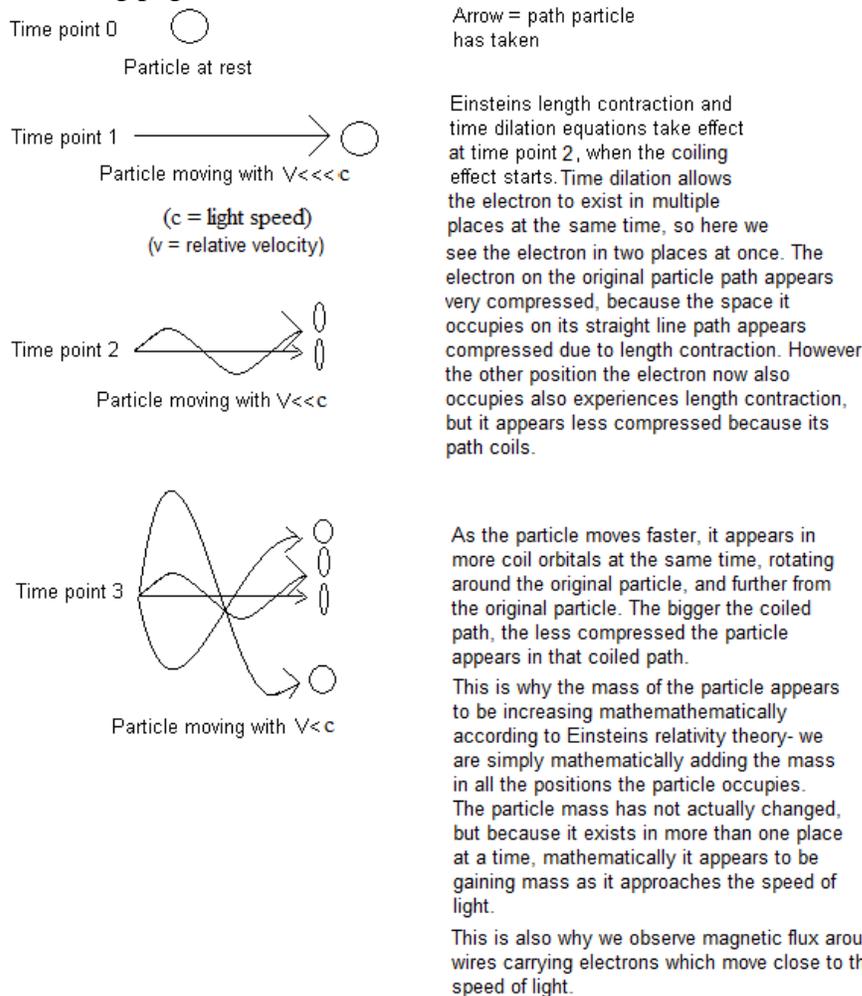


Figure 1: particle relativity- Taken from the McMahon field theory (2010): What we observe as relative stationary observers of a particle as it travels faster.

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:

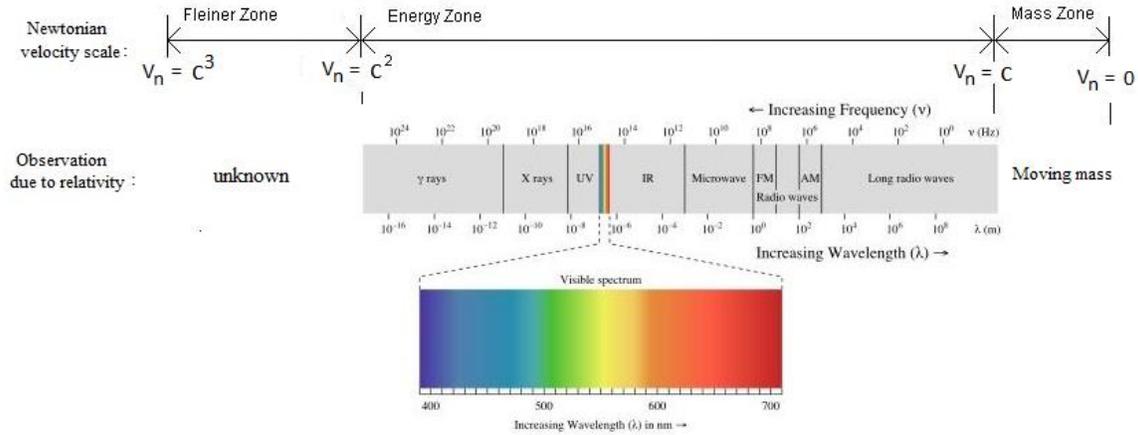
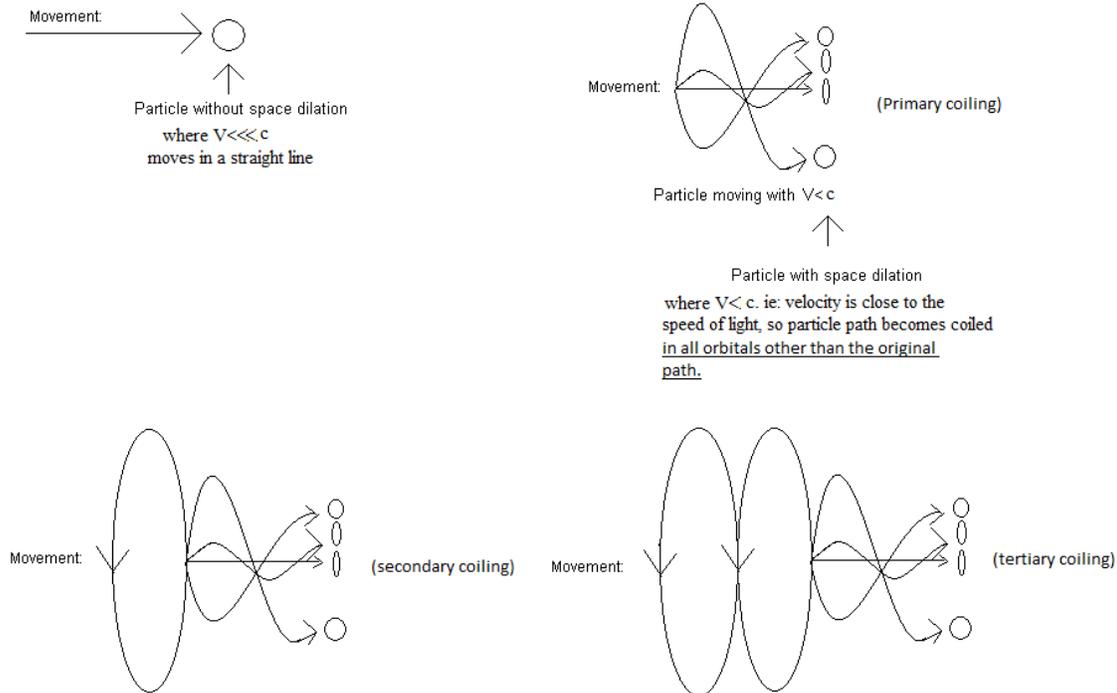


Figure 2: How an electron is observed at different Newtonian speeds: modified from the McMahon field theory (2010): Here, we see that as an electron moves with increasing speed according to Newtonian physics (although the speed we observe is dilated back to that of light because of relativity as in figure 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 V_n 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 $V_n=c$. 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. Other particles, such as protons and neutrons, will also have their own spectrums, which may be different or similar to that of the electron.

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.



From the paper: **McMahon, C.R. (2013)** "Fine structure constant solved and new relativity equations—Based on McMahon field theory", we are told that Einsteins time dilation and length contraction effects stop occurring and reach their maximum effect at a velocity of 299,792,457.894 m/s. Thus once a particle reaches the speed of light, the mass of the particle system mathematically is the same as at the 299,792,457.894 m/s velocity. Also, if the particle tries to move faster than light, the entire system then coils upon itself, something I call secondary coiling. This prevents us from ever seeing velocities greater than light. This is what energy is- particles moving as coiled coils. When secondary coiling is complete- and tertiary coiling begins- this is the state of Fleiner.

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.

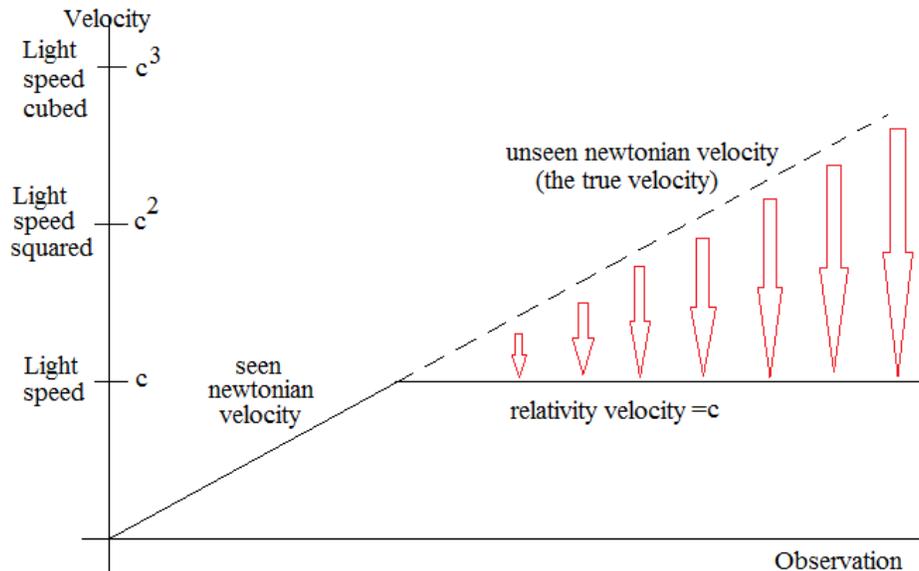


Figure 4: The dilation of the true velocity or Newtonian velocity by relativity. Here, we see that the dotted line represents the true velocity of particles travelling faster than the speed of light, but relativity dilates this velocity down to the speed of light which coils the path of the particle, 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 $V=c$, $t' = \text{undefined}$ (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 $t' = \text{undefined}$, 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

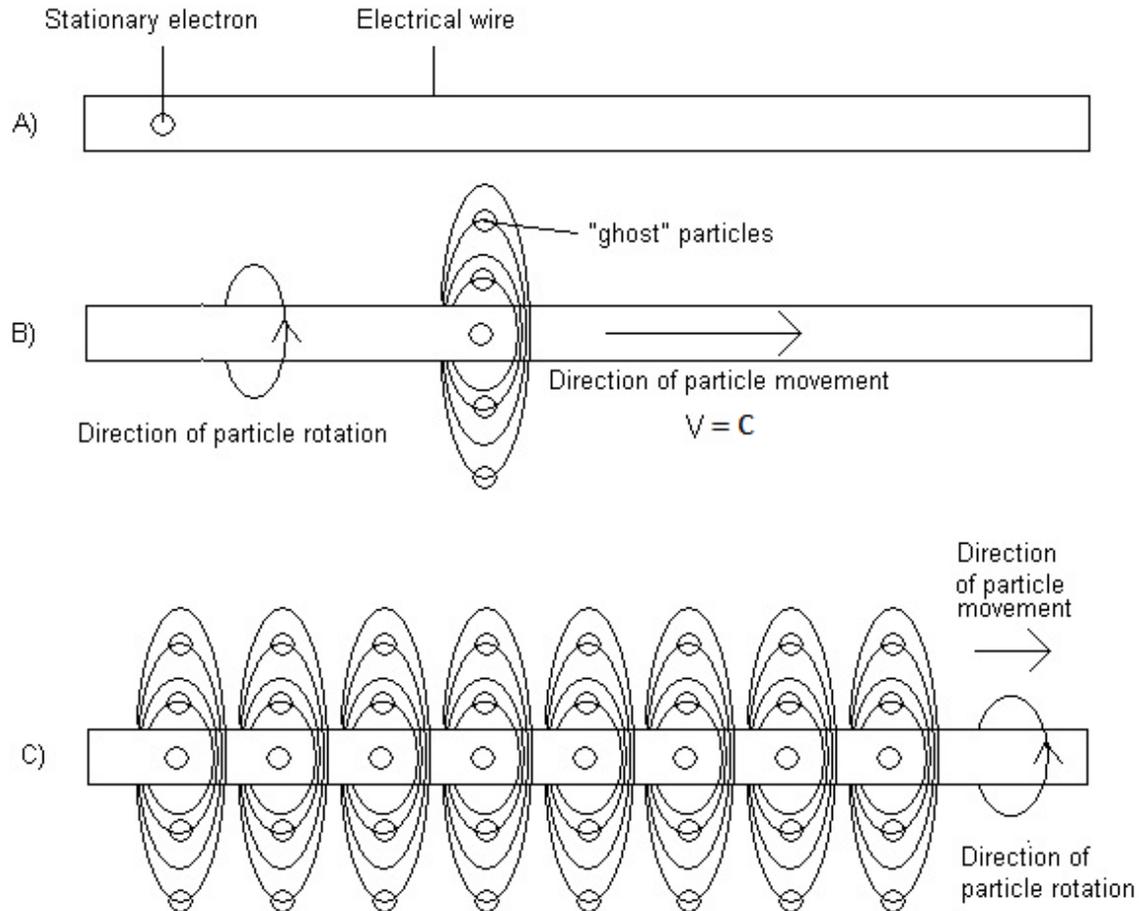


Figure 5: In A), we see a stationary electron in a wire. If this electron moves through the wire at speeds far below c , then the particle simply moves in a straight line through the wire, and no magnetic field is observed. In B), our electron is now moving at c , so space dilation is occurring, causing 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, $t' = \text{undefined}$. 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.

I shall now discuss the twin paradox

The twin paradox:

The Famous twin paradox is as follows: Suppose we have two twins, twin A and twin B. Twin A remains on Earth, while his brother, twin B, takes a ride in a spaceship at a velocity close to light. When twin B returns to Earth, he finds his brother twin A to be much older than himself.

The problem with this is that, under conventionally applied special relativity, each twin appears to be moving at the speed of light relative to the other. As a result, if we use Einsteins time dilation and length contraction equations (equations 1 and 2), it appears that for the other twin time passes more slowly. This cannot be the case- one twin must experience time passing more slowly- they both can't experience the exact same effect.

$$T' = \frac{T}{\sqrt{1 - \frac{v^2}{c^2}}} \dots\dots\dots\text{equation (1)}$$

$$L' = L \sqrt{1 - \frac{v^2}{c^2}} \dots\dots\dots\text{equation (2)}$$

- T' = Observed time of moving system (as seen from the stationary system)
- T = Observed time of stationary system (as seen from the stationary system)
- L' = Observed length of moving system (as seen from the stationary system)
- L = Observed length of stationary system (as seen from the stationary system)
- v = velocity of moving system (as seen from the stationary system)
- c = speed of light (299,792,458 m/s)

As can be seen from equation 1, time slows down for the “moving system”. However, relative to each twin, the other twin appears to be “moving”. Thus, time must slow down for one twin only, but for which one?

Consider figure 1 for a moment. If we replace the electron or particle in figure 1 with twin B, who takes a journey in a spaceship at speeds close to light relative to twin A, then twin A should observe what is observed in figure 1 when he observes his twin. Thus, twin A should observe twin B in multiple positions at the same time, in a coiled pattern identical to the magnetic field. Refer to figure 6 below.

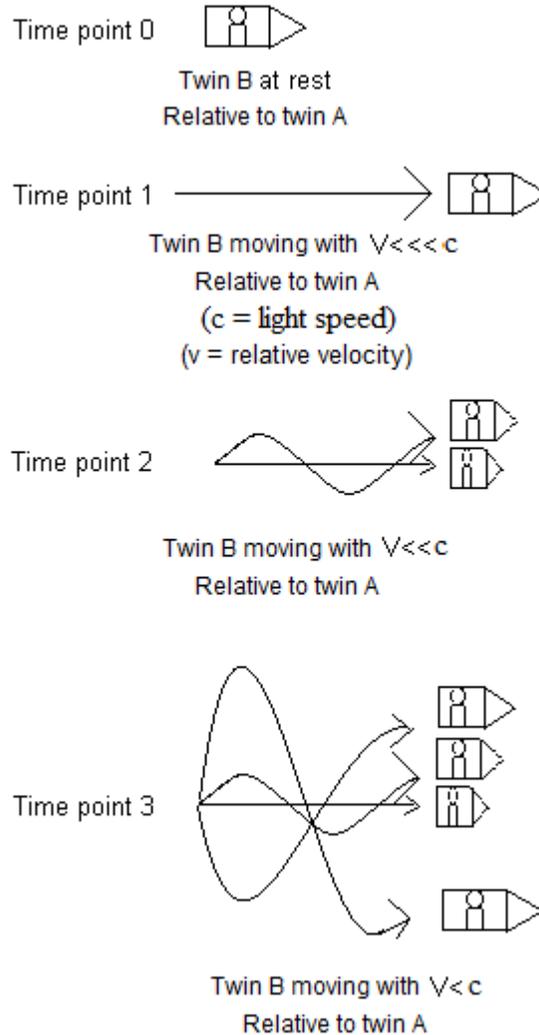


Figure 6: In this figure, the electron or particle in figure 1 is replaced with twin B in his rocket. As we can see, as twin B moves faster relative to twin A, the time dilation and length contraction effects that occur cause twin B to appear to be in multiple positions at the same time, relative to twin A. Twin B also appears to be “compressed” relative to twin A.

If figure 6 is what twin A observes of twin B, then twin B will experience time passing more slowly. Now we must consider what twin B observes of twin A.

Now, lets try to imagine how twin B would observe his surrounding environment outside of his spaceship, as in time point 3 of figure 6. In twin B’s frame of reference, or from twin B’s point of view, it would appear that all of twin B’s surroundings appear in multiple positions all at the same time as twin B approaches the speed of light. The “length contraction” effect experienced by twin B relative to twin A would cause twin B to observe “length expansion” of his surrounding environment. This is because in twin B’s frame of reference, he and his rocket appear normal, but the environment outside the rocket appears to have expanded. **Thus, we can see that the special relativity equations**

for twin A relative to twin B must have the opposite effect of the special relativity equations for twin B relative to twin A. I.e:

Special relativity equations for Twin B, as observed by twin A:

$$T' = \frac{T}{\sqrt{1 - \frac{v^2}{c^2}}} \dots\dots\dots\text{equation (3)}$$

$$L' = L \sqrt{1 - \frac{v^2}{c^2}} \dots\dots\dots\text{equation (4)}$$

Thus, equations 3 and 4 are identical to the conventional special relativity equations, namely equations 1 and 2 respectively.

Special relativity equations for Twin A, as observed by twin B:

$$T' = T \sqrt{1 - \frac{v^2}{c^2}} \dots\dots\dots\text{equation (5)}$$

$$L' = \frac{L}{\sqrt{1 - \frac{v^2}{c^2}}} \dots\dots\dots\text{equation (6)}$$

Thus, from twin B's point of view, the conventional special relativity equations appear to have the opposite effect. Instead of observing length contraction, twin B observes length expansion of his surrounding environment. Also, instead of observing time slowing down for his surrounding environment and his twin, namely twin A, it appears that time is speeding up for twin A relative to twin B.

Since we as observers can observe the magnetic field, which according to McMahon field theory arises due to Einsteins special relativity effect on the electron, the magnetic field allows us to observe special relativity in action on the moving electron, relative to ourselves. Thus, we as observers use equations 3 and 4 to describe the moving electron relative to ourselves, which causes us to observe magnetic fields. Thus, using this as a template, if the moving electron was replaced with an observer, then this observer would use equations 5 and 6 to describe their surrounding environment relative to themselves.

Thus, equations 5 and 6 solve the twin paradox. The twin who remains on Earth (twin A) uses equations 3 and 4 to describe what they observe of twin B, while twin B must use equations 5 and 6 to describe what they observe of twin A.

The main topic of the paper ends here, in that I have solved the twin paradox, but I would like to discuss this topic using McMahon field theory further.

Further discussion:

According to McMahon field theory, it is predicted that time itself has a particle basis, which is why the speed of light appears to have a set limit. In other words, it is predicted that an energy field exists that causes us to experience what we call time- which is interconnected with what we perceive as space. This energy field is predicted to be a neutron field in McMahon field theory, which is identical to the magnetic field with the exception we are dealing with moving neutrons rather than moving electrons. Thus, a neutron field would allow the observer to manipulate time itself- allowing for time travel into the past or future.

Thus, if time is the result of a particle based energy field, then such a field should be used as a frame of reference to determine who is moving and who is stationary. In other words, in the twin paradox, I used the magnetic field to prove my point in that the twin on Earth (twin A) must use the conventional special relativity equations to describe twin B, whereas the twin who flies off in a spaceship close to light speed (twin B) must use modified equations (equations 5 and 6) to describe how he observes twin A. To determine which twin should use equations 3 and 4, we must decide on which twin can be considered as being at rest.

Since the Earth has a gravitational field (gravitational field = proton field according to McMahon field theory) and a magnetic field (magnetic field = electron field according to McMahon field theory), it is quite possible that the Earth also has a time field (time field = neutron field according to McMahon field theory). Since twin A is stationary on Earth, thus stationary relative to Earths time field, Observer A can be considered as the one who uses equations 3 and 4. Since twin B moves relative to the source of Earths time field, twin B must use equations 5 and 6.

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