

Correspondence

Müller's Experimental Disproof of Special Relativity

It is well known that if a wire moves perpendicular to a magnetic field, a voltage is induced along the wire. Less known is the case in which a length of wire rotates together with a magnet, and a voltage is induced in spite of the absence of relative motion between the conductor and the magnet. Even less known is the special case of Francisco J. Müller's experiment [1], in which a voltage is induced when a conductor moves in a straight line together with a magnet, even though there is no relative motion between the two components. According to Müller, special relativity fails in an experiment that is at the heart of its domain of application, and general theory cannot come to the rescue. Müller concludes we therefore need a new physics.

Newton's first law says that a body remains in its state of being at rest or of moving uniformly in a straight line, unless acted upon by an unbalanced force. In his second law, Newton says that a change of motion is proportional to the applied force and occurs in the same direction as that force. In other words, motion in a straight line is a natural consequence of force. Yet as formulated by Newton, the first law is more than a special case of the second law. The importance of the first law is to establish frames of reference for which the other laws are applicable, such frames being called 'inertial' frames. But to say the first law is verified by the second law is simply not true. Motion in a straight line could be a special case of the second law, while otherwise everything moves about inertial frames of natural and force-free circular motion [2].

For the purpose of discussion, force-free circular motion is presumed to exist while space and time are considered absolute entities. All celestial bodies spin with force-free circular motion, and so starlight and other radiation travels with a natural curve in its path. Indeed, photons are emitted in a straight line due to force (at speed c relative to the source of emission), but their momentum is carried and turned by a free spin acquired from their source. For this reason, the faster a star rotates, the faster but more curved its light will be. The same kind of effect results from the orbit of a star. To see what happens with this sort of motion, suppose a star maintains a fixed straight-line distance from Earth. Any curve in the path of light will increase its length of travel from emitter to receiver, and the greater the curve becomes, the longer the distance will be. But because any increase in length of travel is proportional to an increase in angular speed, the motion of a star has no effect on the *apparent* speed of its light. In the context of this report, the apparent speed of light refers to the magnitude of its average velocity, and it should not to be confused with *average* speed. Apparent speed equals total *displacement* divided by elapsed time, while average speed is total *distance* divided by elapsed time. The average velocity for any number of 360° rotations within a given period of time is zero, and so a logical assumption is that no degree of a star's rotation, or its orbit, will affect the apparent speed of its light.

A variable curve in the transmission of light can explain yet a different scenario. Suppose an eastbound train is parked at a railroad station, and a light source is mounted at the rear of the

train. A beam of light is then aimed toward the front of the train. An observer on the train will see the light just as an observer at the station does. And if possible, they would each note the light's apparent speed as c (relative to the fixed non-rotating Earth Centered Inertial (ECI) frame). Now suppose the train accelerates to a high rate of speed and fails to stop at the next station. An observer at the station might see the light, but no change in its apparent speed will be noted. The eastbound motion of the train is in effect the same as increasing the rate of the Earth's rotation, and so the motion of the train itself is carried over to the beam of light. Each photon moves faster with the train but with a greater curve in its path. Hence, the apparent speed of light does not change according to an observer at the railroad station. Yet the emission speed of each photon remains constant relative to the train, while the curved path of light becomes more curved. Subsequently, the apparent speed of light relative to the train becomes less, but with reference to a clock on the train seems unchanged. An atomic clock placed on the train runs slow as well because the curved path of its radiation becomes more curved, while its apparent speed with reference to the train slows down.

Based on my principles of force-free circular motion, an electromagnetic field has no medium such as aether or spacetime. Instead, it is nothing but a field of particles. Photons propagate through a vacuum of absolute space, and waveforms are produced by the motion of the emitter. Electromagnetic force is then produced by physical interactions between the field of particles and the spinning parts of an atom. The magnitude of force is accurately described with Coulomb's law because electrons and protons spin with force-free circular motion, and the strength of force is directly proportional to the rate of their spins. Yet a field of particles becomes more dispersed as the particles move away from an emitter, and so the magnitude of their force complies with the inverse square law.

All radiation is emitted in a straight line due to force, but still it maintains the original free circular motion of its source. Accordingly, a magnetic field moves in a curved path of travel. But just the same as with a light beam on a train, the curve in a magnetic field is affected by the motion of its source. Consequently, a voltage is induced when a conductor and a magnet move together, even though there is no relative motion between the two components. And so Müller's experiment not only disproves SRT, it also shows evidence that a new physics based on force-free circular motion is true.

Reference

- [1.] Francisco J. Müller, "An Experimental Disproof of Special Relativity Theory (Unipolar Induction)", Internet. 2 Aug 2008. Available: <http://home.comcast.net/~Deneb/muller.htm>
- [2.] Mitch Emery, "New Physics Based on Force-Free Circular Motion", Proceedings of the Natural Philosophy Alliance Vol. 3, No. 1: 24-36.

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