

# Experiment to Demonstrate that the Uncharged Electron is a “Rotating Unit of Space”

Bruce Peret, June 22, 2012

## ***Introduction***

In September of 1935, Richard A. Beth published a paper entitled, “Direct Detection of the Angular Momentum of Light”<sup>1</sup> that demonstrated circularly polarized light possessed torque, and when a beam of circularly polarized light was directed at a darkened plate suspended by a string, that torque would cause the plate to rotate.

In his writings on the *Reciprocal System of physical theory*, Dewey B. Larson asserts that the *uncharged* electron is a “rotating unit of space” and should also possess torque. The purpose of this experiment is to demonstrate the rotational character of the uncharged electron, using an experimental setup similar to Beth's where the darkened plate is replaced by a rotating conductor and the photons are replaced with uncharged electrons.

This experiment will demonstrate the following principles of the *Reciprocal System*:

1. The electron does exist in an *uncharged* state as electric current, separate from the charged electron model used by conventional physics.
2. The uncharged electron is a rotating unit of space, possessing torque, and can therefore influence spatial motion.
3. The uncharged electron moves through the *time* of the atom, not the space between atoms.

## ***Background***

In the *Reciprocal System of physical theory* (RS), the electron exists in two states, charged and uncharged. The charged electron is the conventional electron referred to in physics, whereas the uncharged electron is unknown. (In the RS2 reevaluation of the RS, the uncharged electron is identified as the “hole” in conventional, electric theory.) Larson asserts that the uncharged electron is the mechanism behind electric current.<sup>2</sup>

The concept of “voltage” is the ratio of charged to uncharged electrons in a conductor, mediated by resistance.

In the RS, the atom exists as temporal rotations in the “time region,” located on a coordinate, spatial grid. In a solid such as a metal, the time regions are dimensionally locked into position and cannot reorient their internal arrangement without the considerable application of force. Mechanical movement, linear or rotational, will affect the entire structure, not the individual time regions.

The RS is based on the concept of *motion*, a reciprocal relation between space and time. Space can therefore move through time, and time through space, but space cannot move in relation to space, nor time in relation to time.

Because of this, the rotating space of the electron *cannot* move through the spatial vacuum between

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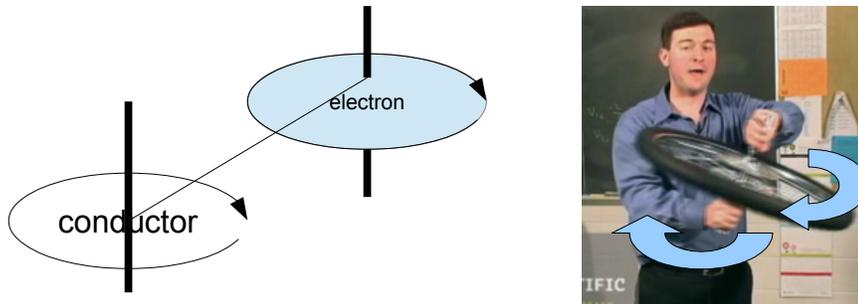
1 Beth, Richard A., “Direct Detection of the Angular Momentum of Light”, Phys. Rev. 48, 471–471 (Sep 1935)

2 Larson, Dewey B., *Basic Properties of Matter*, ISUS, Inc., 1994, p. 104.

atoms, as the relation of space-to-space does not constitute motion. Instead, the uncharged electron, the electric current, moves through the *time* of the atoms, as space-to-time *does* constitute motion. The electrons move through the “solid of time” of the atom, just as bubbles move through water.

Under normal environmental conditions, the orientation of the spin of uncharged electrons is basically random, being a function of the orientation of the magnetic axes of the time region and changes as the electron moves from atom to atom. Because the electron is inside the unit space boundary, external EM fields have minimal affect on the orientation of the electron within the time region.

In order to obtain an effect similar to Beth's setup, a bias must be created within the time region to orient the uncharged electrons in the same spin direction. The solution is simply *angular momentum*.



The uncharged electron has a mechanical analogy of a gyroscope. When a gyroscope is placed in a gimbal and the gimbal assembly is then rotated about another axis, the two, rotational planes align to minimize the angular momentum between them. (Demonstrated by the common physics experiment of holding a spinning bicycle wheel while standing on a rotating platform.) The same situation happens within the time region, when a conductor is rotated about its axis—it creates a bias to the uncharged electron rotation.

If a sufficient quantity of uncharged electrons is present in the conductor, the “rotating unit of space” that is the electron will add its torque to the rotation of the conductor, accelerating the rotation until mechanical losses and resistance prevent further acceleration.

Whereas voltage is defined as the ratio of charged to uncharged electrons, charge (numerator) needs to be *minimized* and uncharged (denominator) *maximized*, so that ratio needs to be small... very low voltage to very high current.

### ***The Experiment***

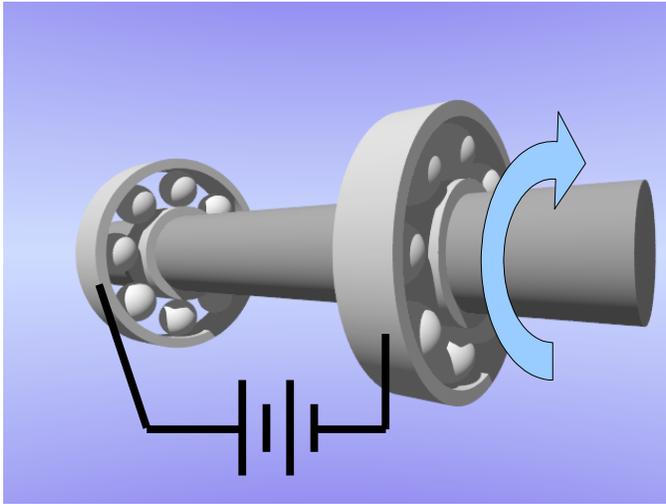
All that is required to test the theory is an axle (bolt, shaft, etc.) set in low-friction ball bearings, where all components conduct electricity (minimal grease or other sources of electrical resistance), a low voltage, high current source, such as an automotive battery, and some jumper cables to connect up the circuit.

The current provided by the battery will saturate the axle with uncharged electrons and the mechanical rotation will orient those electrons to have the same spin direction as the turning axle.

The rotation of the shaft will accelerate until mechanical limits are reached, the current is removed, or it melts.

Note that this is based on *gyroscopic* principles, not electromagnetic ones, so the polarity of the connection is irrelevant and it will work equally well when spun clockwise or counterclockwise.

## Setup and Operation



1. Secure axle in bearings, assuring a good electrical connection. (Pressure fit, or nuts on a bolt.)
2. Mount bearings to a non-conductive surface. For example, a piece of wood with U-bolts, or clamp in a vice with insulation on jaws so all current flows through axle.
3. Connect cables to battery.
4. Connect one cable to bearing.
5. Spin axle (a simple flywheel attached to one end may simplify this).
6. While axle is rotating, touch other cable to other bearing. Only connect for a short period of time, as the setup will get very hot due to the high current. It will also throw sparks from the bearings, so verify no inflammable materials are in the vicinity.
7. Observe rotation accelerates due to gyroscopic alignment of uncharged electron rotation aligning the rotational plane of the axle.
8. Disconnect power and stop rotation.
9. Spin axle in opposite direction and reconnect power.
10. Observe the axle still accelerates, demonstrating that the electron alignment follows the rotation of the axle.
11. Disconnect leads from bearings and reverse polarity.
12. Test with clockwise and counterclockwise rotation, as before. Axle still accelerates, demonstrating that it is the *quantity* of uncharged electrons providing the torque, not the direction of current.

## Conclusion

In order for this to function, uncharged electrons must exist as rotating units of space *inside* the atomic structure and the atomic structure must be in the solid state so the geometry of the time region cannot change. The torque from the spin-aligned electrons is translated directly to the unit space boundary and external structure.

This setup *will not work with charged electrons*, which are rotational *vibrations*. The vibration has *no net torque*, so no rotational energy can be transferred to the mechanical system. It should prove quite a mystery to conventional physics that base electric theory on *charge*.

In summary, this experiment demonstrates that uncharged electrons behave as predicted by the Reciprocal System and are able to easily explain this axial, gyroscopic acceleration.