

## **The Key that Winds Up the Universe** (The Rotating Electron-Positron Dipole)

**Frederick David Tombe,**  
**Belfast, Northern Ireland, United Kingdom,**  
**[sirius184@hotmail.com](mailto:sirius184@hotmail.com)**

**24th January 2009, Manila, Philippines**  
(9<sup>th</sup> March 2009 Amendment)

**Abstract. This article looks at the mechanism of the rotating electron-positron dipole. It is like a key, which when turned by a torque, produces a fountain of aether pressure which is the source of all mass, energy, and angular momentum.**

### **The Electron-Positron Dipole Orbit**

I. Aether is pulled into an electron for reasons unknown, and aether inflow is associated with a tension (negative charge) and hence a pull force. Pressurized aether (positive charge) emerges from a positron for reasons unknown. In an electron-positron dipole, there is a net aether inflow which gives rise to gravity. If the electron and positron within a dipole possess mutual tangential speed, this will introduce vorticity and rotational stress into the aether. This vorticity causes the electron sink to congest and the positron source to widen. Hence vorticity will increase the positive charge and decrease the negative charge in the dipole. On this basis, mass and energy will be a function of the angular momentum of an electron-positron dipole in which the electron and the positron are in mutual orbit. Gravity and negative charge are very closely related, just as centrifugal force and positive charge are very closely related. An electron-positron orbit will constitute an interplay of aether pressure and aether tension. Inflow tension is dominant in the universe until angular momentum increases to such a level as to reverse this fact. Centrifugal force is the positive charge of a positron when the angular momentum of an electron-positron dipole has caused the positive charge to become dominant.

Electron-positron dipoles are like keys. When we turn these keys by applying a torque, we get energy, mass, and angular momentum. A universe in which the mass and energy are continually increasing, will be characterized by net tangential acceleration and a continually increasing angular momentum. In such an expanding universe, planetary orbits would not obey Kepler's laws, and matter would be observed to be continually spiralling outwards.

## **The Kepler Orbit**

**II.** The Kepler orbit involves large mutually attracting sinks submerged in a sea of electron-positron dipoles. Large gravitating bodies will form yokes in extended regions of the electron-positron sea that are entrained by their gravitational fields. Neighbouring gravitospheres will slide together at the shear lines in the electron-positron sea where the respective gravitational fields meet. These shear lines will be lubricated by centrifugal repulsion coming from the positrons, hence giving rise to a frictionless hovercraft effect.

Kinetic energy on the large scale will be measured by the degree of centrifugal pressure that is generated at these shear lines. Kinetic energy, centrifugal force, and inertia are all manifestations of aether pressure in the electron-positron sea. The reason why the gravitational inverse square law force in planetary orbits is not affected by tangential motion, as is the case with the centrifugal force, is because the gravitational force is caused by large scale aether inflow through the electron-positron sea. The electron-positron sea is like a rigid solid without any vorticity. The centrifugal force on the other hand is generated in the electron-positron dipoles at the shear lines in the electron-positron sea where the gravitospheres of two orbiting bodies meet. Tangential motion is required to generate the necessary positive charge from the electron-positron dipoles, which then manifests itself as centrifugal repulsion.

Unlike translational motion, rotational motion does not entrain the electron-positron sea. This was confirmed by the Michelson-Gale experiment. When a body rotates, the electron-positron sea will flow through that body as like water flowing through a basket. Rotational inertia in a rigid body is centrifugal pressure at molecular level in conjunction with a solenoidal alignment of the constituent molecules of that rigid body along their spin axes. Rotational inertia is the same thing as centrifugal charge.