

Lightning and the Gravitational Capacitor **(Auroras and Gravitationally Powered Fluorescent Lights)**

**Frederick David Tombe,
Belfast, Northern Ireland, United Kingdom,
Formerly a Physics Teacher at,
College of Technology Belfast, and
Royal Belfast Academical Institution,
sirius184@hotmail.com
1st January 2008, Manila
(30th September 2008 Amendment)**

Abstract. Gravity and electricity are both manifestations of aether flow. They differ only in the respect that gravity is a rarefied flow that gives rise to a tension/pull force, whereas electricity is a pressurized flow. A thundercloud acts as a transducer and also as a capacitor which collects and stores gravitational aether and releases it again under pressure in the form of electricity. One might say that a thundercloud is a reservoir that collects gravity and releases it again as bolts of lightning. It will further be suggested that auroras are gravitationally powered fluorescent lights which operate when the magnetic field is at an optimum angle.

Compressible Space

I. So long as we treat space as being rigid and dynamic, then the only variable in mechanics will be the motion of particles relative to space. However, if space itself is dynamic, stretchable, and compressible, then this will introduce an extra variable. Both the particles and the space can be moving. This concept has important significance in wave mechanics because it allows for the actual flow of space with a wave. And if energy ultimately comes down to the motion of space as well as to the state of

tension or pressure in space, then we will have the basis for Bernoulli's principle and we will also have the basis for the flow of mass with a wave. See 'The Connection between Gravity and Light' at,

<http://www.wbabin.net/science/tombe18.pdf>

This in turn will explain the close relationship between mass and energy, and it will add a hydrodynamical dimension to wave mechanics. See 'Negative Mass and the Gravity Sink' at,

<http://www.wbabin.net/science/tombe40.pdf>

On this basis, we will suppose that electricity as measured in terms of voltage or charge is in essence compressed space. We will refer to space as the aether, and no attempt will be made to explain the aether using the language of physics, since all the terms in physics ultimately derive from the aether.

Vitreously Charged Thunderclouds

II. There has never been any satisfactory explanation regarding where the accumulated electric charge on thunderclouds comes from. In 'The Four Kinds of Electric Charge' at,

<http://www.wbabin.net/science/tombe26.pdf>

it was explained how vitreous charge constitutes a build up of aether pressure. This build up could be due to the ongoing aether inflow that manifests itself as the gravitational field. Gravity is an inflow of rarefied aether which gives rise to a tension. A thundercloud will behave like a reservoir and absorb some of this aether. As it continues to rain down gravity, the aether pressure will build up until saturation occurs. It will then burst out and flow to Earth in the form of bolts of lightning that look like the distributaries of a river.

Lightning is therefore in effect concentrated gravity that has been collected, stored, and then released all at once. The thundercloud is therefore a dam with a large capacity for vitreous fluid (aether). The thundercloud is a capacitor and it is also a transducer which converts gravitational energy into electrical energy.

The Radial Current

III. Gravity and lightning are radial currents which do not obey Ampère's Circuital Law. Nevertheless, a magnetic field does still surround a bolt of lightning. The solenoidal magnetic field lines will be like rings around the current which will continue on to infinite.

Auroras and Gravitationally Powered Lights

IV. Auroras are another large scale luminous phenomenon that has so far defied any explanation. We know that they occur at a certain distance from the magnetic poles. We can see them at night time when they are out of the direct reach of sunlight. They are clearly self luminous and they exhibit a pattern of large scale fluid motion.

We are therefore observing some kind of fluorescent gaseous discharge phenomenon similar to that which takes place in a fluorescent light. The only large scale hydrodynamical phenomenon in the region is the gravitational inflow of the vitreous fluid (aether) which we know is a rarefied form of an electric field. We are therefore left to conclude that auroras are gravitationally powered fluorescent lights that operate at maximum efficiency when the gravitational field and the magnetic field are mutually aligned at an optimum angle.

There will of course be many other aspects involved concerning ionic discharge and the sunspot cycle, but the underlying principle will be that of the fluorescent light.