The Rotationally Elastic Sponge

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Abstract. This article is written for the purpose of retracting a statement which has appeared throughout a number of other articles in this series.

Kepler's Law of Areal Velocity

I. In quite a few previous articles in this series, it has been stated that Kepler's law of areal velocity implies that there is no large scale vorticity in the solar system. This was a false conclusion based on the fact that the curl of a gravitational field is zero. As a result of this false conclusion, it was then suggested that the rigid sea of tiny rotating electron-positron dipoles sponges up all the large scale vorticity into the magnetic field.

Kepler's law of areal velocity means that there is no net tangential force acting in a Keplerian orbit, and that planetary orbital equations are solved using only the radial equation. However, if we take a closer look at the situation, we can see that even when angular momentum is conserved in a vortex or in a non-circular Keplerian orbit, that there will be both a Coriolis force $\mathbf{v}\mathbf{X}\mathbf{H}$ and an angular force $\partial\mathbf{A}/\partial t$. These two forces will sum to zero numerically, but they can still be individually observed in the motion. Consider the elliptical orbit of a comet. As the comet is moving inwards radially, its angular acceleration will be continually increasing. There will also be a continual deflection of its radial motion, opposite in direction to that of the angular acceleration. So although the net tangential force will be zero, and angular momentum will be conserved, there will

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still be both an angular force and a Coriolis force present which do not cancel each other out physically. Large scale vorticity will therefore be present in a gravitational field. Gravity will have a tangential component which is not officially recognized in the textbooks. The tangential component of gravity will be the angular force mentioned above which causes a change in the magnitude of an object's speed in the tangential direction. The Coriolis force mentioned above will be a tangential case of the centrifugal force. See section **V** in 'The Cause of Coriolis Force' at,

http://www.wbabin.net/science/tombe55.pdf

The electron-positron sea will still sponge up large scale aether vorticity, particularly in relation to large scale rotating objects, preventing any direct interaction between their rotations. Two rotating gyroscopes will not repel each other due to this sponging effect. But this sponging effect will not be total in relation to planetary orbits. Large scale vorticity in the gravitational field will still exist in relation to planetary orbits.

The Aurora Borealis

II. We may even get large scale vorticity of the aether in regions where the aether inflow is deflected by the magnetic field. Gravity is essentially an electric current which differs from standard electric current only by virtue of the fact that it is a rarefied flow of aether, whereas standard electric current in a wire is a pressurized flow of aether. Electric currents are deflected by a magnetic field due to the Coriolis force which arises due to interaction with the rotating electron-positron dipoles of the electric sea. Hence, this same deflection should happen with gravity flowing through the Earth's magnetic field. At a certain optimum angle and concentration of the Earth's magnetic field, in a ring close to the Arctic Circle, we can observe auroral effects. Vorticity can be observed in these effects. A spiral dimension appears to have been introduced into the inflowing gravity.

Gravitomagnetism

III. There is no gravitational analogy to electromagnetism. In order to have a gravitational equivalent of electromagnetic radiation, we would need to have a non-zero curl for the gravitational field, such that this curl

were equal to the rate of change of the angular momentum of a planetary orbital system. In other words, we would need to have a planetary orbital system with a net tangential force acting on it. Electromagnetic radiation involves a propagation of net tangential acceleration through a sea of rotating electron-positron dipoles. No such equivalent effect has ever been detected on the large scale in relation to Keplerian orbits. Theoretically, gravitomagnetic radiation would take the form of a large pulse of energy which would pass through a line of solar systems, giving each of them a momentary net tangential acceleration. If this situation did occur, the density of the distribution of solar systems and the unknown elasticity associated with the pulse of energy would lead to a wave propagation speed of unknown value.

There have been many scientists speculating on a theory of gravitomagnetism. Most of them assume, on no rational basis whatsoever, that any gravitomagnetic radiation would have to have the speed of light. They are clearly going down the wrong lane, usually because they don't have any idea about the true nature of electromagnetic radiation in the first place, and they are assuming analogies which simply don't exist in practice.

The curl of the gravitational field will usually be zero. For it to be non-zero we would have to have an orbital system in which there were a net tangential acceleration, and no such scenarios spring to mind in the nearby vicinity. The general expression for gravitational induction, based on Faraday's law would be,

$$\text{curl } \mathbf{g} = d\mathbf{H}/dt \qquad \textbf{(Gravitational Induction)} \qquad \textbf{(1)}$$

where $\mathbf{H}$ is the angular momentum of a planetary orbital system. A non-zero value for curl $\mathbf{g}$ will only arise when a net tangential force acts on that planetary system. But even when the curl of a gravitational field is zero, it does not follow, as was previously suggested in other articles, that there will be no large scale aether vorticity in the system. There will be aether vorticity both in the momentum field $\mathbf{A}$ of the aether, and in the acceleration field $\mathbf{g}$ of the aether.