



Mountain Man's UseNet Archive

An Incompressible Aether

- "glird" & Ray Tomes

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An Evolving Project ...

NOTE - If this subject is of interest then definitely refer [Theories of the Aether](#)

An Incompressible Aether ...

Date: Thu, 28 Dec 95 10:43:47 -0800
 From: glird@gnn.com (The Man with the Painted Pony)
 To: alt.sci.physics.new-theories
 Subject: An Incompressible Ether.

glird@gnn.com wrote:

In "*The Theory of Electrons*", 1915, after introducing the theory of "electrons" (he invented them) Lorentz came to his item 7, in which he said,

"Indeed, one of the most important of our fundamental assumptions must be that the ether not only occupies all space between molecules, atoms or electrons, but that it pervades all these particles. We shall add the hypothesis that, though the particles may move, the ether always remains at rest. We can reconcile ourselves with this, at first sight, somewhat startling idea, by thinking of the particles of matter as of some local modification in the state of the ether. These modifications may of course very well travel onward while the volume-elements of the medium in which they exist remain at rest."

If we slightly modify Lorentz's hypothesis that his universally stationary material ether is completely "incompressible" and allow that it is **very slightly** compressible (wherefore it will conduct wave systems at a finite rather than infinite velocity), his theory is logically tenable.

All newsgroup posters who set forth a similar basic theory take note!

Nevertheless, also note that Lorentz's "ether" was a MATERIAL substance, not that "medium"-with-

all-the-properties-of-matter-your-theories-stand-on; which you chose to call "empty space", or a "vector field", or a "motion field of empty space" or anything other than "matter" itself; the one and only thing that can undergo your radiating deformations. In obeisance to Einstein's unsupported 1905 denial of such a space-filling luminiferous material medium (later recanted, upon his "more mature reflection"), you remain programmed by your teachers into continuing to think of physical space as "empty".

Although I find Lorentz's entire thesis completely logical, and indeed the only viable logical alternative to mine (which considers ALL matter as everywhere possessing the same property found by every un-"interpreted" scientific experiment ever performed, namely, that matter is bodily compressible); his concept ends up with "nature is a mystery", while mine explains every physical mechanism that exists in the Universe.

Also, his theory denies sense evidence while mine is built on sense evidence. I prefer to believe that the human senses - honed by billions of years of survival of the fittest - do give an accurate image of physical reality at our level of perception. Given THAT thesis, it is obvious at the start that the theories of modern Physics are false. (To PROVE that took almost 40 years. :-)

Regardless even so, the point of this posting is that Lorentz, whom I consider the very best theoretical physicist of his era, already did set forth much the same thesis that many of you think you have originated. It, just as the thesis than physical space is an empty void (with all the properties of an incompressible material medium), led to the present self-anthropomorphic conclusion that "nature is a mystery".

Nature is not a mystery. It's just that the present theories of physics are based on a false premise: matter is ultimately incompressible, coupled with numerous un-found mathematical errors; and that the basic terms of Physics were inadequately and even falsely defined in the first place.

Glird

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Quotation: ***"The Highest Mountain of all to overcome is your own preconceptions."***

Date: Tue, 05 Dec 95 10:03:01 -0800

From: rtomes@kcbbs.gen.nz (Ray Tomes)

To: alt.sci.physics.new-theories

Subject: Gravity, Ether and Unifying the Forces

rtomes@kcbbs.gen.nz (Ray Tomes) wrote:

THINK BIG

Imagine a sort of ideal gas made of one size of particles. Suppose that it has been all stirred up and contains lots of waves and vortices. The vortices themselves can also behave like particles and can propagate waves too, but this is a second order effect and the velocity will be lower than the waves in the gas itself. It is further possible for the waves in the vortices to produce further vortices and again the velocity will be slower. This process can occur without limit if we have enough gas and enough time to stir and observe.

THE AETHER

Now I want to suggest that the universe is filled with a gas which is something like this and I will call it the aether. This aether will have a wave propagation speed of about 10^{15} cm/s which is very much faster than light. The field which is represented by the pressure of the aether is I think the gravitational field of

GR.

Note that I am suggesting that gravity waves propagate at a much higher velocity than the conventional idea, but there is no observational evidence that this is wrong, and it is in good agreement with the commonsense observation concerning the direction of the gravitational field. The traditional view of this is different in theory but not in practice.

The locations that we observe to have matter are actually low density aether regions. A black hole would be an aether vacuum. This is similar to a tornado having a very low internal pressure and density.

THE ETHER

The vortices which exist in the aether can interact also and as a result they make another field. I will call this the ether. It will be the ether of Maxwell's theory that carries the electromagnetic fields. It has a propagation velocity that we call the speed of light, but does vary from place to place depending on the density and pressure of the aether. This is why space is considered bent by gravity in GR, but it is better to think of space as straight and the velocity of light as variable.

Note that the spelling of Aether for gravity and Ether for Electromagnetism was chosen as an easy memory aid.

The subject of vortices and the equations which apply to them were fully calculated by Kelvin in 1880 and lead to exactly the correct equations for electromagnetism as explained by Paul Stowe in a recent post. He also reports that this is covered in "A History of the Theories of Aether and Electricity" by E Whitaker, Dover, 1989.

MATTER

When the ether forms another level of vortices it produces what we call matter. Matter can also support travelling waves which we call sound, and again the speed of propagation of these is very much less than for the level above which is light.

It is interesting that matter comes in different states of solid, liquid and gas which relate to the degrees of freedom that each particle has for its motion. One wonders whether the ether can also have such different states under different conditions. We may only have ever observed one of these in our part of the universe.

When we talk about pressure and temperature we mean these to apply to matter, but the ether and aether would also have these properties. Evidence of this is the already mentioned variation of c near massive bodies. The speed of propagation of waves depends on the temperature of the medium.

MORE LEVELS

There is evidence for a further level of slower waves below sound. Heat travels at a much slower speed and may be considered to be the next property in the sequence: gravity, light, sound, heat. It is probable that matter would need to be in an extremely energetic environment for the next level of substance to fully manifest itself. Such conditions do not exist on earth but might do so inside stars. If they did then we would expect another much slower oscillation in the sun than the ones related to sound which take minutes. The sunspot cycle is of the right order of length.

VARIATIONS WITHIN LEVELS

The speed of light is not a constant. Each substance has a different speed for light and this is usually

expressed (inversely) as the refractive index of the substance. There are concentrations of different speeds for light around certain values which are in simple ratios to the speed in vacuum. For example, the refractive index of water at 18 degrees is 1.3333 or 4/3 while many substances have refractive indices near 1.50 and 2.00. The rule is not absolute, but may be considered to be a bit like Dalton's atomic weights which tended to be integers but were complicated by isotope mixtures.

Again, the speed of sound in different materials clusters around certain velocities that are also in simple proportions to each other such as 12, 6 and 3 km/s. Interestingly these are some of the same velocities as reported in redshift quanta and seem to also be related to typical stellar velocities and planetary velocity quanta.

RATIO STRUCTURE

A similar structure is found for the speed of heat in different materials. Furthermore the ratio of velocities light/sound and sound/heat are of the order of $10^{4.5}$ to 10^5 which is a similar ratio to the scale difference of the distances between many structures in the universe in the sequence: observed universe, galaxy, star, planet, moon and also atom, baryon.

Both the existence of this large ratio and the small ratios of speed in different substances are consistent with my Harmonic theory predictions for spacial and time structures and suggests that a common cause such as the above explanation does exist for all these phenomena. See my WWW pages for a description of the [Harmonics theory](#).

SPEED OF GRAVITY

If the structure found in the velocities is indeed based on the Harmonics theory then it follows that light cannot be the fastest thing. It seems that the step faster than light should be gravity. Its speed can be calculated as about 1×10^{15} cm/s. It seems very likely that gravity is the first order component of these vortices as it has a different and simpler form. Therefore I expect that there are no more faster levels, but this could well be wrong.

BASIS OF CHARGE

Because matter is made of vortices of vortices in this proposition there will be more possibilities than for the first level of vortices. The way that the larger and smaller vortices align or not could be the basis of charge. It would be interesting to know whether phonons also exhibit some more complicated quantum properties as a third level wave.

VORTEX OR SOLID AETHER

It is also possible to consider the aether as being solid. A similar structure can be determined as waves and waves of standing waves. This account should be considered as possibly applying to either, but because the mathematics of the vortex theory has been proven to fit EM theory that option was chosen for this article.

FASTER THAN LIGHT

But hasn't it been proven that nothing can go faster than light? No it has not. It has been proven that no electromagnetic influence can go faster than light. This is a consequence of Maxwell's equations which apply only to the second level of the aether/ether field.

ETHER REST FRAME

If I have correctly identified the highest level aether as the medium for gravity then it might be possible to send signals faster than light by using gravity waves. If only we could detect them. Perhaps existing experiments are looking at the wrong frequencies or wavelengths because of using the wrong speed for gravity?

Again there is the question of whether faster than light travel would violate causality? The answer is that it would not, provided that there is a preferred reference frame in which the faster velocity occurs. There is. It is the ether rest frame. Note that even if we could detect the ether rest frame we could not detect the aether rest frame.

RELATIVITY

There is nothing in the above which disagrees with the predictions of relativity except perhaps whether gravity travels at more than c . However it is worth mentioning that special relativity is really based on electromagnetism in the form of Maxwell's equations and general relativity includes the form of gravity but is not dependant on its velocity which it just assumes to be the same.

So the above should all be consistent with existing theory. However it does open up the possibility of extending theory into new areas. It also allows the possibility of uniting gravity with electromagnetism.

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