

Aether Displacement

The aether is, or behaves similar to, a frictionless superfluid with properties of a solid.

'Superfluid Is Shown To Have Property Of A Solid'

<http://www.sciencedaily.com/releases/1999/07/990730072958.htm>

"Northwestern University physicists have for the first time shown that superfluid helium-3 -- the lighter isotope of helium, which is a liquid that has lost all internal friction, allowing it to flow without resistance and ooze through tiny spaces that normal liquids cannot penetrate -- actually behaves like a solid in its ability to conduct sound waves."

"Faraday's finding was the first indication that light and magnetism were related," says William Halperin, professor of physics and astronomy at Northwestern. "I wouldn't say that our discovery is of that magnitude, but it is significant as the first observation of a previously unknown mode of wave propagation in a liquid -- one that is of the type you would expect to see in a solid."

The galaxy clusters in the following article are not traveling with dark matter. The galaxy clusters are moving through the aether. The galaxy clusters displace aether.

'Hubble Finds Ghostly Ring of Dark Matter'

http://www.nasa.gov/mission_pages/hubble/news/dark_matter_ring_feature.html

"Astronomers using NASA's Hubble Space Telescope got a first-hand view of how dark matter behaves during a titanic collision between two galaxy clusters. The wreck created a ripple of dark matter, which is somewhat similar to a ripple formed in a pond when a rock hits the water."

The 'pond' consists of aether. The moving 'particles' are the galaxy clusters. The 'ripple' is a gravitational wave. The 'ripple' is an aether displacement wave.

The above is physical evidence of a moving 'particle' having an associated aether displacement wave.

In a double slit experiment, the particle travels a single path and enters and exits a single slit. It is the associated aether displacement wave which enters and exits both slits. The aether displacement wave creates wave interference upon exiting the slits. As the particle exits a single slit, it is this interference which alters the direction the particle travels. Detecting the particle causes a loss of coherence of the associated aether displacement wave, there is no wave interference, and the direction the particle travels is not altered.

The aether is detected every time a double slit experiment is performed.

Aether has mass. Aether physically occupies three dimensional space. Aether is physically displaced by matter. Aether is not at rest when displaced. Displaced aether exerts force towards matter. Force exerted towards matter by aether displaced by matter is gravity.

Aether Displacement explains why the shape of the Milky Way's 'dark matter' is in the shape of a squished beach ball.

'Dark Halo Around Our Galaxy Looks Like Squished Beach Ball'

<http://www.space.com/7746-dark-halo-galaxy-squished-beach-ball.html>

"Dark matter seems to shroud the remaining visible matter in giant spheres called haloes."

The Milky Way's halo is displaced aether.

"But the new study found that the Milky Way's halo isn't exactly spherical, but squished. In fact, its beach-ball form is flattened in a surprising direction perpendicular to the galaxy's visible, pancake-shaped spiral disk."

All of the aether displaced by the Milky Way matter exerts force towards the matter. The force exerted towards the matter by the aether displaced perpendicular to the plane of the galaxy's spiral disk offset. It is the aether which is displaced outward relative to the plane of the spiral disk which exerts force towards the center of the galaxy. This forces the matter closer together which results in the displaced aether looking like a squished beach ball.

Matter does not move with dark matter. Matter moves through the aether.

'Offset between dark matter and ordinary matter: evidence from a sample of 38 lensing clusters of galaxies'

<http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2966.2010.16739.x/abstract>

"We compile a sample of 38 galaxy clusters which have both X-ray and strong lensing observations, and study for each cluster the projected offset between the dominant component of baryonic matter centre (measured by X-rays) and the gravitational centre (measured by strong lensing). Among the total sample, 45 per cent clusters have offsets >10 arcsec. The >10 arcsec separations are significant, considering the arcsecond precision in the measurement of the lensing/X-ray centres. This suggests that it might be a common phenomenon in unrelaxed galaxy clusters that gravitational field is separated spatially from the dominant component of baryonic matter. It also has consequences for lensing models of unrelaxed clusters since the gas mass distribution may differ from the dark matter distribution and give perturbations to the modelling. Such offsets can be used as a statistical tool for comparison with the results of Lambda cold dark matter (CDM) simulations and to test the modified dynamics."

The offset is due to the galaxy clusters moving through the aether.

'Ether and the Theory of Relativity - Albert Einstein'

<http://www.tu-harburg.de/rzt/rzt/it/Ether.html>

"Since according to our present conceptions the elementary particles of matter are also, in their essence, nothing else than condensations of the electromagnetic field"

The electromagnetic field is a state of aether.

Matter is condensations of aether.

DOES THE INERTIA OF A BODY DEPEND UPON ITS ENERGY-CONTENT?' A. EINSTEIN

http://www.fourmilab.ch/etexts/einstein/E_mc2/e_mc2.pdf

"If a body gives off the energy L in the form of radiation, its mass diminishes by L/c^2 ."

The mass of the body does diminish; however, the matter which no longer exists as part of the body has not vanished. It still exists, as aether.

Matter evaporates into aether.

As matter converts to aether it expands in three dimensional space. The physical effects this transition has on the neighboring aether and matter is energy.

Mass is conserved. Energy is conserved.

A change in state of that which has mass is energy.

All 'delayed choice quantum eraser' experiments are explained by understanding conservation of momentum and a moving particle has an associated aether displacement wave.

In the image on the right here:

http://en.wikipedia.org/wiki/Delayed_choice_quantum_eraser#The_experiment

When the downgraded photon pair are created, in order for there to be conservation of momentum, the original photons momentum is conserved. This means the downgraded photon pair have opposite polarizations. We will describe one of the photons as being the 'up' photon and the other photon as being the 'down' photon. One of the downgraded photons travels either the red or blue path towards D0 and the other photon travels either the red or blue path towards the prism.

There are physical waves in the aether propagating both the red and blue paths. The aether waves propagating towards D0 interact with the lens and create interference prior to reaching D0. The aether waves create interference which alters the direction the photon travels prior to reaching D0. There are actually two interference patterns being created at D0. One associated with the 'up' photons when they arrive at D0 and the other interference pattern associated with the 'down' photons when they arrive at D0.

Both 'up' and 'down' photons are reflected by BSa and arrive at D3. Since there is a single path towards D3 there is nothing for the wave in the aether to interfere with and there is no interference pattern and since it is not determined if it is an 'up' or 'down' photon being detected at D3 there is no way to distinguish between the photons arriving at D0 which interference pattern each photon belongs to. The same for photons reflected by BSb and arrive at D4.

Photons which pass through BSa and are reflected by BSc and arrive at D1 are either 'up' or 'down' photons but not both. If 'up' photons arrive at D1 then 'down' photons arrive at D2. The opposite occurs for photons which pass through BSb. Photons which pass through BSa and pass through BSb and arrive at D1 are all either 'up' or 'down' photons. If all 'up' photons arrive at D1 then all 'down' photons arrive at D2. Since the physical waves in the aether traveling both the red and blue paths are combined prior to D1 and D2 the aether waves create interference which alters the direction the photon travels. Since all 'up' photons arrive at one of the detectors and all 'down' photons arrive at the other an interference pattern is created which reflects back to the interference both sets of photons are creating at D0.

The following experiment will provide evidence of Aether Displacement:

Instead of having a single beam splitter BSc have two beam splitters BSca and BScb. Have the photons

reflected by mirror M_a interact with BSc_a and have the photons reflected by mirror M_b interact with BSc_b . Do not combine the red and blue paths. Have additional detectors $D1_a$, $D2_a$, $D1_b$, and $D2_b$. Have the photons reflected by and propagate through BSc_a be detected at $D1_a$ and $D2_a$. Have the photons reflected by and propagate through BSc_b be detected at $D1_b$ and $D2_b$. If you compare the photons detected at $D1_a$ and $D1_b$ with the photons detected at $D0$, the corresponding photons detected at $D0$ will form an interference pattern. If you compare the photons detected at $D2_a$ and $D2_b$ with the photons detected at $D0$, the corresponding photons detected at $D0$ will form an interference pattern. What is occurring is all 'up' photons are being detected at one pair of detectors, for example $D1_a$ and $D1_b$, and all 'down' photons are being detected at the other pair of detectors, for example $D2_a$ and $D2_b$. Interference patterns do not even need to be created in order to determine the interference patterns created at $D0$.