

Does Aether exist according to modern physics?

Under a surface of vociferous denying and pointing to flawed experiments there is a general acceptance even among modern physicists and Nobel Laureates that there is a physical strata that plays fundamentally the role of an Aether, although the term is so laden with philosophical prejudices that no one really dares to commit to the name **Aether** and all sorts of alternative and rather silly sounding denotations are invented: "*quantum foam*", "*quantum fluid*" for instance or this "*field*" or that "*field*", where nobody ever can point out what kind of physical species a field IS. There are at best vague ideas what a field DOES: the Higgs field for instance is supposed to act as a kind of molasses that gives particles mass by dragging them down. This is fairy tale physics, and there is a reason behind the fact that this status quo is kept as long as possible: a broad understanding of Aether physics would emancipate the populace intellectually and that is what a "*church of science*" cannot tolerate. How long did it take for ordinary people to be allowed - and not burned at the stake - to read the bible in a language they could understand? full thousandandfivehundred years.

I have written about what **light** is, what **magnetism** is and what **gravity** is based on Aether physics that is, physics without any recurrence to the "*virtual*", the "*imaginary*", the "*pseudo*" and the "*fictitious*" etc. which are all necessary terms to cope with observations in an Aether-deprived framework.

In these articles I have used terms and concepts which even a well read audience might not even have heard before, or if so, in a sadly distorted manner, so here is a primer in Aether terminology and concepts. Before we get started I want to give some quotes that attest to the deep and wide recognition of the conceptual necessity of an Aether.

- "*....Today the vacuum is recognized as a rich physical medium....A general theory of the vacuum is thus a theory of everything, a universal theory. **It would be appropriate to call the vacuum "Ether" once again.***" (S. Saunders and H. R. Brown, The Philosophy of Vacuum)
- "*....Investigations point towards a compelling idea, that all nature is ultimately controlled by the activities of a single superforce"..... " thus a living vacuum, **the Ether, holds the key to a full understanding** of the forces of nature"* (Davies P. 'Superforce—the search for a grand unified theory of Nature. Simon and Schuster, New York, 1984)
- "*....There are good reasons to think that the Universe is a multilayered multicolored superconductor; that all four known forces can be brought together in a unified theory; that seemingly hopelessly different kinds of matter are just **different aspects of one all-embracing stuff.*** I anticipate that the next few years will be a new Golden Age in fundamental physics." (Frank Wilczek, Professor of Physics at MIT,

Nobel Prize winner of 2004, author of the book "THE LIGHTNESS OF BEING: **Mass, Ether, and the Unification of Forces**" (Basic Books; September 2, 2008)

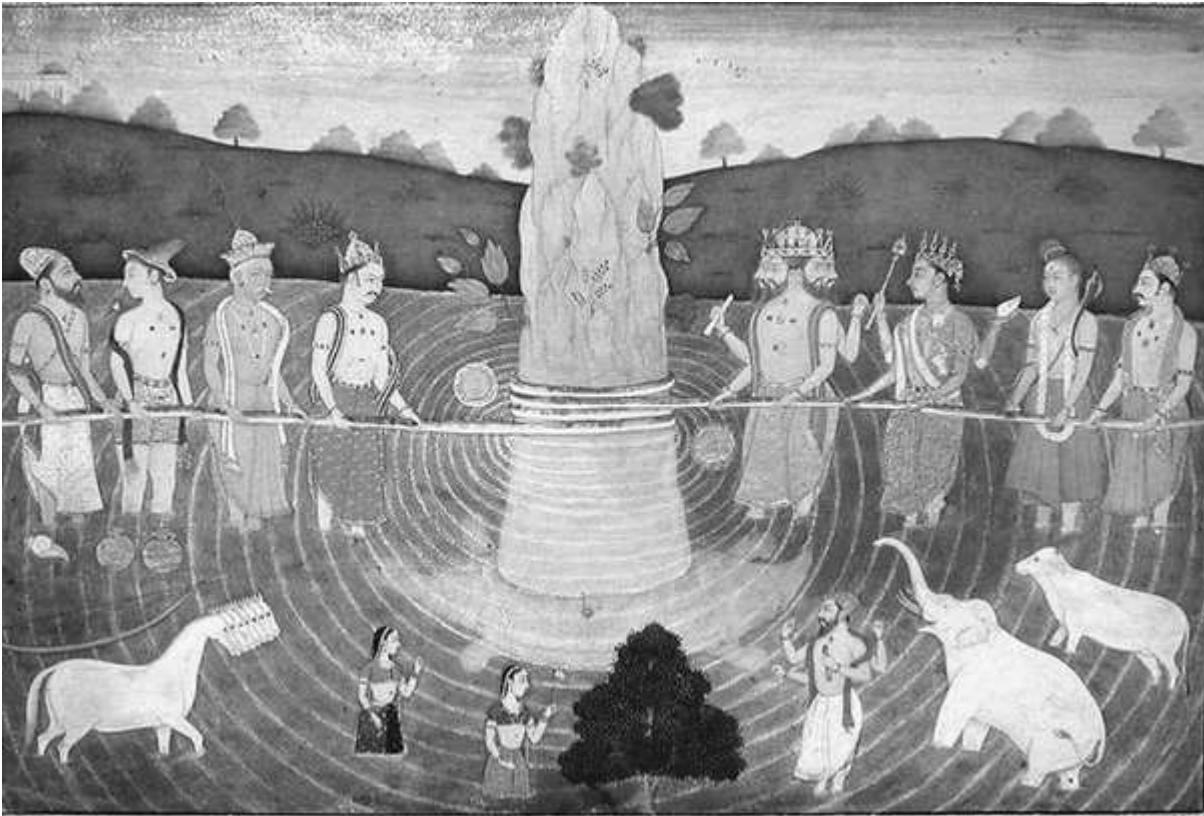
- Robert Laughlin, Nobel price in physics, gives us the reason why the Ether has been ostracised: "*The word "ether" has extremely negative connotations in theoretical physics **because of its past association with opposition to relativity.** This is unfortunate because, stripped of these connotations, it rather nicely captures the way most physicists actually think about the vacuum.*"
- Let that sink in: a 1998 Nobel Laureate in physics tells us that "**most physicists think in terms of the Aether about a vacuum**" because to any serious mind throughout history the mere notion of a vacuum is an abomination which has never ever had any kind of explicative nor descriptive power whatsoever, because it is the negation of everything, and cannot therefore be the seat of anything.

Even Einstein when he tried to elevate his SP from the realm of mathematical fantasy - which exists only in the infinitesimal - to the realm of the real, he had to reintroduce the Aether, because there is no other way to even think about physical reality:

- *According to the general theory of relativity **space without ether is unthinkable**; for in such space there would not only be no propagation of light, but also no possibility of existence for standards of space and time (measuring rods and clocks), nor therefore any space-time intervals in the physical sense" ("Ether and the Theory of Relativity" by Albert Einstein, 5 May 1920 talk at the University of Leiden.)*

Now that we are all on the same page and agree that we need the Aether to explain anything at all, we need to clarify what kind of phenomenon Aether is: there are only two possibilities, **immaterial** or **material**: both have been defended to various degrees over the course of thousands of years,

- All Vedic knowledge is fundamentally nothing but applied Aether physics, a description of which would be too much for this article, but one image may stand for the rest of it: "*the churning of the ocean of milk*" is the central and most depicted scene in all of Vedic Hinduism and it is pure physics of Aether polarisation: the axis Mundi is rotated back and forth by two opposing principles while resting on the symbol of time (turtle) churning up all the attributes of life and existence.



- **Aristotle**: postulates besides the four gross terrestrial elements: **Air, Earth, Fire** and **Water** one subtle celestial element, which moves circularly and has none of the qualities the terrestrial classical elements have. He did not call it the Aether, rather he called it "**The First Element**" but his teacher Plato in his "Timaeus" talked about a translucent air-like element called the Aether. Later Aether was attributed to Aristotle and falsely designated as his "**fifth element**". We will see how close Aristotle came to the modern concept of Aether as a dynamic first principle, as opposed to the concept of a material substrate the way the atomists think about it.
- Alchemy was done in Latin and thus **Aether** became latinised as **Quintessence**, but it remained the "*fifth element*", with Sulphur and Mercury added to the terrestrial 4 elements as principles of **combustion** (Sulphur) and the **metallic** (Mercury)
- **Descartes** followed Aristotle in that he saw the Aether as something special that tied the other elements together, but he was an atomist at heart, and thus postulated the **Aether** to be a **dense medium of very small particle pervading space**. This meant putting the concept of the Aether on a lopsided position, because as we will see, neither is Aether pervading space, nor is it made out of particles. Descartes marks the end of the science of Nature, and the beginning of the science as theoretical, metrical, computational framework. The idea that space *has* 3 Cartesian dimensions for example is

the reification of a metric, not a property of nature. This **corpuscular Aether** is what has been disproven in the 20th century, not the Aether itself.

- **Huygens:** although trapped too in an atomistic philosophy, Huygens came close to understanding light when he postulated it to be a longitudinal phenomenon - albeit one of rarefaction and compression of particles - as well as incorporating the idea of "*point source*", when he argues that each point in a wave front acts as a new point light source: this will later explain and solve the mystery of the double slit experiment, a mystery that completely disappears when seen in the light of Huygen's ideas. The slits become instantaneous sources, like the IC, the instant center of rotation in mechanics.
- Then comes **Newton**, who singlehandedly erased the "*natural*" from "*natural philosophy*", starting a long trend amongst scientists of pursuing the "*mathematical empirical success of physical theories and ignoring their necessary physical conceptual counterpart. It follows that, since Newton provided no alternate explanation of gravity without the use of an Aether concept, he and scientists erred when they relegated the ether to be a mere medium of light.*" (see my article about gravity)

Ever since **Aristotle** conceptualised the Aether as a dynamic process, a rotation, the correct idea of a **Vortex** has dominated the field, until **Newton** without any kind of investigative effort demolished this fruitful approach with a complete irrelevant reference to the Copernican ellipses:

"Hence it is manifest that the planets are not carried round in corporeal vortices; for, according to the Copernican hypothesis, the planets going round the sun revolve in ellipses, having the sun in their common focus; and by radii drawn to the sun describe areas proportional to the times. But now the parts of a vortex can never revolve with such a motion."

May we remind you Mr. Newton that a mass never revolves around the focus of an ellipse but the IC, the instant center of rotation which is always a circle.

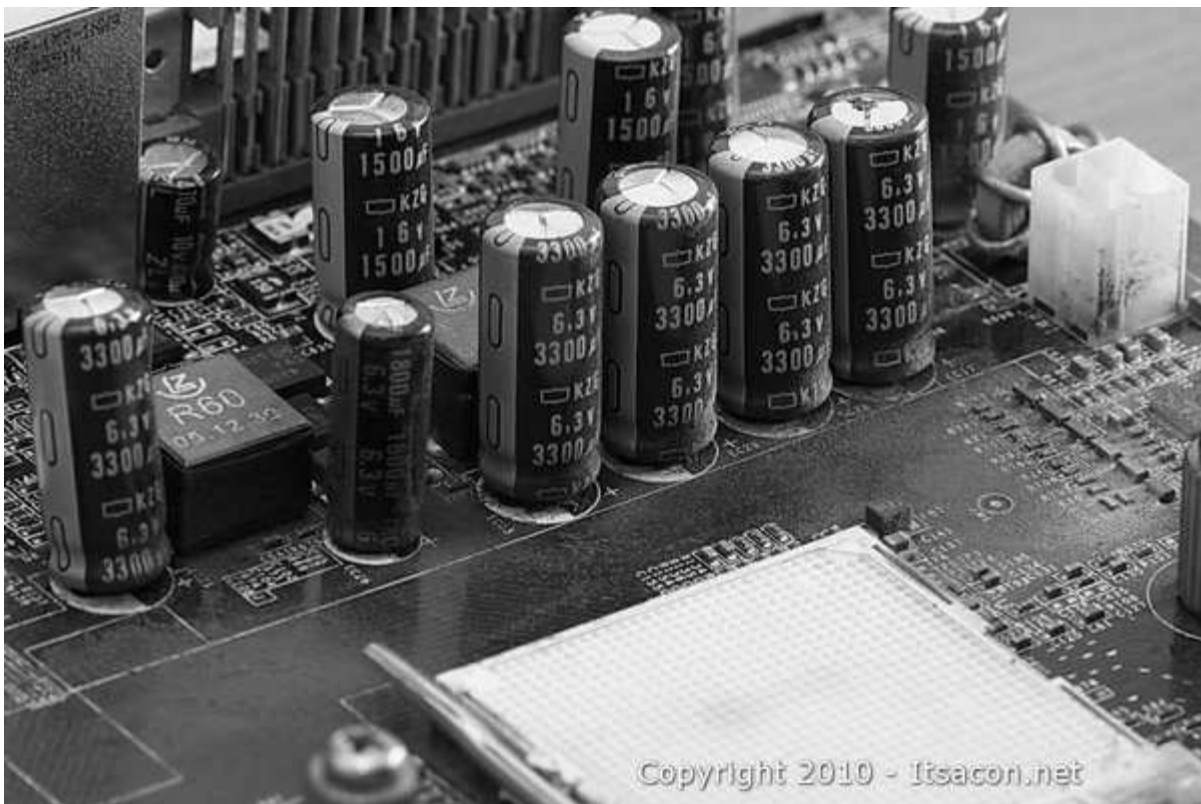
- **Young and Fresnel:** the unlucky corpuscular concept of both light and ether as well as the idea that both permeate space led to the idea of transverse waves as an explanation of double refraction and birefringence. On top of that, this purely atomistic mechanistic approach led to the postulation of the **Aether** as being a kind of **solid**, as only a solid could provide the rigidity to supply the forces to oppose the distortions produced by the waves.
- **Maxwell** correctly understood light and magnetism as process, the process of **Induction**, which is nothing but a perturbation of a medium, and for that to be even possible, there obviously must be something that can be perturbed. But still, there was this idea of an Aether "*permeating*" space, and light moving "*through*" a medium, devastatingly inappropriate concepts.

- **Michelsen-Morley:** the erroneous notion of a monolithic ether filling space through which all moving bodies must travel, led to the ill fated “*M&M-experiment*” which inevitably yielded a null-result: nothing moves “*through*” the Aether, the Aether is not a substance filling an autonomous space, but space IS itself an Aether modality as we will see.
- Then comes Einstein who never investigated anything personally but rather went by hearsay, peer pressure and pure math. When he finally wanted to do some real “*natural philosophy*” in the form of GR, math and peer pressure didn't cut it any longer: “**In 1905 I was of the opinion that I was no longer allowed to speak about the ether in physics.** *This opinion, however, was too radical, as we will see later when we discuss the general theory of relativity.....once again 'empty' space appears as endowed with physical properties, i.e. no longer as physically empty, as seemed to be the case according to special relativity. One can thus say that the ether is resurrected in the general theory of relativity.... Since the new theory, metric facts can no longer be separated from true physical facts the concepts of space and ether have merged together.*” (Ludwig Kostro: *Einstein and the Ether*, 2000)

So here we have come full circle, the concepts of space and ether have merged together, but HOW exactly, and what language do we use to describe that?

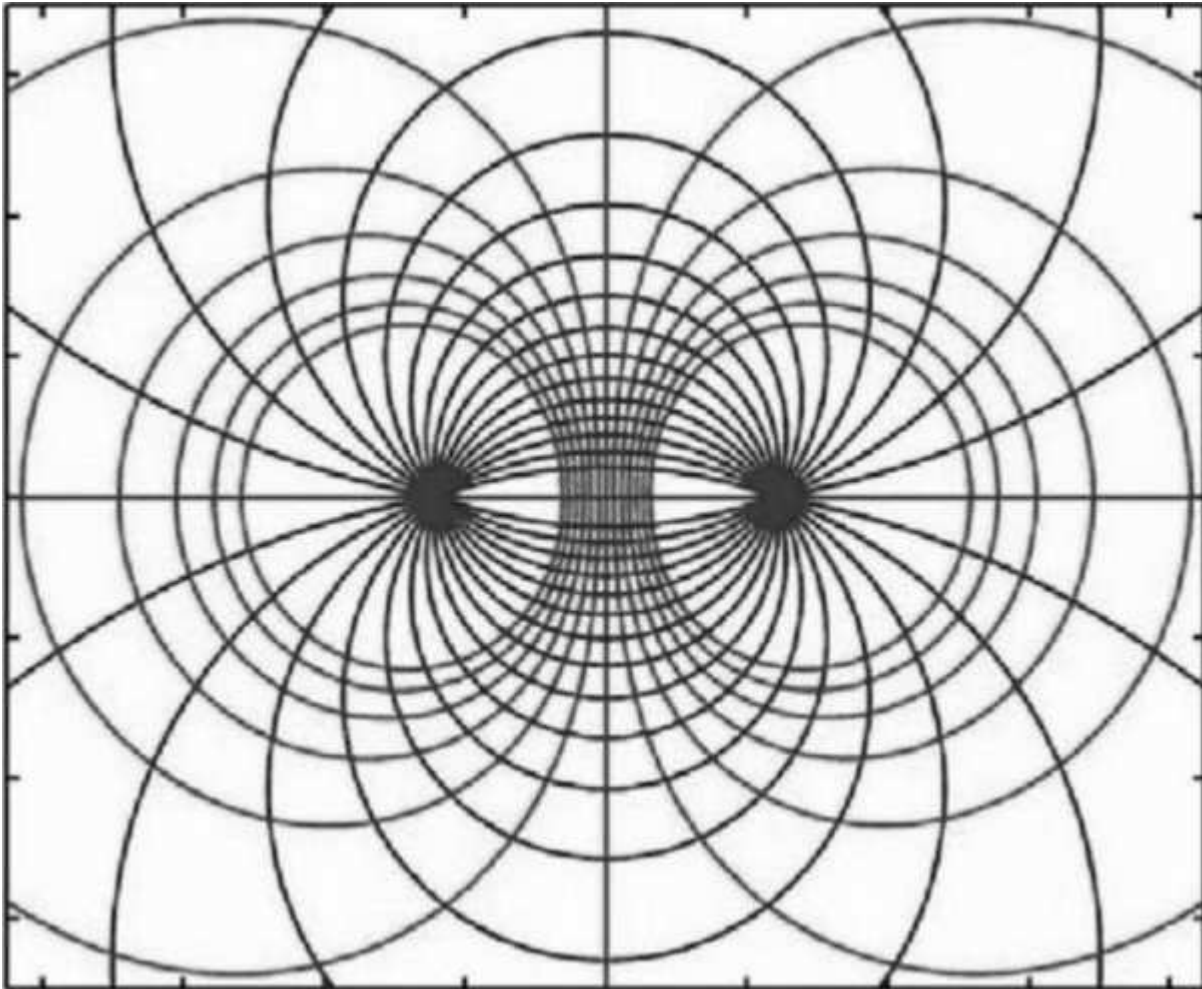
First we have to define **Aether** itself: or rather, it is much more compelling to define what Aether is not:

- **Aether** is NOT a substance that permeates space. Space itself is not an autonomous container within which the universe plays out, but itself a modality, an after-effect of Aether polarisation. Being NOT a substance, it follows that Aether is not physical in the same way as Fire, Water, Earth and Air, just the way Aristotle figured, it is **a-substantial** and that means it has no cartesian nor temporal measure, i.e. NO location, NO extension and NO duration. What it is, is pure **incommensurable potential**. Aether is the antecedent to Energy which manifests as the time derivative of Electrification, i.e. Polarisation of the Aether: $W = \Phi \cdot \Psi / t$ This immaterial, i.e. non-physical character is what Tesla meant when he said: “*The day science begins to study non-physical phenomena, it will make more progress in one century than in all the previous centuries of its existence.*”
- **Counter-Space:** because Aether has no cartesian measure, no cartesian location and extension, it can also not be part of cartesian space, and it's Capacitance therefore cannot be measured in spatial dimensions. **Dielectric Capacitance** is anti-spatial or counter-spatial. That may sound exotic, even esoteric as T.Hehl calls it, but it is applied physical reality in every Capacitor used in circuitry:



- The principle is: the tighter you wrap metal foils, the more electricity you can store, that is, the more Capacitance, which represents more “*storage real estate*” in counter-space. But it is NOT the metal surface that “*carries the charge*” as is erroneously held by atomists, it is the Dielectric (“*insulators*” as we call it, like glass, transformer oil, air, cellulose acetate) between the metal foils that stores the charge, and the less of the “*between*” you have spatially, the more storage capacity you have counter-spatially. **Capacitance** then is the threshold a dielectric medium is able to absorb of units of dielectric induction before discharge. Metal is never where electricity IS, as little as sheep are IN the fence, they run between the fences.
- **Dielectric/Magnetic:** As a material the dielectric is what is commonly treated as “*insulator*”, the stuff between the metal bound of the circuit, yet it is there where the **Magneto-Dielectric** event plays out. The “*conductor*”, usually the metal bounding of the circuit, cannot be penetrated by electricity, wherefore it conducts like fences conduct sheep between them. The **Dielectric** then is the primary half of the conjugate field modalities of the Magneto-Dielectric field: the Dielectric is **Aether under Torsion**, the **Magnetic** is **Aether under Polarisation**. Here below two conductors as we would see in transmission lines, with the Dielectric (blue) and Magnetic (red) fields between and around them, but nothing IN them, and not even ON them, as **C.P. Steinmetz** points out: “*Many textbooks speak of the electric charges on the conductor and the energy stored by them without considering that the dielectric energy is not ON the surface of the*

conductor but in the space *OUTSIDE* of the conductor, just as also is the magnetic energy” -
(C.P. Steinmetz: ‘Electric discharges, waves and impulses’)



- **Dielectric** is the Capacitance of Inertial Counter-space, whereas **Magnetism** is the manifestation of spatial magnitude and temporal retardation, phase and lag (time) through divergent loss of Dielectric Inertia, engendering Volume, i.e. Space. **Space** is the attribute of the Magnetic, which is the absence of, the discharge of the Dielectric.
- **Dielectric** is the inverse of force, the negation of force, whereas Force is the loss of Dielectric, which is **Magnetism**.
- **Dielectric** is Voltage, Current is **Magnetism**
- If we draw a horizontal line through the power lines, we get the ***inertial plane***, the Bloch wall of a magnet, which has the same field geometry. Magnets thus are dielectric machines, driven by the flywheel that is the Dielectric Inertial Plane under torsion and the stronger the magnet the stronger the dielectric, NOT the magnetism, therefore it is somewhat misguided to call magnets magnets, because it is the dielectric, convergent, accelerated towards inertia ***erasure of space*** which is responsible for a

“magnet’s” power, not the divergent loss of Dielectric Inertia which is Magnetism. A **magnet** is a **dielectric accelerator**, not a magnetic decelerator.

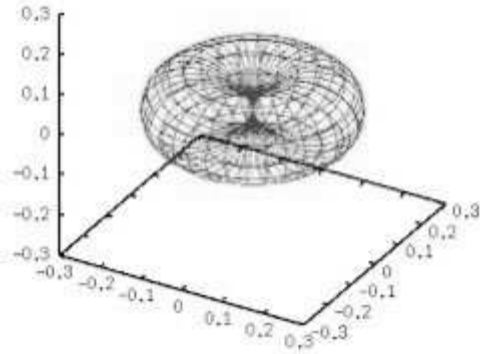
- **Electrostatics:** when a dielectric medium reaches its threshold of Capacitance, it discharges or “*grounds*” into counter space, and that is always in form of dendritic Lichtenberg figures.



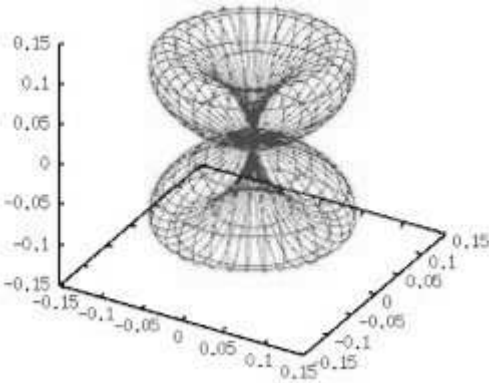
- Artists get creative with this principle: here below high voltage discharge art and it is no coincidence that the topology of earth in vast regions looks just like dendritic discharge patterns



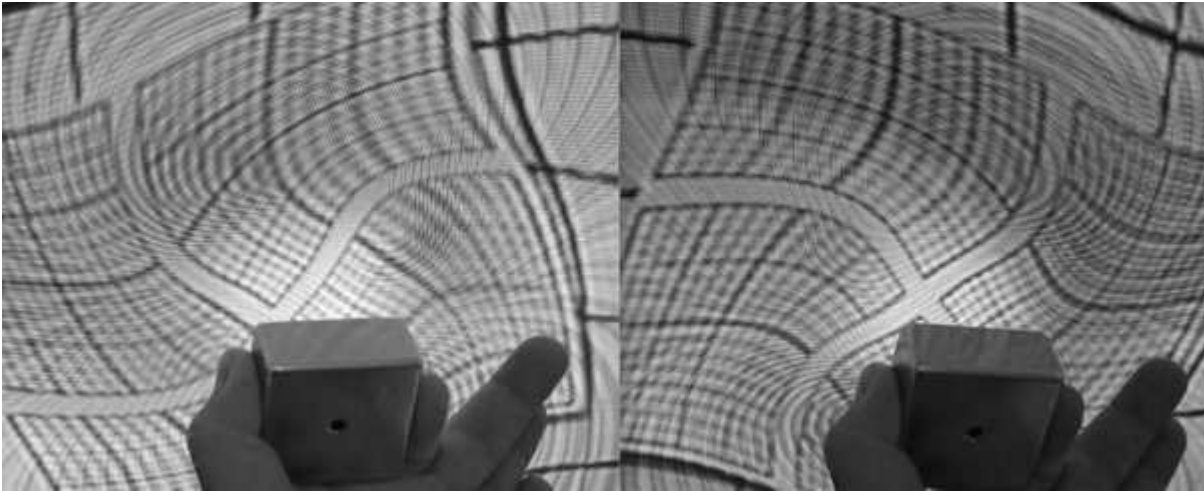
- **Electricity:** is a circuit always composed of the conjugate **Dielectric** and **Magnetic**. Here is a good point to train ourselves to NOT think of “*magnetic attraction*” when we hear or read the word “*magnetic*”: magnetic in Aether Physics means loss of dielectric energy, loss of inertia, creation of space, force, magnitude, retardation (time), in short, the space and the material world of measure and magnitude we experience. What seems to “*attract*” in magnets is - as we have already said - actually its “*dielectric*” and not its magnetic aspect.
- **Force and Motion:** this is not Newton physics where force is a connotation, descriptive of what something does, here it is a denotation, standing for what something is. Here the Force vector is the three dimensional S-curve rooted in counter-space representing the loss of potential, or energy, of inertia and the creation of dimensionality, time and motion, so that we can say **Magnetism is Force and Motion**.
- **Inertia and Acceleration:** again, this is not Newtonian physics, so we have to widen our horizon beyond what we call space, which, as we have seen, is only one of the field modalities of the Aether. Here **Acceleration** is meant as acceleration OF space, not acceleration THROUGH space. It is the accelerated collapse of space towards ultimate Rest , i.e. Inertia in counter-space, and that is called Charge, as opposed to the Discharge of space in the process of divergent loss of Inertia. **Dielectricity is Inertia and Acceleration**.
- **Charge and Discharge:** Charge is not an attribute, it is also not something you can carry or have. There is no such thing as a positively or negatively charged particle, as there is no such a thing as a positive charge or a negative charge, as well as no particle to begin with. What we are dealing with here are events, the event of charging - like charging a glass with wine - and the event of discharging - like discharging a bottle of wine. We can see that dynamic aspect in the units of charge/discharge, the **Coulomb = Amper·seconds**, which means 1A constant current delivered over one second - that means charge is not a property but an action, like pouring a certain quantity of wine in one second, from the point of view of the bottle it is discharging, from the point of view of the glass it is charging. **Charging** is always **counter-spatial convergence**, **Discharging** is always **spatial divergence**. In a magnet the discharging and charging are superimposed, the discharging of the bottle and the charging of the glass are happening in one and the same object:
- discharging is the spatial, toroidal divergent magnetic aspect.....



- charging is the counter-spatial hyperbolic convergent dielectric aspect.....



- **Vortex polarities:** the poles of magnets are inverse spin vortices respective to each other on opposite ends. At the edges of each pole we find the centrifugally accelerating divergent flux as part of the **toroidal** geometry of **Magnetism**, and at the centre the centripetally accelerating convergent flux of the **hyperboloid** geometry of **Dielectricity**. These vortices precess CW (what we call N-pole) and CCW (what we call S-pole). So the **polarity**, that is, the poles, are not static properties of a magnet, but **precessional directions**. You can test that by exposing a Cathode-Ray-Tube (CRT) to the faces of a strong magnet and watch the image twist in opposite directions.

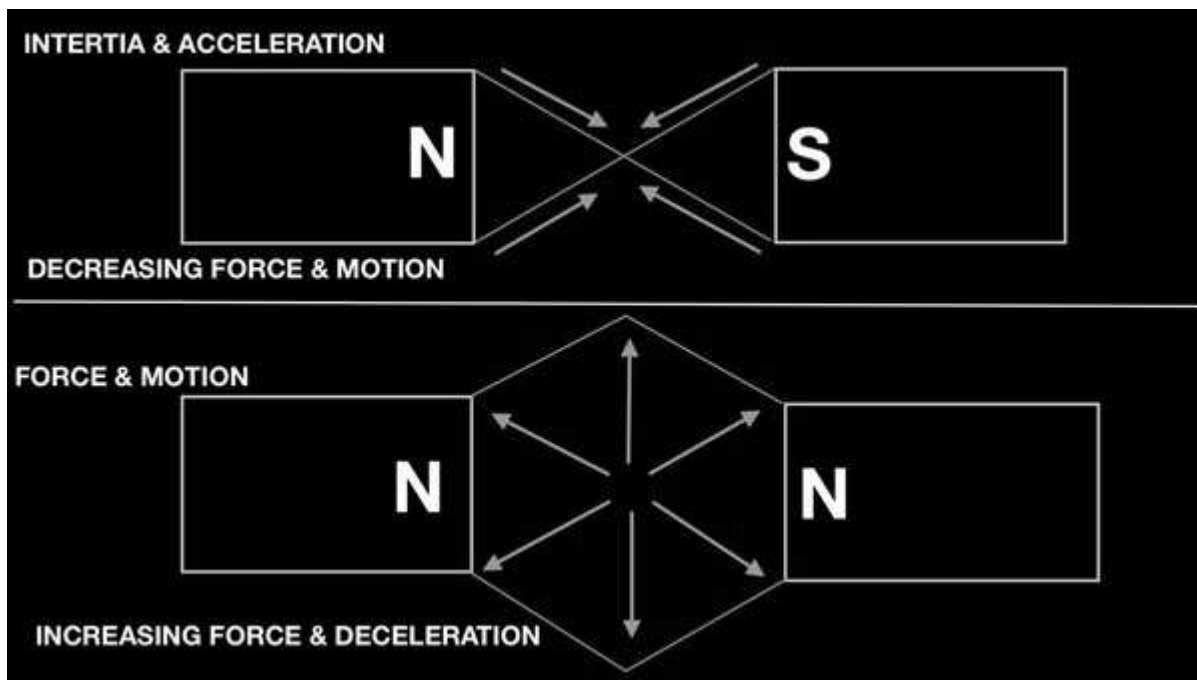


- You can also test the difference between magnetic and dielectric by taking a spinning gyroscope built from non-ferrous materials to the edge of a strong magnet: the flux there will stop the gyro within a few seconds, whereas a gyroscope placed in the center of a magnet will continue spinning undisturbed. The difference is that the edge is **magnetic flux**, which means force and motion, and the center **dielectric flux**, which is the negation of force and the return of motion to rest.
- **Coherency**: before a cube of neodymium or iron-boron is actually magnetised it is just a piece of matter like any other with the same unpolarised “gravitational” characteristics. After magnetisation it becomes a powerful magnet, that is, a powerful “*dielectric accelerator*”. Substantially, quantitatively though nothing has happened, it is still the same piece of matter with the same constituents, the only difference is qualitative in the form of **field-coherency** and with it **polarisation**. A good analogy is coherent light in a laser vs the incoherent light of a lightbulb. A 5W lightbulb is not good enough to read, yet a 5W laser will burn a hole in your retina.
- **Point Source**: “*Coherency*” is not enough though to fully describe the difference between gravity and magnetism or the difference between ordinary light and a laser. It is the “**point source**” quality that makes a magnet a magnet and a laser a laser. An analogy often used in describing magnets is the “*combing of messy hair*” bringing them into alignment, but that would not do, “*aligned magnetic domains*” would not make a magnet, what is needed on top of that is to have the “*aligned hair*”, these “*aligned domains*” come from one single point, making it a “*point source*”. But even a cartesian coordinate point would still not be enough, it is in fact an “**incommensurable point source**” which turns a lump of neodymium into a powerful magnet. Thus a magnet is defined by its “**point source field incommensurability**” which is nothing else but the observed fact that the source of a magnet has

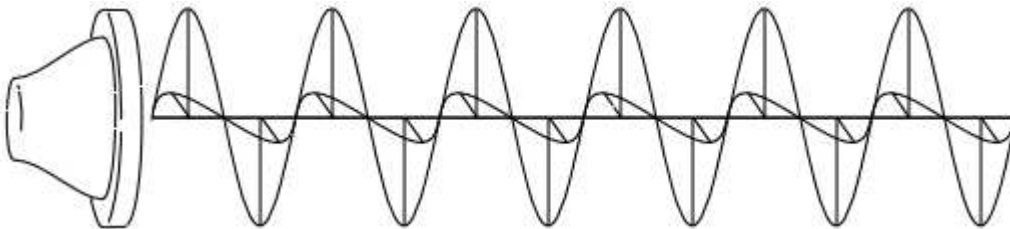
no specific cartesian location, nor has it any kind of magnitude: cut a magnet in thousand pieces, the “*Bloch wall*”, the “*inertial dielectric plane*” will always be where it needs to be, which is “*everywhere and nowhere*”, and when you drill a hole into the center of a magnet there is no flux whatsoever, it is total stillness. The source of a magnet is stillness, i.e. rest, i.e. inertia, in other words the incommensurable Aether, and that is why of course the Aether cannot be “found” as a cartesian corpuscular substrate “*through which*” things move. The magnetic part of a magnet is the “*loss of stillness*” the “*loss of incommensurability*”, i.e. the “*creation of measure*”, that is, the creation of dimensionality and temporality of space and time. What we commonly refer to as “*magnetic attraction*” is actually the RETURN of dimensionality and temporality into the incommensurable, the “non-measure-having”, it is the “*loss of measure*”, the “*collapse of space*” back into “*dielectric counter-space*”.

Therefore a magnet is actually a “**dielectric accelerator**” and NOT a “*magnetic attractor*”. That becomes obvious when we realise that the stronger a “*magnet*” the less magnetic footprint is has, the weaker its magnetic toroid, the far more powerful its **counter-spatial dielectric hyperboloid geometry**, which sits over either pole as counter rotating vortices.

- **Repulsion:** we have seen that what we are used to calling “*magnetic attraction*” is actually dielectric in nature, it is “**dielectric acceleration**”, what is magnetic in nature though is “**magnetic deceleration**”, this is the only phenomenon where we see “*magnetism in action*”. It manifests as compound Aether-Torsion, which results in **Repulsion = magnetic force multiplication** as opposed to **Attraction = dielectric force negation**.



- **Atom:** Atoms are not “things” the way atomists are envisioning them, they are processes, magneto-dielectric dynamics, which **create energy only to dissipate it as space**. This is the 99.99% of “empty space” within an atom as atomists describe it, but this space is what an atom DOES, not what it IS. Magnetism is nature’s fundamental force, and it is centrifugal (yes Hehl, yes!) dissipation of inertia, it is thus “*force and motion*”. Space is not a thing in itself, but as we can say “*shadow is the privation of light*”, so we can say “**space is the privation Aether**”, and a privation cannot have a property as Tesla points out: “*I hold that space cannot be curved, for the simple reason that it can have no properties*”. Looking for Aether in space is like looking for light in the shadow.
- **Light, Illumination and Waves:** Again, let’s start with what light is NOT: light is **not a wave**, because “waving” is what something does and not what something IS. Einstein could have stopped there right away when he tried to “pursue” a wave of light in his thought experiment, as that is as silly a proposition as spatially pursuing a fever curve. Fever goes up and down **in time**, not forward in space. This fundamental misunderstanding was the downfall of science at the beginning of the 20th century: here below Einstein really believed he could chase such a wave and when he caught up with it would see a wave frozen in time - that is utter, utter quackadoodle, because a wave travels through time, not space. Here below the x-axis is the TIME axis whereas the y-axis is magnitude. So a wave has a **position and magnitude in time**, and this is called a **Versor**, as opposed to having **magnitude and direction in space**, which is called **Vector**.



- And that gets us to the next aspect light is NOT: light is **not an emission**, nothing ever emits light, what happens instead is that something gets excited, that is, alters its state of excitation, and that state of excitation changes in time. The time it takes for a fever to “move” though a population is called **rate of propagation** and is 100% a property of the medium, not of the fever. So the processing rate of what we call light is medium specific, NOT light specific. Light has no property that can be called neither a rate nor a velocity, it is entirely the medium that decides how quick a signal is processed.

- Light is **not a duality** of any kind, as such does not exist in nature. Nothing can be its own antithesis at the same time. Again it is the privilege of Einstein to cement a fundamental misunderstanding in science - and he could have known better, would he have been better informed about what his predecessors and contemporaries already knew. Lord Kelvin already postulated the longitudinal propagation of Dielectricity as well as its much greater rate of propagation. “.....*that these electrical waves are **condensational waves** in the luminiferous aether; and probably it would be that the propagation of these waves would be **enormously faster** than the propagation of ordinary light waves.*”
- That gets us to what light is: What we call light is an attribution of light known as Illumination: Light is invisible, what is visible is Illumination. Light is a **dielectric longitudinal coaxial circuit** with **transverse electric and magnetic field modalities**. The **power of light** is not in these transverse fields, but in the longitudinal pulsations, that's where the capacitance resides, and thus the power of light to do harm: a gamma ray has a small transverse, that is, EM footprint, but it delivers a punch, and that punch is in its longitudinal dielectric aspect, its capacitance. And again it was Einstein's privilege to get it totally wrong when he called these punch-carrying longitudinal pulsations “*light quanta*”, “*light particles*”, they are not, they are a longitudinal field modality of **Aether Perturbation**.
- **Photon:** “a unit of light” is the typical creation of atomists and mathematicians who can't help themselves but quantise and count everything: if they can't count it, to them it's not real. **J.J. Thomson** already understood the photon as the intersection between magnetic and dielectric induction, or rather the longitudinal pulse that engenders the transverse electric and magnetic field modalities. If you want to visualise something along these lines, think of holding two long broomsticks in your hands such that they cross each other. Now, rotate your arms outward and watch the intersection move away from you longitudinally. The intersection of the two broomsticks is NOT an autonomous entity, it is an attribution of crossing sticks, that is what a photon is.
- **Electron:** in the same sense Electrons are NOT autonomous entities, they are also only attributions of other entities. This was again known by the discoverer of “Electrons” **J.J. Thomson** who likened them to the broken ends of spaghetti, or rather 1000 such ends constitute one unit called an electron. Tesla was of the same opinion: “*I hold that it (the electron) is a relatively large entity carrying a surface charge and is not an elementary unit (particle).*”
- Already in **1900 Steinmetz** called the notion of a “*charge carrying electron*” prehistoric: “*Unfortunately to a large extent in dealing with dielectric fields the **prehistoric conception** of the electro-static charge, **the 'electron'**, on the conductor still exists, and by*

its use destroys the analogy between the two components of the electric field, the magnetic and dielectric. This makes the consideration of dielectric fields unnecessarily complicated” - C.P. Steinmetz (Electric Discharges, Waves and Impulses)

This vocabulary of Aether physics could be continued for several more pages, but let's wrap it up here with the concepts of TIME and SPACE: as always the best first step is to state what these are NOT, and nobody did that better than Poincaré:

“Time and Space ... It is not nature which imposes them upon us, it is we who impose them upon nature because we find them convenient.”

- **Time:** Time, like space, is the attributional **byproduct of magnitude and its measure**, which itself is a byproduct of magnetism, the divergent loss of Inertia: a good way to visualize this is to think of the hands of a clock: second, minute and hour hands as they measure out time, but at the fulcrum of these, at the center of the axle pin, time has no meaning. This immovable and dimensionless fulcrum of existence is the incommensurable **Aether** from and around which the universe evolves and revolves.