

General Connectivity

Version 10.0

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The grand unified hypothesis of gravity, magnetism, gravitism, electromagnetic radiation, time, consciousness and spirituality by Pal Sahota

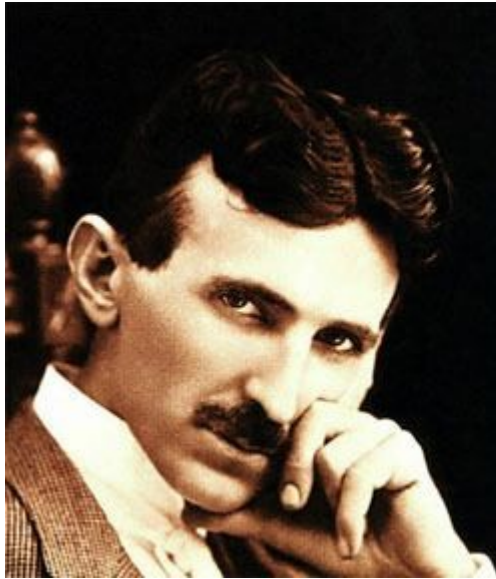
Abstract

The hypothesis re-introduces the concept of the Aether through tiny spinning negatively charged particles called alpha-negatrons with large spaces in between. This compressed medium forms a three dimensional crystalline structure in the shape of "The flower of life" and as a result the speed of propagation is fixed. Electromagnetic and gravity waves propagate through this medium utilizing compression / rarefaction and through the spinning action of these particles. The negatively charged electron spins around the nucleus and also on its own axis, perpendicular to its rotation around the nucleus. The nucleus spins on its own axis and the phenomenon of Nuclear Magnetic Resonance (NMR) is proof of that fact. The movement of the alpha-negatron particles in different directions as a result of the spins of electron and the spinning action of the nucleus is responsible for the phenomenon of magnetism, gravitism, electromagnetic and gravity waves. Time is caused by the vibration energy inherent in these particles which links time with the velocity of light. Consciousness is a separate dimension like time. Consciousness is a manifestation of the alpha-positron particle, the positive counterpart of the alpha-negatron. Consciousness and time move in opposite directions.

Introduction

Previously known as "The Alpha-Negatron Hypothesis", General Connectivity is the grand unified hypothesis which demonstrates through detailed mechanism how the phenomenon of gravity, magnetism, gravitism, electromagnetic radiation, time, consciousness and spirituality are all interconnected.

The barrier to progress lies not in our 'lack' of knowledge but our firm 'understood' knowledge as it is much harder to unlearn facts than learn them especially if the underlining principle behind this 'knowledge' is wrong. The author questions this firm 'understood' knowledge from first principles; the only way he knows how to understand established 'facts'. Some 'understood' knowledge like General Relativity although at the time of its conception made a 'giant leap' in thinking but this idealistic model stifles the advancement of knowledge when it is misinterpreted and used to explain 'every' phenomenon. In my opinion the great genius was Nikola Tesla as he was very close to discovering how everything is interconnected. This work is dedicated to Nikola Tesla and his spirit of innovation.



"All of my investigations seem to point to the conclusion that they are small particles, each carrying so small a charge that we are justified in calling them neutrons. They move with great velocity, exceeding that of light."

Nikola Tesla - July 10, 1932

In the above quote, it is assumed Tesla is referring to neutrinos as the terminology of neutrons and neutrinos wasn't established at that time. Referring to the above statement of "exceeding that of light", he actually said that he had observed them going faster than light. The relevance of the above quote by Tesla will become more significant as we progress through the hypothesis.

This hypothesis offers tangible explanations and wherever possible gives real life analogies one can relate to and tries to answer many unanswered questions relating to the subject. By studying nature it is apparent that there is a basic pattern like fractal which keeps repeating itself so it's unlikely that what we call empty space is really empty and there is an underlying purpose or function to this 'empty space'. Nature is very dynamic, full of movement including spin and is in a state of constant change. There is more dynamics whether in movement or in spin as you move down from the macro cosmic to the microscopic down to the subatomic. The smaller the particle, the greater the movement or spin at the subatomic level. Nothing 'stands still' at the subatomic level and the Aether is alive and full of mysterious properties. Physicists often invent particles to fit the unexplained such as gluons which bind the nucleus and gravitons which give the property of gravity to matter. These particles of convenience are mere fudge factors and it will be demonstrated that other more plausible explanations are more likely to be the reality.

This hypothesis is based on the assumption of a basic particle of matter which may be one of the fundamental components of matter. This particle is much, much smaller than an electron and it is negatively charged, thus it is called the alpha-negatron. The size of this negative charge is also proportional to its relative size compared to that of an electron which is also negatively charged. This particle is available in abundance and may be a basic building block to form bigger particles such as electrons and neutrons. After the 'big bang' when things settled down, everything from large masses such as planets down to subatomic particles such as electrons, protons and neutrons spun on their own axes in the same direction. The alpha-negatrons also initially spun on their own axes in the

same direction but due to their size in relation to other sub-atomic particles such as electrons, neutrons and protons, they can be influenced by them to change direction of movement and spin.

These particles exist everywhere in the universe, they exist in deep space where no physical matter is found and they also exist in between the spaces of subatomic particles such as electrons and the nucleus of the atom. Due to their negative charge they repel each other and are therefore evenly spaced forming a three dimensional matrix, the fabric of space. The phenomenon of gravity, magnetism, gravitism and electromagnetic radiation are caused as a result of the movement of the alpha-negatrons within this matrix. Gravitism is a field force like magnetism and is caused by the spin and movement of protons from within the nucleus just as the spin and movement of electrons causes magnetism. Gravitism is a local effect due to the nuclei spinning in opposite directions thus not allowing the effect of gravitism to accumulate as in magnetism. The density of the nucleus exceeds that of any single entity and considering its size / mass ratio, its spinning effect has a profound effect on the surrounding alpha-negatrons compared to that of an electron. Apart from creating a gravnetic field, it also produces gravity waves which have a substantial range. The mechanism of gravitism, magnetism, electromagnetic and gravity waves will be explained later as the hypothesis progresses.

The sceptic at this stage might be tempted to say to themselves “not another theory based on aether as this concept has already been tested and ruled out by the Michelson–Morley experiment in 1887. The Wikipedia article entitled [“Michelson-Morley Experiment”](#) explains the background and the experiment itself. There are three fundamental flaws with this experiment. Firstly it assumes an ‘aether wind’ or the aether’s natural movement relative to the planets. This point will be clarified with regards to the movement of the alpha-negatrons in their natural state under the below topic of “Vacuum / Zero-point Energy”. Secondly it assumes that the passage of time is independent of matter or aether which is not the case as pointed out by General Relativity and supported by this hypothesis. The alpha-negatron matrix, this hypothesis’s equivalent of the aether is linked with the dimension of time. The below section on “Time” will attempt to explain its nature and the mechanism by which time is linked with the alpha-negatron matrix. Thirdly the Earth's gravitational field in a radius of about 200 miles has a stabilizing effect on the Aether (alpha-negatron matrix) making it less prone to movement.

Dr Harold Aspden was an outstanding scientist whose work has not been truly appreciated and in his book [Physics without Einstein](#) (a centenary review) states “Those years from 1897 to 1904 were indeed years of enlightenment in physics, sadly darkened by the demise of belief in the aether owing to that error in Earnshaw’s Theorem” and he goes on to state “so Earnshaw had erred in his assumption that the aether is merely composed of electrically charged particles sitting in a void”. Earnshaw had recognized the need for the aether but proposed it was composed of electric charges, positive and negative, in equal numbers, to define a kind of crystal structure as a frame of reference for light propagation.

This hypothesis disagrees with the above and proposes that 'aether' is composed of minutely negatively charged particles called alpha-negatrons and because this minute charge is everywhere it is not possible to detect it as it is part of the background. In the above book Dr Harold Aspden goes on to emphasise that "the aether exists and is alive because it exhibits a heartbeat at the Compton electron frequency and because it is full of energy". Dr Aspden in his above book under the section of "Analysis of Aether Structure" and proposes that "the photon as seated in a disturbance set up by a tiny $3 \times 3 \times 3$ cubic array of aether charges spinning and so having an angular momentum quantum proportional to the frequency of waves radiated". Through logical mathematical argument he deduces that the "charges having a mass a little greater than 0.04 of the electron mass". This figure is interesting because in this hypothesis under the section of "Estimation of the size of an alpha-negatron" through mathematical argument also comes to the conclusion that "the approximate size of the alpha-negatron (including the space in between each alpha-negatron) is about 200 times smaller than an electron and a proton".

The other assumption of this hypothesis is that the nuclei of atoms spin on their own axes and the phenomenon of Nuclear Magnetic Resonance (NMR) is supportive proof of this. The atom vaguely resembles a mini 'solar system' and both the sun and the planets possess spin. The electron spins around the nucleus and it also spins on its own axis but in a perpendicular direction to its rotation around the nucleus and its mechanism is explained in the topic of "Gyroscopic effect of an electron and the nucleus". The model of a mini 'solar system' is not to be taken literally but is mentioned only to emphasise that the probability of the nucleus possessing spin and the electrons spinning on their axes are very high. There are major differences between the two models which will become apparent as various relevant topics are discussed in the hypothesis such as how the type S, P_x, P_y or P_z orbitals are formed by the spinning electron.

The movement of the electrons PUSH the alpha-negatrons into mini whirlpools due to their negative charge. The alpha-negatrons within these mini whirlpools are also spinning on their own axes but perpendicular to the plane of rotation of the electron around the nucleus due to the electrons spinning on their axes in the same perpendicular plane. The two fundamental component particles of the nucleus are neutrons and protons. A neutron has no charge but the proton has the equivalent positive charge of the electron. The spin of the nucleus therefore PULLS the alpha-negatrons into a spiral motion due to its positive charge. The alpha-negatrons around the nucleus are also spinning on their own axes in the same plane as spin of the nucleus on its own axis but their direction of spin may vary. The neighbouring alpha-negatrons connect like 'cog wheels' spinning on their own axes in opposite directions. Since the size of the nucleus is much larger than that of an electron, the accumulation of the positive charges from the combined protons in the nucleus all concentrated in the nucleus exerts its effect on the surrounding alpha-negatrons and it is proportionally larger than what one electron would exert. There are two types of currents circulating in the alpha-negatron atmosphere, one caused by the movement of electrons and the other by the spin of the nuclei. Both these currents interact with each other.

Difference between field forces and waves

As stated above, alpha-negatrons are negatively charged particles with spin and are evenly spaced forming a three dimensional matrix. Waves are created by shock and as one alpha-negatron is moved this causes the next to be moved which causes the next to be moved and so forth. Waves propagate through this medium utilizing compression / rarefaction and through the spinning action of these particles. Field forces are created by a stirring and spinning of the alpha-negatrons on their axes in the matrix. The difference between waves and field forces can be best demonstrated with the analogy of a pool of still water being disturbed by a hand. Backward and forward movement of the hand in water causes ripples or waves in the water. Stirring the water with the hand in circular movement causes a whirlpool or tidal current force. Electromagnetic waves of different wavelengths are created according to the type of shock used to create the waves. Magnetism and gravitism are field forces but they differ in their mechanism of creation such as centrifugal and centripetal forces. A spinning negative charge creates magnetism and a spinning positive charge creates gravitism.

Propagation of waves

Similar to sound waves, electromagnetic waves propagate through the alpha-negatron matrix utilizing compression and rarefaction but in addition the spin of the alpha-negatrons plays a vital role in producing the dipolar electric and magnetic field vectors of an electromagnetic wave. Electromagnetic waves can interact with physical matter they meet on the way and can be absorbed or their wavelengths altered according to the type of interaction involved. The wavelength can also be altered as a result of the interaction of another wave of different wavelength or the same wavelength but a different phase. This can result in a combined wave of a longer wavelength or even cancel each other out. This is the result of the combination of constructive and destructive interference from each wave. Electromagnetic waves can also demonstrate the Doppler Effect. Gravity is for intent and purpose an electromagnetic wave at the lower end of the electromagnetic spectrum but the differences between them will be elucidated later in the topics entitled "composition of an electromagnetic wave" and "composition of a gravity wave".

Mass / Weight and Possible nature of Gravity

The common perception of mass is that it is a measure of how much matter is in an object. The common perception of weight is that it is the force with which a body's mass is attracted due to gravitational force exerted by the Earth or another celestial body. A body with a certain mass may have no weight in space whereas the same mass will have a weight proportional to its mass in a given gravitational atmosphere.

Let us now speculate on the possible nature of gravity which could have a number of explanations:

It could be a force like an electrostatic force. If that was the case then matter should be repelled, not attracted to the earth or a celestial body since both are made of essentially the same material.

It could be a force due to the pressure in the Aether causing everything to be pushed together. If that was the case then the force of gravity would not be proportional to the mass of an object and in fact objects of less mass and greater surface area would be pushed together with greater force than dense objects of greater mass. The gravitational force exerted on an object would also increase exponentially as it is brought closer to the earth or celestial body.

If gravity was a field force like magnetism or gravitism such as described above and explained in more detail below, then it would in both cases be influenced by still magnetic fields as both forces alter the alpha-negatron matrix in a broadly similar way and experiments have proven that is not the case. The gravitational force exerted on an object would also increase exponentially as it is brought closer to the earth or celestial body similar to two magnets of opposing poles and we know that is not the case. Although the effect of gravity decreases with altitude, its decrease is gradual and linear.

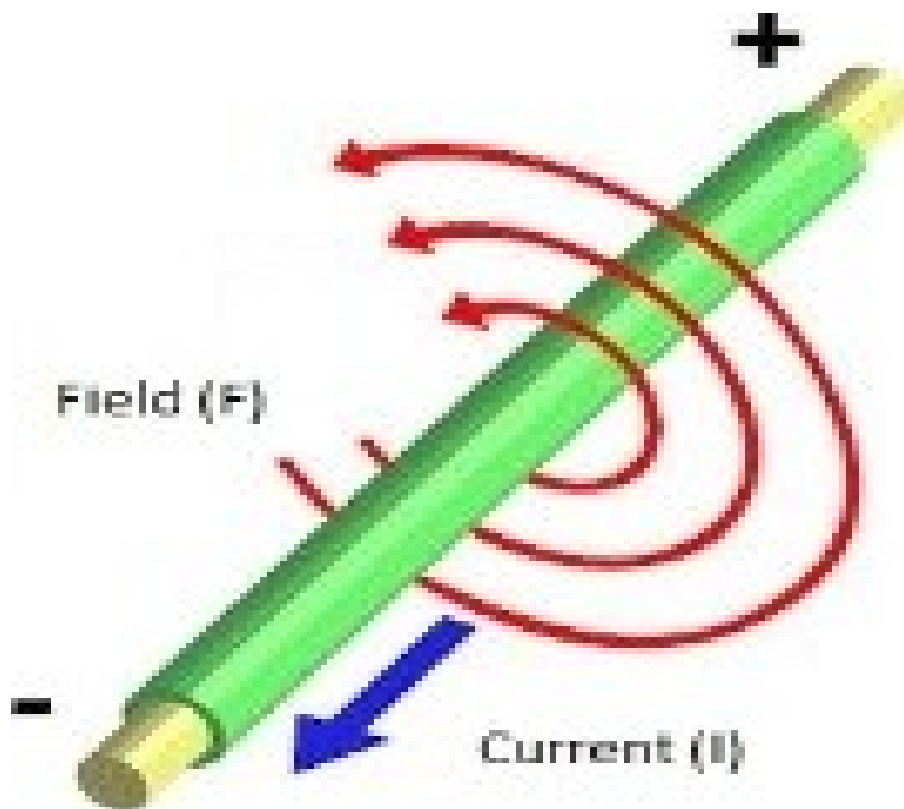
The most likely explanation of gravity is that it is waves travelling IN towards the source whether it is from a small object or a celestial body. The interaction of the gravity waves from two bodies in close proximity exerts a pulling effect on each other proportional to their mass. Such an interaction exerts a weaker force than would be the case if it was a field force. This type of interaction would also exert a more uniform and linear force than that would be exerted by a field force. The bending of light under the influence of gravity from celestial bodies is further evidence that gravity is a wave. Gravity waves are essentially electromagnetic waves going IN towards the source instead of OUT from the source as in light and can be visualised with the magnetic and electric vector element constantly changing direction making them appear quad-polar or multi-polar. Since both light and gravity waves are electromagnetic in nature, it is obvious that they would interact with each other. Gravity waves interact with light waves by bending the light wave towards the source of gravity such as a celestial body.

Scientists announced on 11th February 2016 that they have succeeded in detecting gravitational waves from the violent merging of two black holes in deep space. In an article in The Washington Post by Joel Achenback and Rachel Feltman entitled "[Cosmic breakthrough: Physicists detect gravitational waves from violent black-hole merger](#)" narrates the groundbreaking discovery. The two black holes observed encircled each other with diminishing orbits until they collided and produced a burst of gravitational waves. Normally gravitational waves are not easily detected as gravity waves propagate IN towards the source (in this case the two black holes) but due to the collision the gravity waves collide, change direction, spreading out like an explosion OUT from the merged black hole and are now able to be detected in this rare occurrence in nature. The above discovery confirms through rigorous experiments that gravity is a wave and strengthens the findings of this hypothesis. The detected gravity waves are

however of much lower frequency than predicted by this hypotheses as explained under the section of "composition of a gravity wave" so it seems likely that these gravity waves from the two black holes are interacting to produce waves of longer wavelength due to the combination of constructive and destructive inference from each wave.

Magnetism

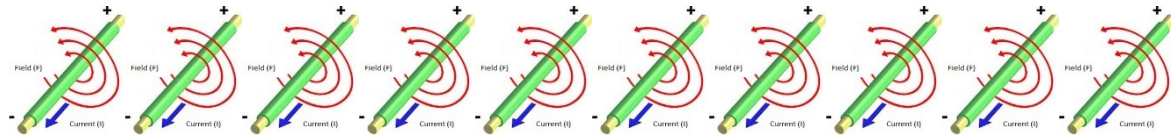
Magnetism is a field force and it occurs due to the accumulation of mini whirlpools in the alpha-negatron matrix caused by the movement of electrons when the flow of electrons in multiple atoms becomes aligned and flowing in the same direction. This can happen in permanent magnets or in an electro-magnet when electrons are exchanged around a coiled wire. A current (I) flows through a wire and this aligns the electrons in the wire to produces a rotational magnetic field (F) perpendicular to the current (I). This field occurs due to the negatively charged electrons exerting a pushing and rotating effect on the negatively charged alpha-negatrons.



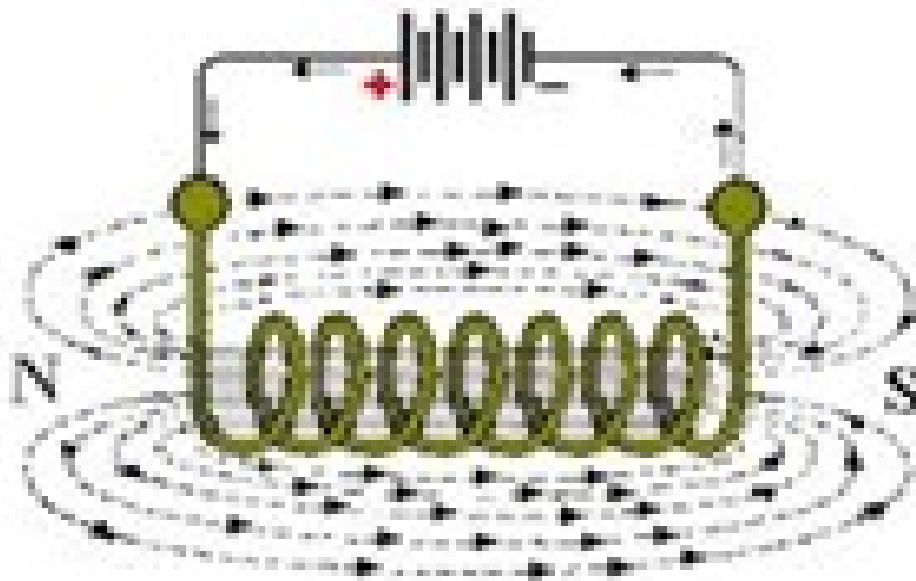
The direction of this rotational field can be determined by Maxwell's right hand rule. When current flows through a wire, the direction of the electrons are aligned in such a manner that results in the motions of the electrons around nucleus is on the same plane as the flow of the current but the spin of the electrons on their own axes is perpendicular to flow of the current and this pushes and stirs the

alpha-negatrons producing a combined rotational whirlpool motion which manifests itself as a rotational magnetic field outside the conductor as well as a magnetic field within the conductor. The actual mechanism of this is explained in more detail later under the section "Gyroscopic effect of electrons and the nucleus". This alignment of electrons can also occur in a permanent magnet due to the nature of how it is created.

There are many windings in a solenoid producing an accumulation of spiral magnetic currents.



These unified spiral magnetic currents push the alpha-negatrons to align from north to south in a closed north south circuit.



The alpha-negatrons are NOT moving from north to south but align to form a closed circuit field. The alpha-negatrons are not moving but they are spinning on their own axes perpendicular to the direction of alignment. The direction of the rotational spin of the alpha-negatrons is also determined by Maxwell's right hand rule by substituting current with direction of alignment. This alignment and spin of the alpha-negatron creates a force field called a magnetic field. A solenoid could be a coil on its own or with a ferrous material in the middle. Since the

alpha-negatrons are also in between the spaces within an atom, they also align within the ferrous material forming a complete closed circuit from north to south. This principle also applies to a permanent magnet except that in a solenoid the alpha-negatrons go back to their normal position when the current is switched off.

Traditionally a permanent bar magnet is produced by repeatedly stroking a bar of metal with one pole of a magnet from top to the bottom or vice versa. This causes the spins of the electrons to be aligned analogous to a row of ball bearings being spun in one direction. The result is that a field is created identical to the one above in a solenoid.

Oscillations not just spin in the alpha-negatrons are needed to produce movement in the electrons in a coil just as oscillations in electron motion produces movement in the alpha-negatron matrix. This explains why electricity cannot be produced from still magnets. This would also explain why attempts to produce a self-perpetuating magnet motor have failed. There is no flow of movement in the alpha-negatrons in a magnetic field hence why still magnetic fields do not disrupt the flow of gravity waves, radio waves or any other electromagnetic waves.

In non-magnetic materials the flow of electrons in multiple atoms are not aligned and not flowing in the same direction so the whirlpool currents from each electron do not accumulate. The result is that the alpha-negatrons do not align to form a field. The formation of electron covalent bonds also inhibits the alignment of the alpha-negatrons in the matrix. In non-magnetic materials the overall effect on the object is that magnetic currents cancel each other out and the gravitational currents in the form of waves, similar to electromagnetic waves but coming in towards the source dominate.

Apart from magnetic and non-magnetic materials there are also materials that exhibit Para magnetism and Diamagnetism. Paramagnetic elements are strongly affected by magnetic fields because their subshells are not completely filled with electrons. Diamagnetic materials contain only paired electrons spinning in opposite directions around the nucleus, thereby cancelling each other out and producing no magnetic field. Magnets possess the quality to attract some metals yet repel others, so the materials that magnets attract are magnetic and the materials that repel are diamagnetic.

A magnet has two poles irrespective of how it is created (permanent or electromagnet), a north and a south pole. In the above diagram of the solenoid, when viewed from the top of the north pole of the magnet the alpha-negatron alignment fields are coming outwards. When viewed from the top of the south pole of the magnet the alpha-negatron alignment fields are going inwards.

When two magnets are brought together with the like poles of each magnet facing each other (for example both north poles) then both the electron spins and the resulting forces of alignment from each magnet are moving in the opposite directions. The directions of the spins of the alpha-negatrons from each

magnet are also spinning in opposite directions. There is a head on collision of the alpha-negatrons due to opposing forces of alignment and the magnets repel each other. Since the forces of alignment are stronger in the centre and close to the pole of each magnet, the closer both magnets get to each other the stronger the force of repulsion.

When two magnets are brought together with the opposite poles of each magnet facing each other (for example the north pole of one magnet and the south pole of another magnet) then both the electron spins and the resulting forces of alignment from each magnet are moving in the same direction. The directions of the spins of the alpha-negatrons from each magnet are also spinning in the same direction. The forces of alignment are stronger in the centre and close to the pole of each magnet. Since both the forces of alignment in the alpha-negatron matrix are in the same direction, these combined forces of alignment in the alpha-negatron matrix merge in an attempt to unify both fields. The pull from each magnet becomes stronger the closer their respective poles get to each other and both magnets are forced to align themselves respective to the centre of each pole. This results in both the magnets being pulled together and a new field of alignment is created between the combined north and south poles of both magnets. This new field of alignment gets stronger and stronger as the distance between the two magnets is decreased while the original field of alignment for each magnet gets weaker and weaker until the two magnets meet. At this point the two magnets merge to form a new bigger magnet with a new unified field of alignment between the north pole of one magnet and south poles of the other magnet.

Electromagnetic radiation

Electromagnetic waves vary in wavelength according to which part of the electromagnetic spectrum they belong to. Radio waves are created by causing a change in electron motion in a coil which in turn creates a wave in the alpha-negatron matrix due to its oscillations at a particular frequency. The motion of electrons going up and down in a coil will create waves in the alpha-negatron matrix by agitation just as they do in water when an object is moved up and down. Light waves are visible part of the electromagnetic spectrum and they are created when an electron moves from an outer activated orbit to an inner orbital from within an atom. Energy is lost in the process when the electron moves from the outer activated orbit to the inner orbital creating a shock which in turn creates a very narrow wave at a specific wavelength in the alpha-negatron matrix. In traditional physics this is termed a photon which has supposedly properties of a wave and a particle but in reality no such particle exists, it is just the propagation of a wave appearing to behave like a particle.

Electromagnetic radiation such as x-rays, microwaves and gamma-rays are of shorter wavelength and are very penetrative. X-rays are created when electrons are accelerated and bombarded on to a harder material such as metal.

Microwaves are created by various types of transmitter such as chip and an antenna in a mobile phone and a magnetron in a microwave. Gamma-rays are

produced in nuclear reactions such as in stars and it involves the collision of high energy particles such as protons or neutrons. In all of the above a very powerful, narrow, short wave of a penetrative nature at the appropriate wave length is produced according to how this sharp shock is created in the alpha-negatron matrix.

Estimation of the size of an alpha-negatron

As stated above alpha-negatrons are much, much smaller than an electron and due to them being negatively charged are evenly spaced forming the three dimensional alpha-negatron matrix. Since the universe is submersed in these particles the distance between alpha-negatrons is very small and is relatively fixed. When one alpha-negatron is moved, this causes the neighbouring alpha-negatron to be moved. Consider how fast a shock transfers energy or propagates it in the form of a wave in a metal or air as sound waves. This transfer of energy is faster in a metal than in air because the distance of the lattice structures of metals is much smaller than the molecules that make up air and hence the speed of travel in metals is proportionally faster. This underlying principle can be applied to the alpha-negatrons and safely assume that the speed at which electromagnetic radiation travels in the alpha-negatron matrix is determined by the size of the alpha-negatron including the distance between each alpha-negatron. Since the size of the alpha-negatron and the distance between each alpha-negatron is relatively fixed hence the speed of travel for electromagnetic waves is also relatively fixed. This is why the speed of light is considered to be a relative constant. If the distance between the alpha-negatrons were to be reduced then the increase in the speed of travel for electromagnetic waves would be inversely proportional to the distance and vice versa.

It is possible to calculate the approximate size of an alpha-negatron (including the spacing in between each alpha-negatron) since both the speed of light and sound is known and the distance between molecules that make up air can be estimated.

Johann Loschmidt in an article entitled "[On the Size of the Air Molecules](#)" published in Proceedings of the Academy of Science of Vienna vol. 52, p. 395-413 (1865) estimates the size (diameter) of air molecules to be in the region of 0.000000969 mm. This figure rounded off and converted into metres becomes 9.7×10^{-10} metres. The average speed of sound at sea level is 340 metres / second. The speed of sound is inversely proportional to the size of air molecule. The approximate speed of light in vacuum is 300,000,000 metres / second or 3×10^8 metres / second. The speed of light is inversely proportional to the size of the alpha-negatron (which includes any spacing in between).

Alpha-negatron size (including spacing) = Speed of sound x Size of air molecule / Speed of light

Alpha-negatron size (including spacing) = $340 \times 9.7 \times 10^{-8} / 3 \times 10^8$

Alpha-negatron size(including spacing) = 1.1×10^{-16} metres

Let us now compare the above size to the size of an electron and a proton. John Macken from Saint Mary's College of California writes an article in ResearchGate entitled "[Is an electron larger than Planck length?](#)" Collision experiments have been interpreted as implying the radius of an electron must be less than 10^{-18} metre but the energy in the electron's electric field would exceed the electron's measured energy by a factor of at least 10^{20} times.

He goes on to state that "The very successful Dirac equation implies that an isolated electron has a radius on the order of its reduced Compton wavelength which is about 10^{-13} meter." This gives isolated electron a relatively large radius due to its movement and relative uncertainty of its positioning.

An article by Yelena Meskina (1999) in The Physics Factbook entitled "[Diameter of a Proton](#)" shows a list of values for the size of a proton by the various bibliographic entries. The diameter estimates for a proton vary from 10^{-15} metre to 2×10^{-14} metre. The most recent estimate carried out in 1992 by Sears, W. Francis in University Physics appears to me to be the most reliable and this gives the diameter of a proton to be 2×10^{-14} metre. Since the electron is the negative counter part of the proton then the diameter of the electron should be in the same order as that of the proton that of 2×10^{-14} . This gives us the approximate size of the alpha-negatron (including the space in between each alpha-negatron) to be about 200 times smaller than an electron and a proton. It is very unlikely that there is no spacing in-between each alpha-negatron because the implication of that would be that 'empty space' is pure matter.

Let us now compare the above figures with Planck length. The Wikipedia article entitled [Planck length](#) gives a figure of Planck length to be 16.162×10^{-36} metres. That's interesting because the square root of Planck length is approximately the diameter of an alpha-negatron including the spacing in between each alpha-negatron. The Planck length is about 10^{-20} times the diameter of a proton.

As stated above

Alpha-negatron size (including spacing) = 1.1×10^{-16} metres

The all-important questions are “what is the actual size of an alpha-negatron?” and “what is the spacing between each alpha-negatron?” Is the actual size of the alpha-negatron in the region of Planck length? Is the size of the neutrino the same as an alpha-negatron and are they one and the same particle?

A case for the neutrino being the hypothetical alpha-negatron

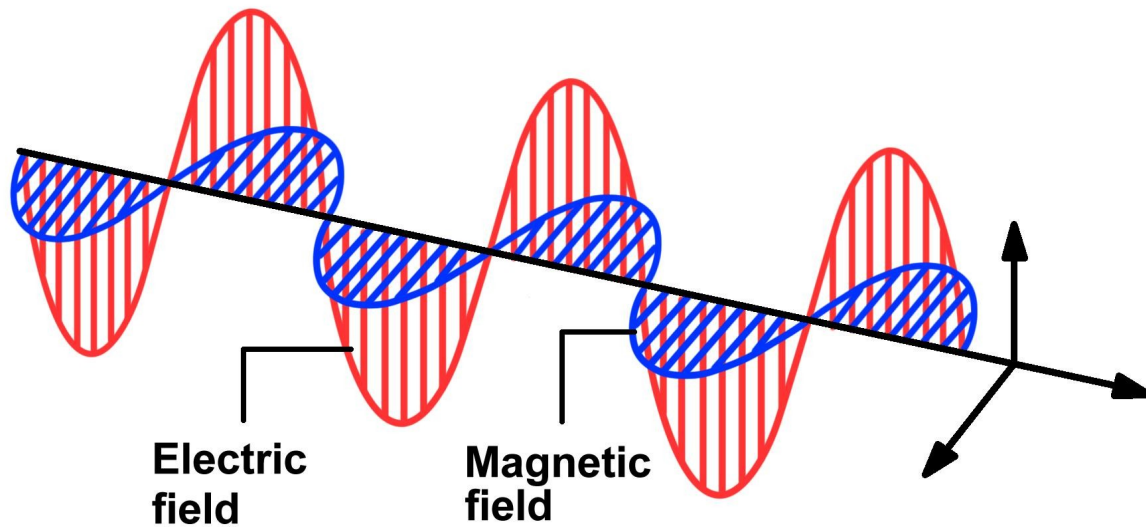
According to conventional theories there doesn't seem to be enough matter and dark matter to halt the expansion of the universe so there seems to be still a large amount of matter in the universe still unaccounted for. Could the alpha-negatrons be a kind of dark matter thus explaining the bulk of the unaccountable mass? Recently scientists have suggested that neutrinos could be responsible for the unaccountable mass. Experiments indicate that neutrino are electrically neutral, but is it possible they do have a very, very small negative charge which so far has not been detected due to their relative size in relation to the electron or they are alpha-negatron particles which have lost their charge? Is it also possible that neutrinos could be in fact loose alpha-negatron particles which have been knocked out of the matrix by a powerful shock and are being catapulted in different directions? The case for neutrino's being everywhere and perhaps even being the alpha-negatron particles is strengthened by The 2014 Heinz R Pagels Memorial Lectures - “[Neutrinos Are Everywhere](#)” with Joseph Lykken.

An article in the Connections through time, Issue 15: April - June 2002 entitled “[The Mysterious Neutrino Has Mass \(barely\) and Changes Flavor](#)” sheds more light on the nature of neutrinos. The above states that “One estimate is that for every electron, proton, or neutron in the universe, there are a billion or so neutrinos”. This figure seems a gross exaggeration but a figure in the order of thousands would correspond to the expected number of alpha-negatrons. For a long time, neutrinos were considered to have no mass but now experimental evidence points to the fact that they do have a very small amount of mass. When one day we can demonstrate that neutrinos have a very small negative charge, which could be about 200 - 1000 times less (depending on the distance between each alpha-negatron) than that of the electron then the case for the alpha-negatron being the same particle as a neutrino will be overwhelming.

The detection of neutrino's is carried out in laboratories based in deep underground bunkers. It may be that neutrino's are being pulled by gravity waves going IN towards the centre of the Earth. The spinning negatively charged neutrino, spinning forward (vertical) and perpendicular (horizontal) produces sinusoidal electric and magnetic vectors (like electromagnetic radiation) being pulled by magnetic vectors of gravity wave? Is this indirect proof that neutrino's possess a negative charge and probability is that the neutrino is the alpha-negatron?

Composition of an electromagnetic wave

An electromagnetic wave has an electric and magnetic field vector component hence the term electromagnetic wave.



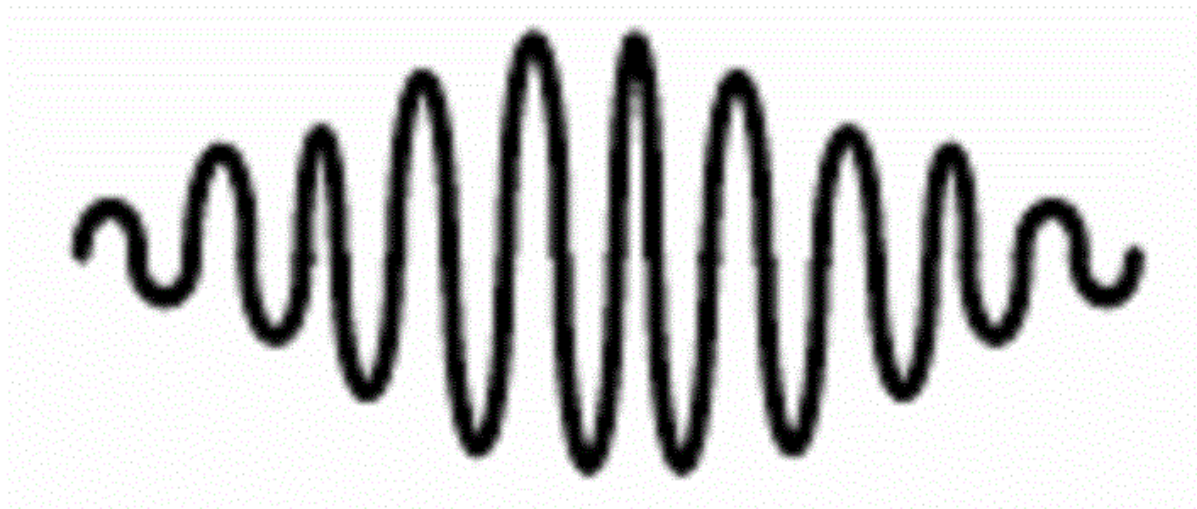
This can be explained by General Connectivity as follows. As stated before, electromagnetic waves are created by shock and as one alpha-negatron is moved this causes the next to be moved which causes the next to be moved and so forth. This creates the electric field and magnetic field vectors due to the spinning alpha-negatrons on their own axes.

The alpha-negatrons can be visualised as cog wheels, as one spins 'vertically' in one direction, it causes the neighbouring one to spin 'vertically' in the opposite direction as in this [video clip](#). This causes 'vertical' sinusoidal oscillations in the electric field vector in the process of charge exchange by the alpha-negatrons. The spinning alpha-negatron is like the minutest magnet with a north pole on one side and a south pole on the other side (dependant on direction of spin) as explained below under the section of "Superconductivity and the mechanism of cooper pairing". The article by hyperphysics regarding [Nuclear Magnetic Resonance Spectroscopy](#) shows by animation how a spinning charge generates a magnetic field. Since the neighbouring alpha-negatron spins in the opposite direction as explained above, it causes sinusoidal oscillations in the magnetic field vector perpendicular to the electric field vector whilst the wave propagates forward. This is further strengthens the arguments for the existence of the negatively charged alpha-negatrons.

An estimation of the size of an alpha-negatron (including spacing between each alpha-negatron) is given in the above section of "Estimation of the size of an alpha-negatron". If the size of the actual alpha-negatron particle is much smaller than this figure and the alpha-negatrons do not touch each other, then how can the above 'cog wheel' mechanism be explained? Any charged particle will have a range and the effect of the charge will decrease with distance. An electron spinning around the nucleus and spinning on its own axis will exert the effect of its negative charge over varying distances thereby contributing to its relative uncertainty of its positioning. The alpha-negatron particle can be visualised with

its negative charge encircling it like a balloon. Imagine two balloons touching each other and as one is rotated in one direction the other balloon rotates in the opposite direction. Depending on the density of the alpha-negatron atmosphere, the tighter the charged alpha-negatrons are pressed together the stronger the bond between the two.

The di-polar nature of an electromagnetic wave is explained above and is the direct result of how an electromagnetic wave is created by a sharp shock (this can be likened to a billiard ball being hit in the middle) and it hits the neighbouring one in the same way and to the next one and so forth. The wave now progresses in a linear and non-coherent (broken strand or strain) wave packet as illustrated below.



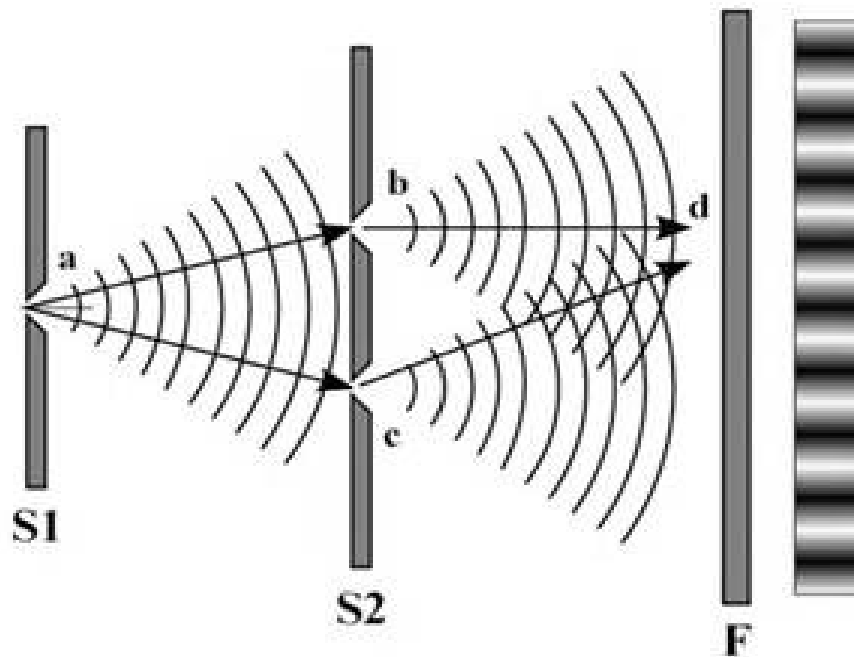
The wave frequency is determined by the type of shock used to create the electromagnetic wave which determines the speed of rotation of the negatively charged alpha-negatron. Since the speed of light is a relative constant, the wavelength of an electromagnetic wave is inversely proportional to the wave frequency. A frequency of 30 MHz will produce an approximate wavelength of 10 metres. Since electromagnetic waves propagate at the speed of light, in the above example the time it takes to complete one cycle at 30 MHz, the wave has travelled 10 metres. This makes sense as the approximate speed of light in vacuum is 300,000,000 metres per second.

Particle wave duality

An important implication of Heisenberg's Uncertainty Principle is that particles behave in some respect like waves and vice versa. The duality of electromagnetic radiation (includes gravity) behaving like a particle and a wave can be explained through General Connectivity as follows. Alpha-negatron particles like an electron have a fixed size and charge and electromagnetic waves propagate through the alpha-negatron matrix utilizing compression and rarefaction. Due to its above nature electromagnetic waves can be emitted or absorbed only in 'packets' and possess the properties of frequency, wavelength, amplitude and phase. Alpha-negatrons are particles but behave like waves when

energy is transferred such as in electromagnetic radiation and its mechanism is explained under section of “composition of an electromagnetic wave” and “composition of a gravity wave”. As stated above under the section of Radiation Shielding “Electromagnetic waves at very short wavelength behave more like particles than waves by creating focussed waves with virtually no scattering”. There is no such particle as a photon but this term is used to describe the focussed wave created by a high energy shock in the alpha-negatron matrix. In the case of an electron going through a ‘vacuum’ in a Cathode Ray Tube (CRT) although there is virtually no scattering but because it still going through a medium, the alpha-negatron matrix there is still a very small amount of scattering hence is partial wave like behaviour.

Thomas Young conducted in 1801 his famous double-slit experiment demonstrating that light and matter can possess the properties of a wave or a particle in different circumstances. The image below of Young's double-slit experiment is taken from Physicsoftheuniverse.com.



The above diagram shows the first plate (S1) with one slit producing a wave (a) propagating towards the second plate (S2) with two slits producing two individual waves (b & c) which produces an wave interference pattern (d) being displayed on the film screen (f). In the basic version the first plate (S1) is not used but coherent light such as a laser or a beam of electrons are fired directly at plate S2.

The dilemma of thinking that a particle suddenly becomes a wave can be easily resolved if we think of the individual wave coming out of the two slits in plate S2 as new waves being produced by the slits themselves due to shock. The shock of coherent light or an electron beam hitting the slit produces an electromagnetic wave which propagates in the alpha-negatron matrix utilizing compression /

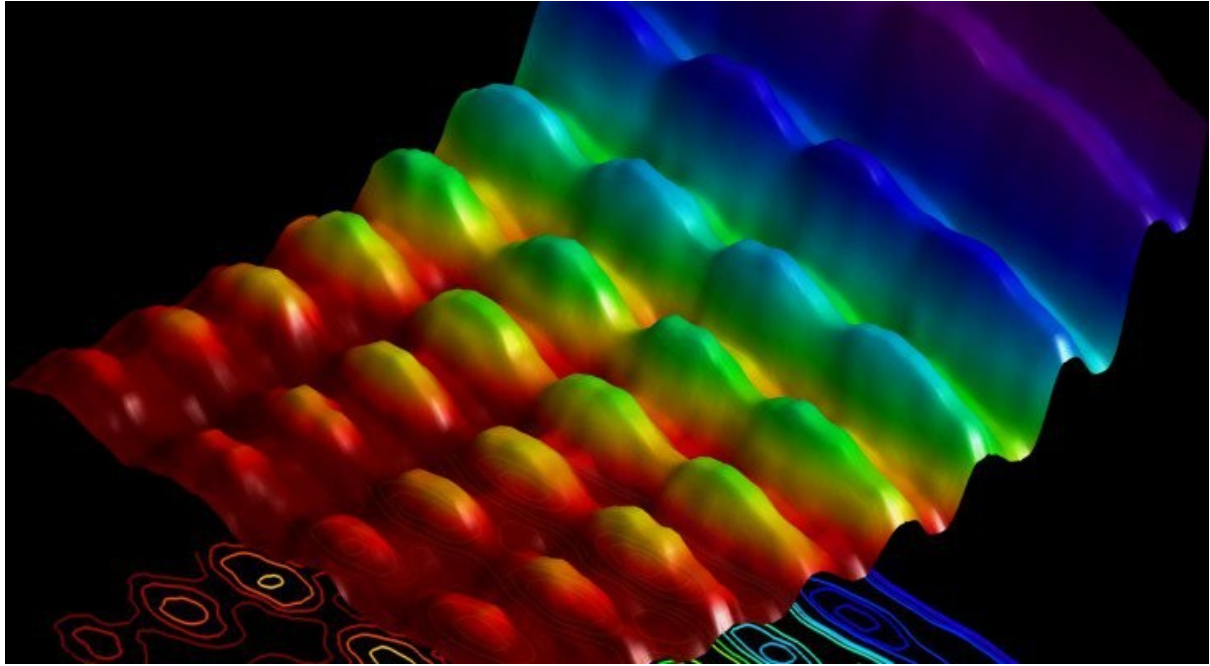
rarefaction and through the spinning action of the alpha-negatron particles. The two electromagnetic waves created by the two slits interact with each other producing an interference pattern which is displayed on the screen. A stream of 'photons' or electrons do not as a result of the slits physically travel from plate S2 to the screen F.

In the YouTube video entitled "[Double Slit Experiment explained!](#) by Jim Al-Khalili" uploaded by The Royal Institute demonstrates an interesting experiment of firing particles such as electrons through the slits but with a detector connected monitoring one slit. The interference pattern of bright and dark bands only appear on the screen when the detector is not present or present but not connected. When the detector is present and connected then interference pattern is not present but only two bright bands corresponding to the two slits. The rational explanation is that the connected detector absorbs the radiation thus collapsing the wave function produced by the propagation of the alpha-negatron particles.

An article by Jeff Roberts entitled "[The first ever photograph of light as a particle & a wave is here](#)" in Collective Evolution 11 June 2015 shows below a photograph of a 'photon' of light behaving as a particle and a wave at the same time. Fabrizio Carbone and his team at EPFL devised the clever experiment to capture the above phenomenon.

A pulse of laser light is fired at a tiny metallic nanowire in both directions to produce a standing wave. Streams of electrons are shot close to the nanowire and as they interact with the confined light on the nanowire, they either speed up or are slowed down. An ultrafast electron microscope is used to image the position where this change in speed occurred.

Looking at the below photograph, a few observations come to mind. The shape of the 'photon' appears to be like an oval tablet with the depth being smaller than the height. It is a known fact that a magnetic field deflects electrons and that is what appears to be happening here. The visible oval shape of the 'photon' is the magnetic field vector of the electromagnetic wave and this is interacting with the stream of electrons. The size of the actual 'photon' (alpha-negatron particle) is much smaller than the size of the magnetic field vector and this type of imaging makes the appearance of the magnetic field vector to be bigger than the electric field vector of the electromagnetic wave which in reality is not the case. In the photograph below there is the 3-D image of the wave and below is the 2-D image with contour circles with the smaller circle inside each 'photon' which could be the actual particle. As the wave progresses as a 'packet of energy' the cluster of 'photons' appear to increase in width and height and then reduce in both.



Refraction and polarization of electromagnetic waves

The phenomenon of refraction and polarization of light is only possible because of the electromagnetic nature of light. The mechanism of a single 'strand' of an electromagnetic wave is described above but any radiation particularly light is present with a colossal amount of single 'strands' each with a different orientation relative to each other with regards to the electric and magnetic field vectors. Although an electromagnetic wave can travel colossal distances as it propagates but the individual 'strand' is very short unless it is a coherent wave as in a laser. Light due to its electromagnetic nature can be influenced by electric and magnetic fields. An external electric field can influence the electric field vector and an external magnetic field can influence the magnetic field vector of an electromagnetic wave.

Refraction is the bending of an electromagnetic wave such as light as it travels through an optically transparent material such as glass. The degree of bending due to the optical density of the material and is expressed as the refractive index. The bending of light in the above case occurs due to the magnetic field vector of the wave being influenced by magnetic field created by the electrons in the lattice structure of the transparent material. A material such as Calcite possesses two refractive indexes due to its oblong lattice structure. This can be used to create polarized light as explained in the Wikipedia article on [Nicol prism](#).

A polarizer is a filter which allows a certain orientation of electric and magnetic field vectors to pass through whilst blocking the other orientations of electric and

magnetic field vectors. Light can be polarised in any plane such as horizontally / vertically or it could even be polarized circularly. The nature of polarized light and how polarized lenses are made are explained in [The science of Polarized Lenses](#) by Vision-Ease Worldwide. The plane of polarized light can also be rotated to any angle by an electric field as accomplished in liquid crystal displays. Polarization and the rotation of polarized light are made possible by influencing the electric field vector of the electromagnetic wave by external or internal electric fields present in the lattice structure of a transparent material.

Gravity

Gravity is caused by the interaction of the positively charged nucleus with the negatively charged alpha-negatrons causing an overall effect of a current of alpha-negatrons moving towards the nucleus hence causing the pulling effect of matter. This current is in the form of a wave formed in the alpha-negatron matrix. Two atoms in close proximity will pull on one another on the same plane due to the rotation of the nuclei creating a gravitational field in the same way as the alignment of planets occurs and this helps to form molecules through electron bonds. The pulling effect due to gravity in individual atoms in the above example is directional due to the spin of the nuclei on one plane. A covalent bond is formed when atoms share valence electrons. This may be achieved by one atom flipping relative to another so that both the outer electrons are spinning in opposite directions allowing an electron to be shared by freeing one electron in a covalent bond. This can also result in the spins of both nuclei spinning in opposite directions but the direction of spin of the nucleus is not dependant on the direction of the electron spin so the nucleus can spin in any direction. There are many types of molecular bonding but the overall above principles still apply. The direction of spin of the nucleus can suddenly change under certain circumstances by flipping, especially if the proton / neutron ratio is uneven due to causing an imbalance of charge / mass ratio. This is responsible for the phenomenon of nuclear magnetic resonance NMR which is explained by the article by chemguide entitled [What is nuclear magnetic resonance \(NMR\)?](#) NMR has many useful applications including spectroscopy. The existence of NMR is proof that the nucleus of an atom possesses spin.

The pushing effect of the electrons on the spinning alpha-negatrons in conjunction with the pulling effect of the spinning nucleus on the spinning alpha-negatrons may actually help to weave or modulate a wave in the alpha-negatron matrix. Matter is three dimensional with the nuclei of the atoms being evenly distributed within it and the rotations of the nuclei are in all probability not synchronous and about half of the nuclei are spinning in opposite directions relative to one another due to molecular bonding or by chance as explained above. The implication of this is that the gravnetic field created by individual nuclei is mostly cancelled out but the effect can be observed at very short distances especially in metals due to their lattice structure where its influence is strong.

Gravity waves are created by the mechanism explained below. Oscillations produced when the positively charged nucleus spins results in waves in the alpha-negatron matrix. Oscillations are also produced in the alpha-negatron matrix when two adjacent nuclei have opposite spins. Due to their close proximity and opposing spins the result is that greater agitation is achieved. This is analogous to a spherical object floating on water, oscillating back and forth doubling the wave frequency. These waves are double the frequency of the single nucleus in the above example. The size of the nucleus also influences the frequency of the gravity wave. The size of the nucleus is dependent on the number of protons and neutrons in the nucleus which is unique for each element.

The vast majority of gravity waves are produced as result of two adjacent nuclei having opposite spins as explained above. Gravity waves are in a small range as opposed to a fix frequency and fall in the lower end of the electromagnetic spectrum due to the above effect. Gravity waves due to their nature of formation are unique in that they come IN towards the source as opposed to other electromagnetic radiation which goes OUT from the source. Normal electromagnetic and gravity waves are respectively analogous to high and low tide of sea current if we consider the source to be centre of the ocean. Low tide drags objects into the sea whereas high tide drags objects from the sea on to the shore. It is more difficult to detect waves that go in towards the source thus explaining why gravity waves have been difficult to detect and therefore have not been categorised as such.

Like matter the result of this compounded wave is three dimensional so it results in waves coming towards matter from all directions unlike sea waves coming towards the shore. The size of this current created is dependent on the size of the nucleus which in turn is dependent on the accumulation of the number of protons and neutrons within the nucleus. The net result is that gravity is directly proportional to mass; hence the periodic table gives us a proportional measure of mass thus taking into account isotopes with an uneven number of neutrons and protons.

Two objects will pull on one another and the object with the larger mass such as the earth will have a proportionally greater pull. To put a visual perspective, imagine two adjacent objects creating a 'low tide' effect dragging the other object in its direction due to the interlocking of waves from each object such as a piece of rock and the Earth. Gravity is a stabilising force, not just because it stops things flying about but is at work in all physical, chemical and biological processes. It may also be responsible for the stability of time on earth and is a vital component without which the formation and sustenance of life would be impossible.

Composition of a gravity wave

The section above entitled "composition of an electromagnetic wave" explains the di-polar nature of an electromagnetic wave. This is the direct result of how an electromagnetic wave is created by a sharp shock (this can be likened to a

billiard ball being hit in the middle) and it hits the neighbouring one in the same way and to the next one and so forth. The wave now progresses in a linear and non-coherent (broken strand or strain) manner as explained above in the section "composition of an electromagnetic wave". Positively charged nuclei spinning in different directions in three dimensions of matter, create gravity waves in the alpha-negatron matrix travelling towards the source. Gravity waves move towards the source in a coherent continuous strand or strain but in a non-linear or curved manner. Gravity waves propagate for intent and purpose unperturbed through space due to their weak interaction with matter. This result from their mode of propagation in that it is non-linear or curved so they continue their propagation around the object instead of causing a head on collision.

Apart from the nucleus of a hydrogen atom which contains only a proton, all other atoms contain one or more proton-neutron pairs. The nucleus can be visualised as being built of three dimensional layers of these proton-neutron pairs. As the nucleus spins on its axis these proton-neutron pairs at different horizontal and vertical depths will exert a different radius of rotation of the positive charge thereby influencing the alpha-negatrons to change spin and direction. The above also influences the electrons around the nucleus dictating how many electrons are allowed for each orbit including the orbital type such as "S" or "P". The "S" orbital are spherical in shape and "P" orbitals look like two balloons tied together but can point in any direction and are classified according to which direction they face such as P_x , P_y or P_z .

Gravity waves are essentially electromagnetic waves and can be visualised with the magnetic and electric vector element constantly changing direction making them appear quad-polar or multi-polar. As stated above that gravity waves are created by the spinning nucleus but on average 50% of nuclei spin in one direction while the other 50% spin in the opposite direction so thereby effectively doubling the frequency of the gravity waves produced. Two adjacent nuclei spinning in opposite directions will also cause the magnetic and electric vectors of the wave to change direction making the wave appear quad-polar or multi-polar.

The movement of the alpha-negatrons can be visualised in the analogy of a billiard ball been hit non-centrally, causing an angular spin and direction which will be passed on the next billiard ball with the opposite angular spin and direction and so forth. As stated above the alpha-negatrons can be visualised as cog wheels, as one spins 'vertically' in one direction, it causes the neighbouring one to spin 'vertically' in the opposite direction but in the case of a gravity wave, it also changes angular spin and direction. This results in gravity waves being much weaker than normal electromagnetic waves but having a continuous twisting strand or strain propagating towards the source in a non-linear or curved manner. As a result of the above, gravity waves behave more like a field force than a wave. Due to the alternating electric and magnetic field vectors of gravity waves, polarization of gravity waves has not been observed in nature. If that were possible then it would be easy just to 'block' gravity waves as it is with light with polarisers.

The earth's gravitational force has the effect of pulling objects towards the Earth. One can visualise gravity to be millions of strands of electromagnetic waves going IN towards the earth and millions of strands of strands of electromagnetic waves going IN towards an object in a given area under observation. The magnetic vectors (north and south magnetic poles) from each strands of gravity waves going IN towards the earth and the object interact like two magnets of opposite poles (north and south) going to the least energy state (opposite poles pulled together) causing a pulling effect of both opposing directional strands of gravity waves. This in turn has the effect of the object being pulled towards the earth due to the stronger effect of the gravitational waves from the earth. The above mechanism explains why gravity waves are so hard to disrupt and why the effect of gravity is observed even at great distances.

As stated above under the section of "Mass / Weight and Possible nature of Gravity" that scientists announced on 11th February 2016 that they have succeeded in detecting gravitational waves from the violent merging of two black holes in deep space. In an article entitled "[Gravitational Waves Detected, Confirming Einstein's Theory](#)" in The New York Times by Dennis Overbye also mentions the work of Joseph Weber. The above article states that long before the above confirmed discovery, in 1969, [Joseph Weber](#), a physicist at the University of Maryland, claimed to have detected gravitational waves using a six-foot-long aluminium cylinder as an antenna. He predicted that "Waves of the right frequency would make the cylinder ring like a tuning fork". Sadly his results could not be duplicated but the above confirmed discovery proves that he must have succeeded as sound from [gravitational waves was heard](#) in the above ground-breaking discovery. The six-foot-long antenna indicates that it is the wavelength of the average gravity wave or multiples of the cycle of the wavelength of the average gravity wave. Six foot converted into meters becomes 1.8 metres.

$$C = F \times \lambda$$

Where C is the velocity of light, approximately 3×10^8 metres / second. λ is the wavelength in metres. Putting the above wavelength of 1.8 metres into the above equation becomes

$$F = 3 \times 10^8 / 1.8 = \text{approximately } 166 \text{ MHz}$$

Joseph Weber's original paper entitled "[Evidence of discovery of gravitational radiation](#)" published 16th June 1969 in Physical Review letters presents the evidence for gravitational radiation and the experimentation carried out to prove it. The frequency of 1660 Hz is chosen for the experimentation because this is the frequency swept through during emission in a supernova collapse. However there are a few discrepancies from the viewpoint of this hypothesis regarding Joseph Weber's experiments. By what logic does this frequency of 1660 Hz become the resonant frequency of the six-foot-long aluminium cylinder used as an antenna? Clearly from the above calculations the six-foot-long aluminium

cylinder as used as an antenna would have a resonant frequency 166 MHz, if gravity waves are electromagnetic in nature, corresponding to a wavelength of 1.8 metres! If Joseph Weber did indeed detect signals for gravitational waves using this six-foot-long aluminium cylinder then the frequency detected would have been 166 MHz as predicted by this hypothesis derived from using different logical arguments. The gravitational waves claimed to have been detected by Joseph Weber and the LIGO team are either from a supernova collapse or the violent merger of two black-holes and do not represent 'normal' gravitational waves which go IN towards the source as exhibited by the earth or any other celestial body. The gravitational waves from a supernova collapse or the violent merger of two black-holes produce waves going OUT from the source like normal electromagnetic waves. This is due to gravity waves colliding, changing direction and spreading out like an explosion OUT from the merged black hole or a supernova collapse. The deep underground bunkers used to detect neutrino's would be the ideal place to detect gravitational waves from the Earth. The LIGO laboratory should be based in one of these bunkers. This hypothesis predicts that if the original apparatus used by Joseph Weber were to be used in one of these bunkers, it would detect gravitational waves with a resonant frequency of 166 MHz!

If gravity is a wave then it must have a mechanism of creation. This hypothesis proposes that the spinning positively charged nucleus causes gravity waves in the alpha-negatron matrix just as the spinning electron causes magnetism. The phenomenon of NMR is proof that the nucleus spins on its own axis. In NMR an external magnetic field is applied to a material with an uneven number of proton / neutron ratio to align the nuclei poles and spins in one direction. For the positively charged nucleus to possess poles such as north and south, it has to be spinning proving that the nucleus spins on its own axis. Then another alternating magnetic field is applied and at a critical frequency determined by the material in question the nucleus is forced to 'flips' its poles. This critical frequency which has a destabilising effect on the spinning nucleus has to be related to the frequency of the rotation by the spinning nucleus and the resultant frequency of the gravity waves. A proton has NMR frequency range of about 60 - 100 MHz .

Without the external applied magnetic field to align the nuclei as in the NMR application above, the poles and spins are NOT in one direction but 50% of the nuclei are spinning in one direction and the other 50% are spinning in the opposite direction. If one spinning nucleus in one direction produces an average frequency of 83 MHz, two adjacent nuclei spinning in opposite directions has the effect of doubling the frequency of rotation from 83 MHz to 166 MHz (average frequency) due to the combined interaction of the two spinning nuclei in opposite directions. The resonant frequency of NMR indicated above and therefore the frequency of the average wavelength of gravity waves as predicted by General Connectivity is consistent with Joseph Weber's experimental findings? It can't be just a coincident that the two figures match (see below of further scrutiny), so it is further proof that the model in this hypothesis fits once again with experimental findings?

As stated above, the spinning alpha-negatrons are changing spin and direction as a gravity wave propagates. The magnetic interaction of neighbouring alpha-negatrons due to the alternating magnetic field vectors on their axes causes the oscillating expansion and contraction of space-time as gravity waves propagate through the alpha-negatron matrix. The above ground-breaking discovery confirms oscillating expansions and contractions as gravity waves propagate through space-time.

The [Laser Interferometer Gravitational-Wave Observatory \(LIGO\)](#), detects gravitational waves by looking for tiny changes in the path of a long laser beam. In each of the lab's two facilities, a laser beam is split in two and sent down two perpendicular tubes 2.5 miles long. Each arm of the beam bounces off a mirror and heads back to the starting point. If nothing interferes, these two arms recombine at the starting point and cancel each other out. LIGO can detect changes in the length of one of those arms as small as one ten-thousandth the diameter of a proton, a subatomic particle too small to be seen by even the most powerful microscopes as a gravitational wave sweeps through. Once again the experimental findings in the above ground-breaking discovery fits the mechanism of how the oscillating expansion and contraction of space-time takes place. Maxwell's equations relate to the interaction between the electric charge and magnetic field vectors in an electromagnetic wave and Einstein field equations relate to the interaction between mass and space-time curvature due gravity waves.

Gravitism and the stability of the nucleus

As explained above, gravitism is field force like magnetism and is caused by the spin and movement of protons whether on their own or from within the nucleus instead of electrons as in magnetism and its mechanism is explained below.

As stated above that after the 'big bang' everything from large masses such as planets down to subatomic particles such as electrons, protons and neutrons spun on their own axes in the same direction. Before the formation of the nucleus apart from the hydrogen atom, a proton and a neutron are separate but both spinning in the same direction. The spinning proton and neutron causes the surrounding alpha-negatrons to spin in the same direction creating separate whirlpool currents around each one. The spinning proton in addition has a pulling effect on the surrounding alpha-negatrons. Both the whirlpool currents are spinning in the same direction and in a mechanism similar to when two magnets of opposite poles come together, the proton and the neutron come together in an attempt to unify both spinning whirlpool currents. More protons and neutrons unite through a similar mechanism to form different elements. The nucleus of a hydrogen atom contains just a proton and when a neutron is added to it for form a helium atom in a process called nuclear fusion then energy is released. This indicates that the union of a proton with a neutron requires less energy than a proton on its own and hence the excess energy is released indicating that the above mechanism of how a neutron binds to a proton is likely to be correct.

The nucleus is most stable when it contains even numbers of both protons and neutrons. When neutrons outnumber the protons in a nucleus as in certain isotopes of the same element then the element becomes unstable and therefore radioactive. The mechanism is similar to above in nuclear fusion in that more energy is required to bind uneven number of protons and neutrons and the excess energy is released in radioactive decay by the process of nuclear fission. If gluons were responsible for holding the protons and neutrons together then the above would not be true.

The movement of the electrons in the first orbit pushes the alpha-negatrons into mini whirlpools, compressing and aligning the alpha-negatrons around the nucleus due to their negative charge which are already being pulled by the spinning positively charged nucleus due to its proton content. This mechanism causes a compression of the alpha-negatrons around the nucleus, further adding to the stability of the nucleus. The presence of the alpha-negatron matrix and the pressure it creates around the atom and nucleus is also crucial in the stability of the nucleus and the atom as a whole.

Gravity enhancement / Hyper-gravity

The concept of 'anti-gravity' or gravity reduction / disruption has been much talked about due to its application for flight, particularly in space but the reverse effect of creating gravity or gravity enhancement / hyper-gravity is relatively uncommon. In the film "2001: A Space Odyssey", the circular rotating space station creates a centrifugal force giving the illusion of gravity. An electronic application of 'gravity' would be particularly useful in a standard spacecraft where the use of spin to create 'gravity' would not be practical.

The spinning positively charged nucleus creates gravitism due to its pulling effect on the surrounding negatively charged alpha-negatrons. The spinning negatively charged electron creates magnetism due to its pushing effect on the surrounding negatively charged alpha-negatrons. Both magnetism and gravitism are field forces and can be likened to the difference between centrifugal and centripetal forces. A spinning charge (positive or negative) creates a 'magnetic' with one pole being north and the other being south which can be effected by an external magnetic field. In NMR an external magnetic field is used to align the poles of the spinning nuclei in one direction of the isotope material under test while applying electromagnetic radiation at a specific resonant frequency causing the nuclei to 'flip' continuously due to its unstable neutron to proton ratio. This hypothesis predicts that in the above example of an isotope, gravity waves from the above material would be disrupted due to nuclei continuously changing direction causing a weight reduction in the isotope material under test. In the above example, if the material under test is a pure element with an even number of neutrons to proton ratio instead of an isotope then this hypothesis predicts a weight increase in the above material. This phenomenon of weight increase is termed gravity enhancement / hyper-gravity and occurs due to the following mechanism. The external magnetic field aligns the poles of the spinning nucleus in one direction and the applied electromagnetic radiation at

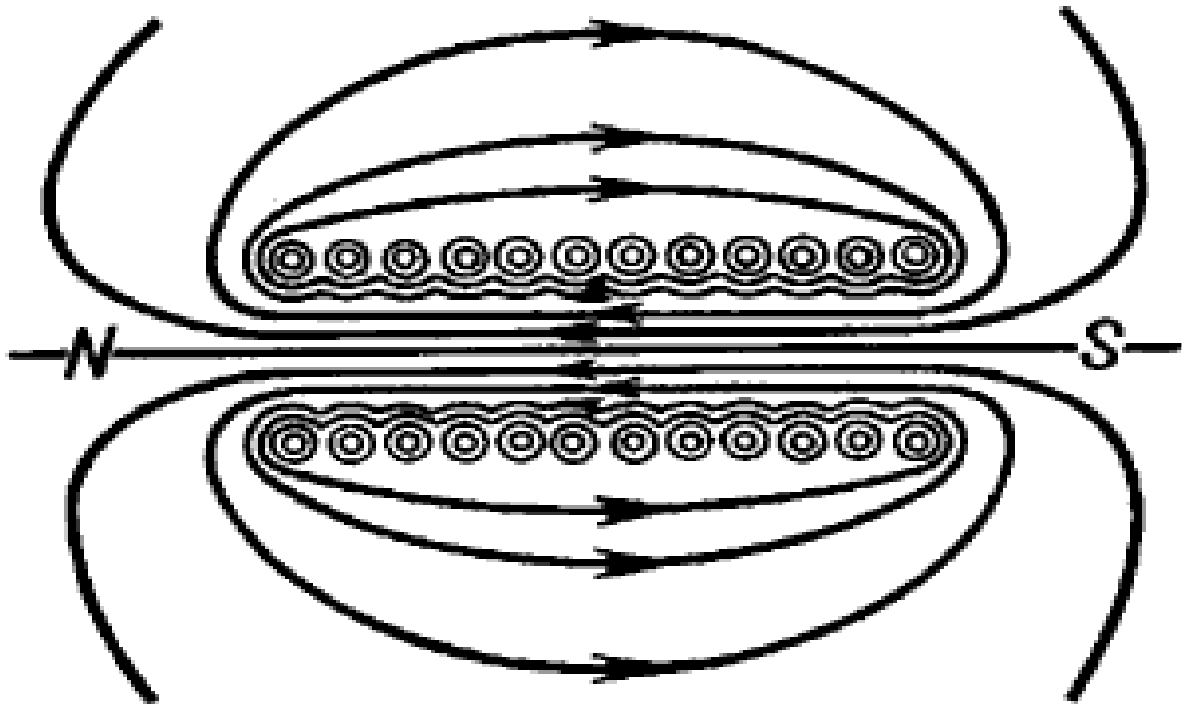
the resonant frequency does not cause the nuclei to 'flip' and the absorbed electromagnetic radiation strengthens the gravity waves created by the nuclei spinning in one direction.

Gyroscopic effect of an electron and the nucleus

[Professor Eric Laithwaite's lecture \(1974\) part 3](#) (uploaded by stawmy) reveals the possible mechanism of an electron spinning around the nucleus. A spinning gyroscope is suspended on a thread with its spinning rotor spinning in a vertical plane, the same plane as the thread that is suspending the gyroscope. The gyroscope moves out in the horizontal plane in a circular motion. The radius of this circle is proportion to the speed of rotation of the gyro rotor or the energy given to it. Let us imagine that instead of the gyroscope, it is an electron spinning in a vertical plane. Instead of the thread and gravity, it is the positively charged nucleus holding the negatively charged electron in a horizontal plane by its pulling effect as it spins around the nucleus.

To clarify the above observations and deductions, the spin of an electron on its axis is on a perpendicular plane to the plane it spins around the nucleus. The spin of the electron on its axis causes the electron to spin around the nucleus due to the powerful gyroscopic effect created and its direction of rotation around the nucleus is determined by the direction of rotation of the electron on its own axes. To visualise this let us imagine looking at the electron from the nucleus. If the electron is spinning anticlockwise in the vertical plane then looking at the atom from the top, the electron spins around the nucleus in a clockwise direction on the horizontal plane. This is consistent with Maxwell's right hand rule.

As the electron spins around the nucleus, the alpha-negatrons are pushed into mini whirlpools on the horizontal plane and as the electron spins on its own axis in the vertical plane the alpha-negatrons are pushed into mini whirlpools in the vertical plane. The magnetic field vector appears to be perpendicular to the electric field vector as taught in conventional physics; however is not the full story as there is a magnetic field vector on the same plane as the electric field as well as a magnetic field vector perpendicular to the electric field vector. Both the magnetic field vectors are needed to complete the magnetic flux flow shown in the diagram below.



In Diamagnetic materials not only are the two opposing paired electrons are moving in opposite directions on the horizontal plane they are also spinning in opposite directions on their axes on the vertical plane.

The plane of rotation of the nucleus is that of the electron spinning around the nucleus and not that of the electron spinning on its axis. The direction of rotation of the electrons around the nucleus can be the same or in opposite direction to that of the nucleus.

The spin of the electrons and the spin of the nuclei make very powerful gyroscopes because by comparing mass / size ratio it can be seen that they are in essence 'pure masses'! If the gyroscopic effect of the nucleus did not stabilise the nucleus in one plane then the effect of its positive charge on the electrons could be catastrophic in terms of the atoms stability with regards to proton / neutron positioning.

Gravity Entanglement / Concentration / Disruption

Some remarkable balancing feats can be achieved using rocks that seem to defy the laws of gravity as demonstrated by [Gravity Glue](#) 2014 (short version), uploaded by Michael Grab. The technique seems to rely on tilting the rocks / positioning them in order to 'concentrate' the gravity while maintaining its centre to obtain the optimum balance. Imagine an odd pointed shaped rock to be container full of holes filled with water. This container is now tilted to produce the most concentrated flow of water in a vertical direction. Something similar seems to be happening with gravity waves from the rock. Gravity waves are produced by the earth and the small rock in both cases going in towards the source. Both these waves interact and the much stronger waves from the earth alter the

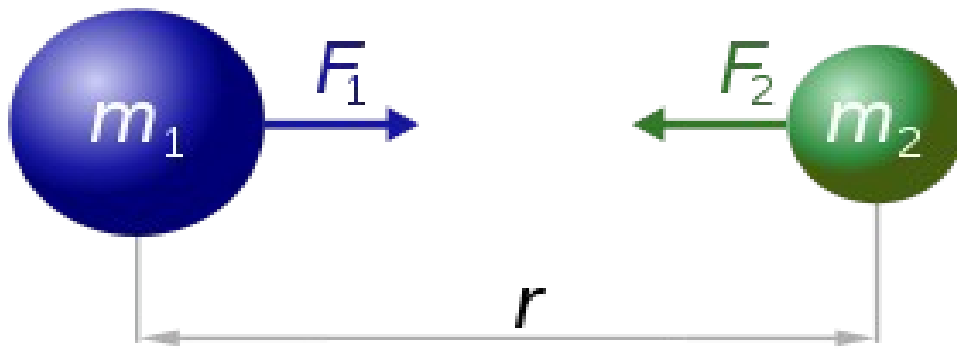
waves going into the rock to produce a more concentrated wave channelled through the rock and is termed the centre of gravity. The phenomenon is amplified in a spinning top through the gyroscopic effect. Due to the spinning object there is gravity wave entanglement producing a vortex of gravity waves. The concentrated force of gravity waves resides at the lower tip of the V shaped vortex stabilizing the spinning top in any position. Viktor Grebennikov work on insects demonstrates in this video, [Anti-Gravity & Levitation](#), uploaded by FranzVoltmayer that shape can alter gravity.

In the above section on “Gyroscopic effect of electrons and the nucleus” in a series of lectures Professor Eric Laithwaite demonstrates some remarkable properties of gyroscopes. In a YouTube video entitled “[Gyroscopic Propulsion with Eric Laithwaite](#)” uploaded by TheRealVerbz demonstrates possible gravity reduction using a gyroscope. Eric Laithwaite tries to pick up with one hand a handle which has a gyroscopic wheel attached at the other end spinning perpendicularly to the handle weighing some 50 pounds in weight. When the wheel is not spinning he is barely able to lift it up to the height of a few inches but when it is spinning he can effortlessly lift it up to any height and wave it in any direction like a toy. Clearly there is a ‘real’ weight reduction for the person holding the wheel and some unexplained phenomenon is at play.

In the still wheel, gravity waves going in towards the Earth interact with gravity waves going in towards the wheel by ‘locking’ and pulling on each other. In the spinning wheel this process is disrupted as the wheel spins, its gravity waves keep changing its position of linkage and this disrupts the ‘locking’ of gravity waves from the earth to the gravity waves from the wheel. The greater the spin of the wheel the greater disruption of the ‘interlocking’ of gravity waves hence the greater the weight ‘reduction’ of the wheel. Simultaneously another phenomenon is at play and that is a small element of time dilation caused by the spinning wheel which adds to the weight ‘reduction’ of the wheel.

Since the phenomenon of time dilation occurs irrespective of the direction of travel, this hypothesis predicts that time dilation also occurs if the object was spinning on its own axis such as a gyroscopic spinning top or anything spinning. This phenomenon doesn’t only occur at speeds approaching the speed of light but it’s a continuous process as the speed is increased. It may be exponential or linear in nature, which is yet to be established. In the case of a spinning top, not only gravity entanglement and concentration occurs as discussed in the above topic but a small element of time dilation is also present. This is why a rapidly spinning gyroscope appears to be slowed down even appears stationary at times.

Below is a visual representation of Newton's law of universal gravitation and is taken from the Wikipedia article entitled “[Gravitational constant](#)”.



$$F_1 = F_2 = G \frac{m_1 \times m_2}{r^2}$$

The gravitational constant G is the key quantity and is approximately $6.674 \times 10^{-11} \text{ N} \cdot \text{m}^2 / \text{kg}^2$. It is an empirical physical constant involved in the calculation(s) of gravitational force between two bodies. The attractive force (F) between two bodies is directly proportional to the product of their masses (m_1 and m_2), and inversely proportional to the square of the distance, r , (inverse-square law) between them.

The dimensions of the gravitational constant are: length cubed, divided by mass, and by time squared (in SI units, meters cubed per kilogram per second squared). The fundamental significance in terms of Planck units are that the gravitational constant is dimensionally and numerically equal to the cube of the Planck length divided by the product of the Planck mass and the square of Planck time.

In order to assist comprehension and understand its implications, let us look at the above formula for the gravitational constant in cgs units as an approximation.

$$G = 6.674 \times 10^{-8} \text{ cm}^3 \text{ g}^{-1} \text{ s}^{-2}$$

It can be clearly seen that minute increases in time due to time dilation will substantially reduce the gravitational constant G and when substituted back into the below equation will proportionally reduce the attractive force (F) between two bodies.

$$F = G \frac{m_1 m_2}{r^2}$$

The Biefeld-Brown Effect and its possible mechanism

The article entitled "[The Biefeld-Brown Effect](#)" uploaded by montalk.net gives the accepted description and explanation for the "Biefeld-Brown Effect".

According to this article "Brown's first experiments consisted of two lead spheres connected by a nonconductive glass rod, like a dumbbell. One sphere was charged positive, the other negative, with a total of 120 kilovolts between them. This formed a large electric dipole. When suspended, the system moved toward the positive pole, arcing upwards and staying there against the force of gravity tugging downward." It goes to state that "This showed that electric dipoles generate self-acceleration toward the positive pole. This experiment was repeated in oil, in a grounded tank, proving that ion wind was not responsible." The article points out that "Positive and negative charges, in addition to creating an electric field, also generate slight gravitational fields." The article concludes that "The Biefeld-Brown effect demonstrates a link between electricity and gravity. Given the explanation above, it should be clear why electric dipoles self-accelerate toward the positive pole; the positive pole converges space, the negative poles diverges space, and being that between poles these distortions cancel while outside these poles they point in one direction, the dipole as a whole should accelerate in one direction." The Biefeld-Brown effect is also termed "Electrogravitation".

Brown's later adaptations including a device termed a "Cellular Gravitator" which produced significant acceleration which he patented in 1927 ([British patent #300,111 - issued in 1927](#) uploaded by Rexresearch.com). Brown's later experiments included saucer-shaped disks with positive and negative electrodes on opposite sides that created an open-air high voltage capacitor combining Electrogravitation with ion wind for better propulsion.

In light of the revelations made in this hypothesis, the above explanation of the Biefeld-Brown effect is rendered incomplete and perhaps Electrogravitation is the wrong term to describe it. It should be born in mind that the force of gravity is due to waves not any other phenomenon. Both gravity waves and electromagnetic waves have an electric and magnetic vector component both propagating in the same direction but perpendicular to each other. The propagation of these waves occurs through the alpha-negatron matrix utilizing compression / rarefaction and through the spinning action of the negatively charged alpha-negatron particles.

While it is true as in the above explanation that "the positive pole converges space, the negative poles diverges space" due to the effect of the positive and negative charges on the spinning negatively charged alpha-negatrons, what mainly occurs is that the gravity waves already present are aligned in the direction of positive => negative charge. The electric field created by the positive and negative charges affects the electric vector component of the gravity wave by aligning and propagating the gravity waves in the direction of the negative charge. Newton's third law states "that every action has an equal and opposite reaction" and hence the propagation of the gravity wave in the direction of the negative charge causes the force in the direction of the positive

charge. Although the direction of the gravity wave is altered the perpendicular orientation of the electric and magnetic field components of the wave remain unchanged. For the sake of clarification, the Biefeld-Brown effect does not "generate slight gravitational fields" as stated in the above standard explanation but aligns the already existing gravity waves from the earth and objects. Just as an external electric field can alter the electric field vector component of electromagnetic waves or gravity waves, an external magnetic field such as created in spinning magnets can alter the magnetic field component of electromagnetic waves or gravity waves. The Biefeld-Brown effect would be better termed "Gravity Alignment" instead of "Electrogravitation".

The Podkletnov Effect

Dr Mike McCulloch in an article in physicsfromtheedge.blogspot (27th May 2013) explains the [Podkletnov Effect](#). His opening statement "One of the most controversial subjects to talk about in physics is the 'apparent gravity shielding' experiment done by Podkletnov". This statement after so many years of the initial claim and subsequent experimentation by Podkletnov says volumes. He goes on to add that "the published accounts of the attempts made so far say that they were not able to reproduce the experimental conditions", so no one has been able to reproduce his results even the likes of NASA and Boeing with all their funding!

The following description of the experiment is taken from the above paper by Dr Mike McCulloch. The experiment was done by Podkletnov and his team in Finland (see Podkletnov, 1992, 1997). They had a half-superconducting disc with a radius of 13.5 cm. They cooled it down to 70 Kelvin (-203oC) in a cryostat, so that the upper part only was superconducting and then levitated it using a magnetic field. They then applied an AC magnetic field of high frequency (MHz) which accelerated the disc. A team member was smoking when he shouldn't have been and they noticed that the smoke was rising over the cryostat. After investigation, they noticed that when the disc was accelerating due to the AC field, but not spinning, objects above the disc lost 0.05%-0.06% of their weight. When they spun the disc at 5000 rpm they noticed a larger weight loss of 0.6-2%. The greatest weight loss occurred when they slowed the disc to 3000-3300 rpm and it visibly vibrated. The effect was independent of the test mass's composition and was not due to moving air since it persisted when the test mass was encased in glass. It was not magnetic because it remained when a metal screen was placed between the disc and the masses.

Podkletnov in an article published in *New Scientist*, 12 January 2002, claimed to have made a device that produces a pulse that has the same properties as a gravitational field. This impulse gravity generator can apparently produce a pulse that can pass through a steel plate and knock over a book placed on a table one-kilometre away. This effect can be amplified by discharging a high-voltage source (from several kilo Volts to several mega Volts) across the ceramic. These waves apparently travel faster than the speed of light and Podkletnov has 'measured' the speed of the impulses as being sixty four times the speed of light! This figure

is clearly not possible as even Gamma-rays travel only at the speed of light and they are produced in nuclear reactions such as in stars involving the collision of high energy particles such as protons or neutrons in very extreme conditions.

A article entitled "[Experimental detection of the Gravitomagnetic London Moment](#)" by Martin Tajmar et al, describes in detail the extensive experimentation in a joint research effort sponsored by Space Propulsion (Austria) and European Space Agency (France) concluding that the results achieved were very different to claims made by Podkletnov. The results achieved were less than 0.0005% as compared up to claimed 2% weight change for samples above a rotating superconductor.

This hypothesis's response to the above weight reduction by various parties is as follows. Rotating objects produce gravity entanglement hence gravity disruption. A rotating superconductor in addition will also produce greater gravity disruption due to super-diamagnetism. When a high-voltage source is discharged across the rotating ceramic superconductor then even greater gravity disruption (dependant on the direction of the discharge) occurs due to gravity alignment as a result of the Biefeld-Brown effect. The channelling of gravity waves through gravity alignment would also explain Podkletnov's impulse gravity generator.

Space-time Warping

Let us now postulate on the possible mechanism of why all planets orbit the Sun on the same plane. The centrifugal force of the planets spinning around the Sun has a pushing effect which is balanced by the pulling effect of gravity from the Sun keeping the planets in well-defined orbits. The effect of gravity from a heavenly body would be from all directions, so why do the planets align themselves to the equator of the Sun on the same plane? The Sun and some planets have a magnetic core, so it cannot be the magnetic fields from the Sun and the planets keeping them all in the same plane. Even if all planets possessed a magnetic core then when every so often the Sun 'flips' its magnetic poles the planets should also 'flip' to align with the new poles of the Sun, but that does not happen.

General Relativity provides us with the most popular answer and a typical demonstration of space-time warping is shown in a video entitled "[Gravity Visualised](#)" uploaded by Apbiolghs on 10th March 2012. This hypothesis endorses the concept of space-time but the above explanation seems a bit simplistic considering the effect of gravity from the Sun would be from all directions and not just on one plane. It seems feasible that the direction of light could be bent through gravity bending space-time but it does not seem feasible to support the mass of heavenly bodies such as the planets around the equator of the Sun.

The angular momentum of the spinning polar axes of the Sun and the angular momentum of the spinning planets not only has a gyroscopic stabilizing effect on the planets but it also creates gravity entanglement / concentration at the equator of the Sun causing the fabric of space-time in-between the Sun and the

planets to become elastic in nature and bends as shown in the above video. This process is further aided by the Sun's spinning magnetic polar axes as a spinning magnet causes more gravity entanglement / concentration than a non-magnetic object.

Evidence in support for General Relativity includes how the bending of space-time correctly accounted for the anomalous precession of the perihelion of Mercury. A book entitled *Relativity Re-examined* was published by Academic Press in 1970. Leon Brillouin, its author discusses the various aspects of relativity and on the subject of it 'correctly accounting' for the anomalous precession of the perihelion of Mercury he concludes on page 55: "There is no experimental check to support the very heavy mathematical structure of Einstein. All we find is another heavy structure of purely mathematical extensions, complements, or modifications without any more experimental evidence." And he goes on to say "To put it candidly it is science fiction about cosmology - very interesting but hypothetical."

Let us now examine an alternative explanation for the above by comparing the Earth's Moon with Mercury. Mercury is only a little larger than the Earth's Moon but is considerably denser than the Moon because it is believed to be composed mostly of iron and rock. Both possess 'elliptical' orbits and both the planet's rotation on their own axes is much slower than its rotation around the parent planet compared to other planets in our solar system. The Moon spins just once for every revolution around the Earth whereas Mercury rotates three times about its own axis for every two revolutions about the Sun. This means that Mercury has a slower spin on its own axis compared to that of the Moon but it has a much greater mass to size ratio (density) than the Moon.

The slow spin of the Moon compared to its rotation around the Earth gives it an elliptical orbit due to its mass inertia of acceleration / deceleration coupled with angular momentum due to its spin on its own axis. The above also applies to Mercury but because of its greater density and slower rotation on its own axis results in a perihelion orbit around the Sun.

While we are on the topic of planetary spins, let us ponder on why Venus has an opposite spin on its axis as compared to the rest of the planets in the solar system. Venus and Mercury have slower spins on their own axes as a result of being closer to the Sun. This closeness results in an exponentially greater gravitational effect from the Sun for these planets. Subsequently a greater gravity entanglement / concentration effect is produced due to the spinning polar axes of the Sun which creates a drag effect on both the above spinning planets. The Earth's Moon also spins slower for the same reason due to its closeness to the Earth.

Venus initially spun in the same direction as the other planets and had a very strong magnetic molten core also spinning in the same direction, thus creating very strong magnetic poles. At some point the Sun 'flipped' its magnetic poles which destabilised Venus's spin and caused it to flip its axis 180%. This resulted in Venus spinning in the opposite direction but the core was still spinning in the

same direction as before. Since the 'bulk' of Venus was spinning in the opposite direction to its molten core, this created a drag effect slowing the rotation of the core until it stopped.

This hypothesis predicts that if two spheres are spun like gyroscopes vertically in close proximity in the same plane, due to gravity entanglement / concentration a field force would be created elastic in nature between the two rotating spheres. If this experiment could be carried out in vacuum to rule out the effect of air and shown to support a very light object, it would prove that a similar phenomenon is occurring with regards to the planets rotating at the equator around the Sun.

The genesis of the atom

Now let us postulate at the possible mechanism of formation of the atom. The above topic "Gravitism and the stability of the nucleus" explains the mechanism of how the neutrons fuse with protons to form the basic nucleus. Why and how such large variations of elements are created by the combination of neutrons fuse with protons is still unexplained. All the elements were created shortly after the 'big bang' and they are relatively stable unless they undergoing 'radio-active decay' through nuclear fission or undergoing nuclear fusion through extreme heat and pressure.

Once the nucleus has been created with its various combinations of protons and neutrons, the pulling force of the spinning nucleus attracts a passing negatively charged electron towards it. The electron aligns itself on the same plane as the spin of the nucleus. Since the electron is also spinning on its own axis (exerting a pushing effect on the alpha-negatrons), it rotates to the 'lowest energy' point stabilising at the position where its spin on its own axis is perpendicular to its spin around the nucleus. This electron is now spinning around like a mini gyroscope around the spinning nucleus as described in the above topic "Gyroscopic effect of electrons and the nucleus" at the most innermost orbit as dictated by the proton / neutron combination of the nucleus. The numbers of orbitals available are dictated by the number of protons in the nucleus and they are filled from the innermost to the outermost with available electrons by the same way as described above. The mechanism of this innermost and other orbitals are described in the below topic "Mechanism of electron orbitals"

Mechanism of electron orbitals

The Danish scientist Niels Bohr in 1913 suggested that electrons can only orbit at specified set distances and experimental evidence has proven this to be true. This can be explained through General Connectivity due to the electrostatic pulling force of the positively charged proton on the negatively charged electrons and the very strong magnetic forces occurring at the sub-atomic level keeping the electrons of the atom in well-defined orbits. The size of the positive charge of a nucleus is dependent on the number of protons in the nucleus. The size of the nucleus is dependent on the number of protons and neutrons in the nucleus. The spin of the nucleus apart from creating gravity waves in the alpha-negatron

matrix also pulls the alpha-negatrons into a spiral motion due to its positive charge by the mechanism of gravitism thereby compressing and aligning the alpha-negatrons around the nucleus. The proton / neutron positioning in the spinning nucleus creates the necessary 'peaks' and 'troughs' in the surrounding alpha-negatron matrix which lays the foundation for the various available orbitals for the outer spinning electrons on their vertical axes. The above proton / neutron positioning in the spinning nucleus is also responsible for the various types of electron orbital's such as S and P type in various directions.

The movement of the electrons in the first orbit pushes the alpha-negatrons into mini whirlpools compressing and aligning the alpha-negatrons around the nucleus due to their negative charge. Both the fields of alignment from the electron and the nucleus interact and there is a head on collision of both fields of alignment resulting in a magnetic repulsion force between the two fields. This results in the electrons in the first orbital having a fixed well-defined orbit. The distance of the first orbital is determined by the size of the nucleus, its positive charge and the number of electrons in the first orbital. Subsequent well-defined orbits are also created due to the fields of alignment created by electrons from each orbit interacting with fields of alignment created by electrons from the neighbouring orbits. The distance of the subsequent well-defined orbitals are determined by the number of electrons in each orbit which is responsible for the strength of the field of alignment around that orbit which interact with neighbouring field of alignment created by the accumulation of electrons in the neighbouring orbit.

The above is a simplified explanation not taking into account the shape and direction of the electron. The explanation of how "S" and "P" orbitals are formed is given in the above section of "Composition of a gravity wave". A particular orbit is classified as the number of the orbital and the type. The second "S" orbital would be classified as 2S and the third "P" orbital would be classified as 3Px, 3Py or 3Pz according to the direction of the named electron.

Radiation Shielding

The Wikipedia article on [Lead Shielding](#) explains the use of lead as a form of radiation protection and why it is so effective in shielding people or objects from radiation such as gamma rays and x-rays. Lead has a high atomic mass therefore requiring more electrons to maintain a neutral charge. The relatively large size of its nucleus in conjunction with the small size of its bond lengths gives it greater packing density making it well suited to scatter x-rays and gamma-rays due to the interaction of the radiation with the many electrons and the nucleus in its path.

The all important question is that if x-rays and gamma-rays are electromagnetic waves like gravity then why does lead not shield against gravity waves? Part of the answer lies in the penetrative nature of x-rays and gamma-rays due to its very short wavelength. Electromagnetic waves at very short wavelength behave more like particles than waves by creating focussed waves with virtually no

scattering. Electromagnetic waves with longer wavelengths are less focussed therefore more scattering occurs and their behaviour retains its wave nature. The other part of the answer lies in the nature of gravity waves compared to 'normal' electromagnetic waves in that gravity waves come IN towards the source whereas 'normal' electromagnetic waves go OUT from the source. Gravity waves propagate for intent and purpose unperturbed through space due to their weak interaction with matter and its mechanism is explained under the section "Composition of a gravity wave". The outcome of that is that there is no other interaction other than the interaction of the gravity waves from the lead object (just as any other object) and gravity waves from earth or any other celestial body creating a PULLING effect on each other as explained under the above section on "Gravity".

Relationship of mass and energy

J. J. Thomson discovered the electron in 1897 and then, in 1901, Kaufmann discovered that it's mass increased with speed by measuring how the charge to mass ratio of the electron varied with increase of speed. The mass-variation of an electron with speed is consistent with the formula $E = M C^2$.

The famous Einstein's equation $E = M C^2$ was first published by Henri Poincare a French genius in 1901 four years before Einstein even published his paper on Relativity. Energy (E) is equal to the mass (M) times the velocity of light (C) squared. Nuclear fission and fusion demonstrate that colossal amounts of energy can be released from a very small amount of mass and that the energy which can be obtained from matter is directly proportional to its mass. No one has actually managed to convert the full mass into pure energy so apart from using the above formula, it's unlikely that we can actually calculate accurately how much energy will be produced from matter if it was converted into pure energy. The above equation applies when all of the matter is annihilated and converted into pure energy such as when matter collides with anti-matter.

If the above equation is true then is it a massive coincidence that the speed of light squared just happens to be the constant that completes the relationship between energy and mass? If the speed of light squared is the correct constant connecting energy and mass then why is the speed of light so significant? Is this because the transfer of energy occurs through the alpha-negatron matrix (fabric of space-time) and the rate of transfer of energy happens at the speed of light? This poses another question that if matter was converted into pure energy in a black hole, would this significantly release more energy than on earth?

Time

Let us first consider the known facts about time and speculate on its possible nature. It is a fact that time as we know it is the measure of sequential change. A sequence cannot be reversed except through a backward sequential reconstruction. If time reversal contravenes the laws of nature in any real

complex situation, then it can be deduced that time can only be speeded up, slowed down even stopped but not reversed. Current thinking suggests that time reversal may not contravene the laws of nature.

Through experimentation, it is a proven fact that light has a finite speed. Due to the nature of the alpha-negatron matrix, the medium for electromagnetic and gravity waves, it is the fastest a wave can travel so it is regarded as a constant. Albert Einstein thought "What if you attached a torch to the front of a moving rocket? The light coming from this torch should be travelling faster than the speed of light?" He deduced that light could not physically travel faster since its speed is absolute and it being a constant, time had to be variable. He predicted that "the motion of an object would make time slow down" and relativity was born. Experiments have tested Einstein's predictions and have proven them to be true. The above confirms that although time moves forward in terms of sequential change, it is everywhere and does not have a direction such as up, down, left or right. In other words as the physical dimension has three sub-dimensions (height, width and depth) so time also flows from all these sub-dimensions. Einstein's General Relativity links time with the fabric of matter calling it space-time. Time passes differently for different observers relatively to their motion. The classic example is that of two identical twins where one twin stays on earth and the other travels on a long journey in space, travelling at speeds approaching that of light and returns home. On return to earth the travelling twin looks remarkably younger than the twin that stayed on earth. The faster the speed of the rocket the slower the time observed by the travelling twin and on a long journey the time difference observed by the two twins could be quite significant.

Einstein's General Relativity predicts that gravity bends space-time and time is executed faster in space than on earth. This is a separate phenomenon to the above example of the twins which is an example of time dilation. Although the speed of travel in the alpha-negatron matrix or the speed of light is a relative 'constant', but as stated above it is dependent on the distance between each alpha-negatron in the matrix. Since the spinning positively charged nucleus has a pulling effect on the negatively charged alpha-negatrons in the matrix, this would bring the alpha-negatrons closer together than they would normally be without this pulling force which manifests itself as gravity at planetary level. General Connectivity predicts that accurate measurements for the speed of light in vacuum on earth and that in space would show that light travels very slightly faster on earth in vacuum than in space due to the gravitational force.

The dimension of time is linked to the alpha-negatron matrix proportionally in the same way as the speed of light is linked to the alpha-negatron matrix. On earth due to air molecules the speed of light is slowed down very slightly and this happens to time as well compared with outer space but this is due to the effect of gravity on time having a drag effect.

Time is a complex phenomenon and its true nature is a mystery but the following analogy may help to put a visual perspective to it. As stated above, time has no

one direction and is executed from all directions of matter due to its three dimensional nature. Since space-time is linked through the alpha-negatron matrix, the source of time has to be from within the alpha-negatron particles producing a 'sinusoidal wave' coming OUT in all directions of the alpha-negatrons. The cause of this is the inherent vibrational energy present in the alpha-negatron particles. Since gravity and time are 'waves' travelling in opposite directions, gravity has the effect of dragging time. Imagine the effect of gravity pulling the 'sinusoidal time wave', making it a longer wavelength thus decreasing its 'frequency'. When a body comes out of a gravity field, the 'frequency' of time increases and this is analogous to increasing the clock speed in the CPU on a computer to execute more instructions.

As postulated above, time like light is a 'wave' coming out from the source, so similarly the travelling twin is travelling 'ahead' of the execution of time irrespective of the direction of travel. In relation to the stationary twin on earth the time for the travelling twin is slowed down proportional to the speed of travel of the rocket. The speeding rocket in relation to the stationary earth is 'stretching' the 'sinusoidal time wave', making it a longer wavelength thus decreasing its rate or frequency thus slowing down time. In its extreme when the object reaches the speed of light, the time wave becomes flat and time stops. This implies that anything travelling at the speed of light can travel through space without the passage of time. This phenomenon also results in length contraction of the rocket since the physical dimensions are linked to time. Time is actually slowed down exponentially as the speed of light is approached.

There is evidence to suggest that the universe is expanding so it seems conceivable that the distance between each alpha-negatron is also being increased hence slowing the speed at which electromagnetic radiation travels. The alpha-negatron matrix make up 'space' and electromagnetic radiation and time travels through this space hence the phrase "fabric of space-time". As explained above under the section "Particle wave duality", alpha-negatrons are particles but can behave like waves and since time is also interwoven with these particles, time also exhibits the property of a particle and a wave. Each cycle of sine wave of time can also be thought of as quanta or packet as can consciousness which also exhibits the property of a particle and a wave. This is demonstrated by De Broglie's equation for consciousness below under the section of "Consciousness".

Tired light

The concept of 'tired light' was first proposed by Fritz Zwicky in 1929 due to the observation made by Edwin Hubble that distant galaxies have redshifts proportional to their distance. Although this hypothesis does not recognise the existence of a photon but the concept of 'tired light' is consistent with this hypothesis. As stated above in "Propagation of waves", electromagnetic waves can interact with physical matter they meet on the way and can be absorbed or their wavelengths altered according to the type of interaction involved. Deep space is full of loose subatomic particles such as protons, neutrons, neutrinos

and electrons so the propagation of electromagnetic radiation over large distances has to be effected by them. The observed redshift is due to a combination of 'tired light' and the Doppler Effect due to the expansion of the universe.

Superconductivity and the mechanism of cooper pairing

The structure of conductors which are generally metal can be thought as atoms spaced evenly three dimensionally in a particular lattice formation. When a conductor has an electric field applied to it, there are electrons around the nucleus forming the electron bonds but there are also loose or free electrons (due to shared valance electrons) moving in the direction of the current. At absolute zero (0 degrees Kelvin) the atoms forming this lattice structure have no vibration and stop moving. As the temperature is increased above absolute zero, there is greater vibrational movement proportional to the increase in temperature. This vibrational movement of the lattice structure results in electrical resistance due to the free electrons colliding with the electrons which form atomic bonds and with each other. The state of the alpha-negatron matrix in between the lattice structures can be visualised as a 'rough sea' with strong tidal forces. Although the free electrons are moving in the direction of the applied electric field but the individual electrons spins are not aligned and could be in any direction of spin.

Consider a free electron spinning on its own axis in a vertical spin direction. The spins of the surrounding alpha-negatrons are also being aligned in the same direction creating a magnetic field. The above free electron is in fact the second minutest magnet with north and south poles on its horizontal axis depending on its direction of spin on the vertical plane. The minutest magnet would be an alpha-negatron spinning on its own axis giving rise to the magnetic vector in the electromagnetic wave as stated above.

When an electric field is applied to a conductor and the temperature is lowered below a certain critical temperature for that material the phenomenon of superconductivity occurs. In conventional theories, two free electrons are moving in opposite directions and merge to form cooper pairs. This cannot be true as all free electrons in a conductor with an applied electric field are moving in the same direction of the electric field in spite of the collisions with other electrons. The sequence of events that occur in the formation of cooper pairs are as follow: As a consequence of the lower critical temperature, the state of the alpha-negatron matrix in between the lattice structures can be now be visualised as a 'calm sea'. The free individual electrons align so that if they are travelling horizontally in the direction of the applied electric field, their direction of spin on their own axes is vertically. Two nearby free electrons pair up forming cooper pairs when their vertical spins are in the same direction. If the spins of the above pair of electrons are not on the same vertical plane then one electron flips so that both have the same direction of vertical spin due to their magnetic effect. As two magnets with opposing poles unite, these two electrons unite forming a

cooper pair. The cooper pair continues to spin in the same direction of spin on their axis as before.

Without superconductivity, normal free electrons due to their mixed direction of spins on their axes causes the magnetic effect of the electrons to pull the lattice structure closer together. In superconductivity the cooper pairs due to the alignment of spins of the electrons on their own axes in a vertical plane (could be clockwise or anti-clockwise depending upon the individual cooper pair) to the direction of the electric field causes the magnetic effect of the cooper pair to push the lattice structure further apart resulting in the free movement of the electrons through the lattice without electrical resistance. This is an example of quantum entanglement due to the electrons forming the cooper pair spinning in the same direction resulting in the superconductor possessing unique magnetic properties. The magnetic field from within the superconductor is in effect 'driven out' and the perpendicular magnetic field outside of the conductor is much stronger than a non-superconductor. This phenomenon happens at the initial stages superconductivity is achieved and is termed the Meissner Effect which is separate from the phenomenon of super-diamagnetism which prevails afterwards. The phenomenon of diamagnetism is discussed above under the topic of "Magnetism". Super-diamagnetism is an amplified version of diamagnetism and is achieved through the following mechanism. As stated above the two electrons forming the cooper pair is travelling horizontally in the direction of the applied electric field but its direction of rotation on its own axis could be clockwise or anti-clockwise vertically in relation to the applied electric current. On average approximately half of the cooper pair of free electrons in the above scenario would spin clockwise and the other half would spin anti-clockwise vertically on their own axes. This would result in diamagnetism as in the above example of an atom with only paired electrons spinning in opposite directions around the nucleus and super-diamagnetism results from the phenomenon of superconductivity due to having zero electrical resistance.

The key to producing superconductivity at normal temperatures is in having a large, strong and stable lattice structure with strong covalent bonds. An article entitled "[Giant covalent structures](#)" by Chemguide compares the properties of substances like diamond, graphite and silicon dioxide (silicon(IV) oxide). The semiconductor properties of carbon seems to be the most promising with recent development in carbon nanofibers, graphene and other carbon related structures. An article by AZO Materials April 20th 2015 entitled "[New Method for Discovering Superconductors with High Superconducting Critical Temperature](#)" writes about the discovery of Jahn-Teller metal (a form of carbon having a large spheroidal molecule consisting of a hollow cage of sixty or more atoms) by Professor Kosmas Prassides of Tohoku University and his team. Among molecular superconductors, fullerenes are considered to have the highest known superconducting critical temperature (T_c).

Vacuum / Zero-point Energy

Times Higher Education in a feature article entitled [Vacuum Gleaning](#) 21 December 2001 stated that "Our failure to understand the energy of empty space is the most important roadblock today to further progress in both fundamental physics and cosmology". Steven Weinberg who is "considered by many to be the preeminent theoretical physicist alive in the world today" in the above article shares his views on zero-point energy. John Baez on June 10, 2011 attempts to answer the all-important question in an article entitled "[What's the Energy Density of the Vacuum?](#)" The answers to vacuum density of space can vary from infinite, enormous but finite or very close to zero depending on whether the calculations are based on General Relativity or quantum field theory. In the video [NassimHaramain: Sacred Geometry And Unified Fields \(Full Version\)](#), posted by Billy Spears 01 January 2014, Nassim Haramain explains his unified field theory. He explains that 'space' is not empty but infinitely dense and even gives calculations for the density / energy of the vacuum. General Connectivity literally fills the 'vacuum' in the above theory and vacuum / zero-point energy theories. This hypothesis unifies General Relativity and quantum field theory by putting an actual mechanism to the phenomenon of magnetism, gravitism, electromagnetic radiation, gravity, zero-point energy and space-time.

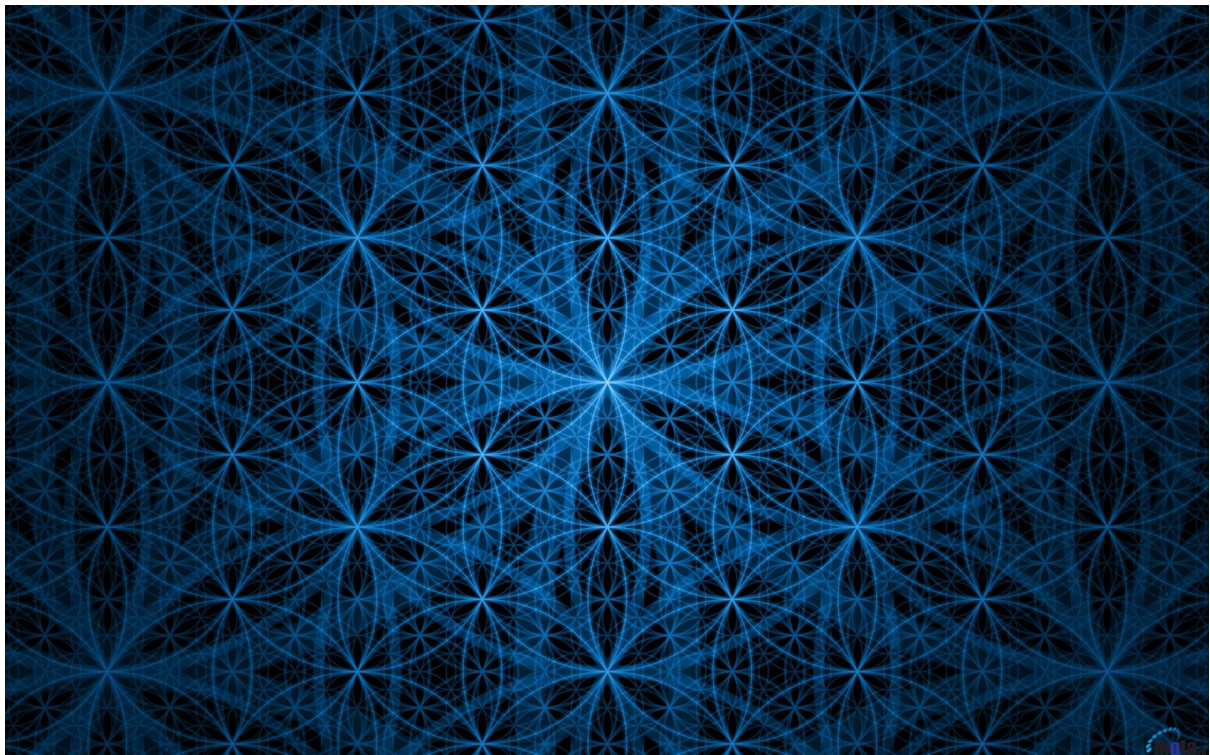
When two metal slabs are placed very close to each other such as within a millionth of a meter then they are pulled together due to the pulling effect of gravnetic fields from both the metal slabs. In 1948, Casimir, the Dutch physicist, predicted the above effect arising but attributed it to zero-point energy and is termed the Casimir effect. This hypothesis predicts the quantum fluctuations of alpha-negatrons not quantum fluctuations of empty space explaining the missing mass in the universe. The Casimir effect in this hypothesis is explained through the field force of gravitism and this phenomenon has only been demonstrated in metals. If the Casimir effect was due to the pressure of the vacuum then it should occur with any material and not just metals. As the metal plates are not 'sealed' at the edges then surely vacuum 'pressure' would be distributed evenly throughout and not cause the metals to pull together?

New data suggests that the expansion of the universe is actually speeding up so if this 'empty space' was filled was filled with 'ordinary matter' then surely this would slow down the expansion since gravity attracts? The mechanism of gravity and the nature of gravity waves are explained above, clarifying that matter such as the alpha-negatron particles do not themselves possess the property gravity. General Relativity is flawed in assuming that all matter possesses a gravitational force and Einstein's introduction of the cosmological constant is an example to trying to 'fit' the maths to the factual observable data.

The nature and mechanism of an electromagnetic waves and gravity waves are explained above in the appropriate section but the nature and mechanism of free standing alpha-negatrons has not been explained or clarified so far. The free standing alpha-negatrons without any external influence results in the formation of electromagnetic or gravity waves due to the alpha-negatrons spinning on their own axes in different directions. The implication of this is that any electromagnetic or gravity like waves created by the spinning alpha-negatrons

are cancelled out. An estimation of the size of an alpha-negatron (including spacing between each alpha-negatron) is given in the above section of "Estimation of the size of an alpha-negatron" and this figure comes to 1.1×10^{-16} metres. As stated before that the actual size of the alpha-negatron particle is likely to be much smaller than this figure and that the alpha-negatron particle can be visualised with its negative charge encircling it like a balloon. It can be imagined that the density of the alpha-negatrons with their balloon like charge is very high resulting in a large amount of pressure in the alpha-negatron atmosphere as these 'balloons' press on each other. Although the pressure is high but the actual mass content is not that high and the vast majority of 'space' in the alpha-negatron atmosphere is empty. The figure Nassim Hameiri gives for the vacuum density in his above theory is close to infinity and is flawed in that it is assumed that particles of Planck length are jammed packed in a confined space and are 'solid' in nature.

Given the above model of the three dimensional alpha-negatron matrix with a very small nucleus of the alpha-negatron surrounded by its negative charge under a huge amount of pressure, the image of this can be visualised in the shape of the 'Flower of life' as below.



The above image is taken from abzu2.wordpress.com entitled "The structure of space-time is a quantized infinite scalar Flower of Life lattice."

The concept of quantum fluctuations of empty space vacuum is based on paired virtual particles of matter and antimatter. These come together at some point in space and time, move apart and then come together to annihilate each other. Apart from giving an alternative explanation for the Casimir effect, vacuum

fluctuations of empty space do not offer any explanations of the numerous natural phenomenon discussed in this hypothesis especially on the formation and composition of electromagnetic or gravity waves.

There is undoubtedly energy in subatomic particles such as the spinning electron, the spinning nucleus or the spinning alpha-negatron but the idea of 'extracting' and 'using' that energy in any practical way is pure fantasy without the knowledge of how these particles renew their energy and by what mechanism this energy can be released. It can be likened to putting a coil around a magnet hoping to produce an electric current. The alpha-negatron atmosphere would however make an ideal medium for space propulsion as air with aeroplanes and water with submarines.

Consciousness

Yoga literally means 'union' in the context with God' and this can be achieved by the practice of yoga in an experience called "god consciousness". Through yogic meditation, different stages of trances are produced and the god consciousness experience is the last of two stages. Just before the commencement of the actual god consciousness experience, the thought process is heightened and pure concentration is achieved. Shortly after this a white light is 'seen' which gains in intensity. The first stage of god consciousness is Sabikalpa Samadhi in which pure consciousness prevails and one is totally absorbed in inner awareness. Then at some stage one becomes aware of one self and Nirbikalpa Samadhi is achieved. It can be likened to the experience of a ferrous material going into a magnetic field and retaining the magnetism for a while when it is withdrawn from the magnetic field.

In Sabikalpa Samadhi one is not able to think and time seems to stand still and you feel you have been in that state for hours and hours when in reality you have only been in that state for a short while. In Nirbikalpa Samadhi, one is able to think and is conscious of the surroundings but the mind seems to be detached from the body. The mind is in a state of bliss and the body is also immune to pain and if one was suffering with pain of any sort then it is no longer felt while in this state. In Nirbikalpa Samadhi something echoes inside "I am" and "I am not afraid" The above insight is taken from the author's personal account of the [god consciousness experience](#).

In Sabikalpa Samadhi, one is not able to think and pure consciousness prevails. This implies that consciousness is separate from thinking in that neural circuits are not needed as in the process of thought as it transcends the domain of normal thinking. Consciousness is a dimension like time and it is interwoven in the fabric of matter, the alpha-negatron matrix. Consciousness like time pervades everywhere and through everything but a medium like neural circuits is needed to experience it fully and a dull consciousness is still experienced without it in non-living entities. This is analogous to the use of a coil in a tuned circuit to decipher the radio signals which would still be there nonetheless. Varying levels

of consciousness prevails according to the sophistication of the neural circuits involved.

The following quotes and concepts are derived from [Athene's Theory of Everything](#) a video uploaded by AtheneWins (time 45:00 onwards). After relativity "Louis De Broglie discovered that all matter, and not just photons or electrons, has a quantized wave / particle-duality" thus De Broglie's Equations apply to all matter. Consciousness (C) is responsible for what we experience as the NOW (god consciousness / pure consciousness), a quantized or minimum unit of an interaction. The sum of all moment's C up till the current moment is what shapes our concept of life. This can be summed up in the below equation.

$$C \text{ (conscience)} = H \text{ (Planks constant)} \times F \text{ (frequency)}$$

To sum up again, consciousness is a separate dimension like time, interwoven in the fabric of matter, the alpha-negatron matrix and relativity can be applied to it.

ESP

We in the physical world communicate with the universal consciousness through the matrix of matter, the alpha-negatron matrix by thought or deed and the degree of 'pure consciousness' of the individual. Thought or deed is translated into emotions and the most pure emotion is love which has the most profound effect. The most effective transmitter of these emotions is the heart. Sincere wishes from the heart are heard by the universal consciousness and manifest themselves as reality due to the interactive nature space-time-consciousness. Communications happen through frequencies and some frequencies are more effective for certain applications and its significance can be verified by studying brain waves like alpha, beta and theta. The pineal gland is like an aerial which is involved in receiving and transmitting of raw signals and is involved in ESP or telepathy.

A raw thought is like a bolt of lightning stimulating a few selected neurons and that 'thought' like an 'emotion' is translated into a language according to one's knowledge, experience and upbringing including culture / language etc. Two individuals with similar knowledge, experience and upbringing including culture / language like twins or lovers are more likely to translate the 'raw' transmitted signal in the same way into words through language if they are in a similar state of consciousness / awareness. Just as different cultures / languages put different meaning to words / ideas, the 'raw' signal if received, can be translated in the same or totally different way to what the 'transmitter' perceived!

Another main reason why we do not experience ESP / telepathy often is because the privacy of our thought process is very crucial to our survival. When we feel that our thoughts have to be protected, specific neurotransmitters such as norepinephrine trigger a defence state involving specific neuron literally blocking our thoughts being transmitted. When we feel close to someone then these 'defence chemicals' decrease and due to the process of self-validation, dopamine neurotransmission activates the release of the neurotransmitter serotonin. When

we feel particularly close to someone then the body releases the hormone oxytocin and a close emotional bond is formed. In this close 'emotional bond' state ESP / telepathy is more likely as it does in lovers or twins because we are in a more receptive emotional state to share thoughts and emotions.

Other dimensions / Spirit world

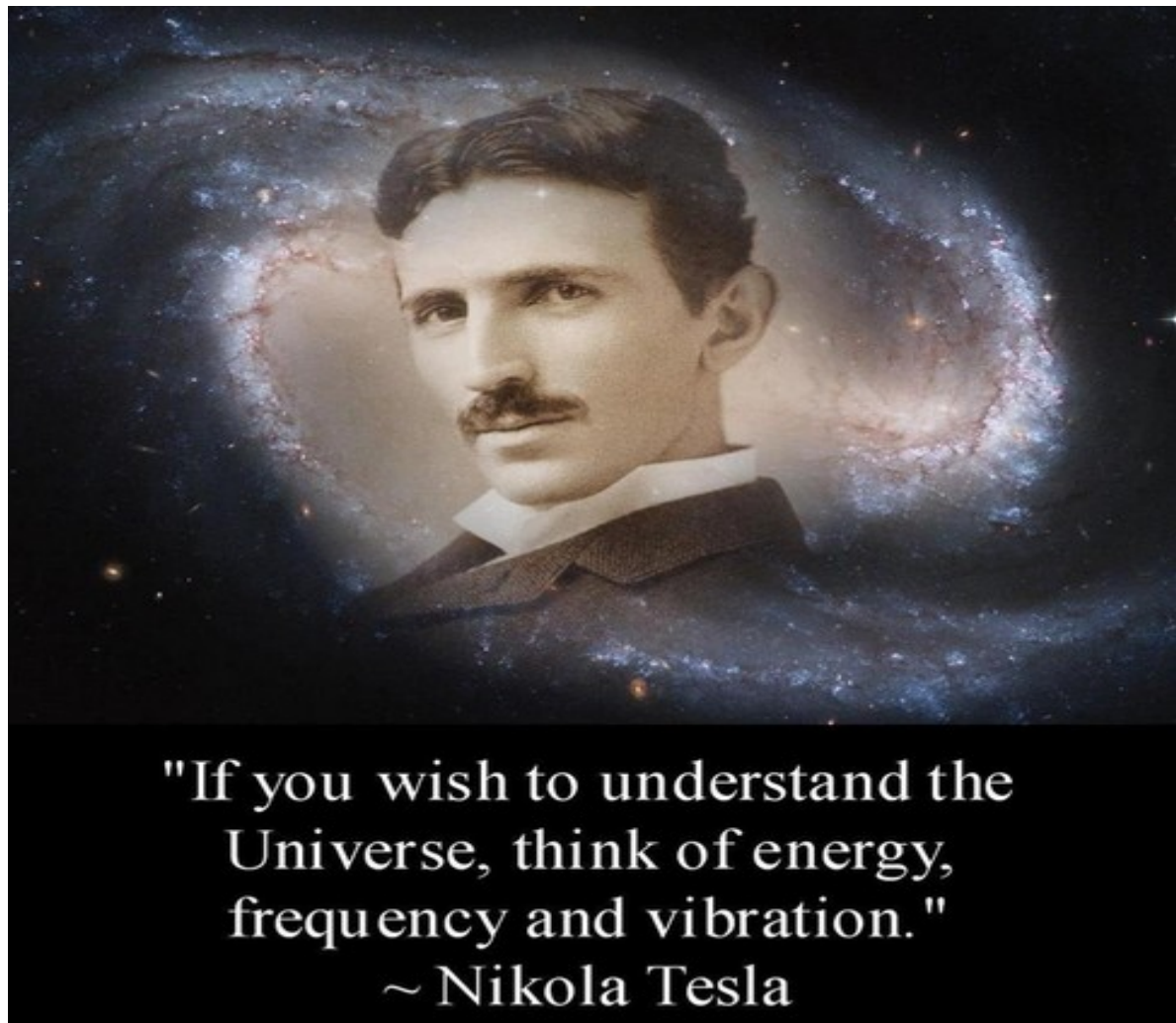
There is a positive particle counterpart to the alpha-negatron called the alpha-positron. There is a spiritual dimension with spiritual matter, the medium being the alpha-positron matrix just as there is a physical dimension with physical matter whose medium is the alpha-negatron matrix. The term spirit is used for the lack of a better term and it signifies non-physical matter which has weak to no interaction with physical matter. Both the alpha-positron matrix and the alpha-negatron matrix reside in separate dimensions so there is no direct interaction of the two. The source of the alpha-negatrons and the alpha-positrons are from black holes where universes begin and end. This provides us with continuous and endless supply of these fundamental particles created through total destruction of matter with anti-matter due to the extreme temperatures and pressures present in black holes. The Large Hadron Collider is a mere toy in comparison. The topic of "A case for the neutrino being the hypothetical alpha-negatron" puts forward the argument that the alpha-negatron could be the same particle as the neutrino. If that turns out to be the case then the anti-neutrino would be the alpha-positron. There is already strong scientific evidence that the source of neutrinos and anti-neutrinos are from black holes so it ties in well with this hypothesis.

The dimension of time is dominant in the alpha-negatron matrix whereas consciousness is dominant in the alpha-positron matrix. Since pure consciousness and the stillness of time are associated with the God Consciousness experience, the alpha-positron can be regarded as the 'god' particle.

Spiritual matter is also made up of atoms but since the medium for the spiritual dimension is the alpha-positron matrix made up of positively charged alpha-positrons then the composition of the atom differs accordingly. The nucleus of the atom in spiritual matter is negatively charged being packed with electrons and neutrons and the corresponding 'electrons' are positively charged made up protons. The physical plane is mirrored in the spiritual plane. The physical laws governing the spiritual plane are radically different to the ones governing our physical plane. When the two laws cross path due to quantum entanglement, the degree of 'binding' of the physical / spiritual plane is altered and an act of miracle is perceived.

There is also a dimension of universal energy, the psi-energy which sustains everything from energy required at particle level to life in the physical world to the sustenance of spiritual matter. The source of this is again from black holes. This serves as a catalyst for the production / destruction of matter and anti-

matter providing renewed energy in all subatomic particles including the alpha-negatrons in the physical world and alpha-positrons in the spiritual world.



The psi-energy can be thought of in terms of energy, frequency and vibration putting shape, direction and purpose to physical and spiritual matter as illustrated in the [Cymatics Video](#) uploaded by Jeff Leanse.

The physical and spiritual world or plane run parallel as parallel universe's but both share the dimension of time, consciousness and psi-energy. The dimension of time, consciousness and psi-energy shape the evolutionary process on both the physical and spiritual plane. There is a physical body superimposed on to a spiritual body. The degree of binding for a living organism is altered according to the quantised levels of time, consciousness and psi-energy and vice versa. The increase in the rate of time heightens the physical plane whereas an increase in pure consciousness heightens the spiritual plane and vice versa. This is why In Sabikalpa and Nirbikalpa Samadhi, the mind seems to be detached from the body. Another way to view this is the analogy of light falling on a physical object creating a shadow and psi-energy falling on a spiritual object creating an apparent physical object. Life is in essence a spiritual body with a physical body as 'clothing' and not the other way around.

As in the above analogy of consciousness, psi-energy pervades everywhere and through everything whether in the physical or spiritual plane. A medium such as cellular biological processes is needed to 'tap' this energy for the purpose of sustaining life in the physical plane. The psi-energy is used at the sub-atomic level in the physical plane to provide the necessary energy for sustenance of motion, spin, positive / negative charges and in the spiritual plane for sustenance of spiritual matter including spiritual life form.

When the physical body dies such as due to not getting enough oxygen via blood vessels then the 'circuit' is broken and the body is unable to tap the energy from the psi-energy, the universal source for the purpose of sustaining the physical body due to shutdown of cellular biological processes and the soul or the spiritual body is separated from the physical body. In the dying brain the neural circuits slow down and eventually stop working. The thinking process is affected first and then consciousness is slowly affected. In the early stages of the above thinking is suppressed and this results in consciousness being heightened until it becomes pure consciousness. This would explain many near death spiritual experiences. It seems very likely that we experience the god consciousness experience at death and even at birth due to similar logic.

The eastern metaphysical conception of the origin of god can be thought of as mist of pure consciousness gathering together in empty space, gradually getting more and more concentrated until it shines as a bright light. As it began to move, time began to take its course and it echoed "I am, I am not afraid". A poem by the author entitled [The Awakening](#) narrates his own god consciousness experience. The key revelation here is "in the stillness of time YOU will meet the 'I AM'", the state of Sabikalpa Samadhi. Let us now ponder on the implications of this. When a travelling aircraft reaches the speed of sound a sonic boom is heard so it is not unreasonable to assume that when a traveling spacecraft reaches the speed of light, a light explosion will be seen. According to General Relativity, when the travelling spacecraft reaches the speed of light, time will come to a standstill. This hypothesis predicts that since time and consciousness 'travel' in opposite directions that the crew of the space craft will experience god consciousness. The crew of the travelling space craft will on reaching the speed of light see a light explosion and experience Sabikalpa Samadhi as time comes to a standstill. Nirbikalpa Samadhi will be achieved after spacecraft slowdown below the speed of light and time will again start to take its course.

The three god-consciousness scenarios of the "origin of god", "personal" and the "rocket ship" have a common theme. There is intense concentration and the 'speed of light' is achieved, a light explosion is seen and time stands still, the state of Sabikalpa Samadhi is achieved. When time begins to take its course once again, one becomes aware of oneself and Nirbikalpa Samadhi is achieved. The eastern metaphysical conception of the origin of god can be equated as parable of the 'big bang' theory. There was not just one 'big bang' but it is a continuous process where universes are created and destroyed through the production and total annihilation of black holes.

All matter got sucked into a massive black hole until it became one singularity where there was no time or space only consciousness. This became very unstable resulting in an almighty 'big bang' thus creating space and time began to take its course from matter itself. It is through the dimension of consciousness that 'reality' is created by the universal mind.

Occam's razor

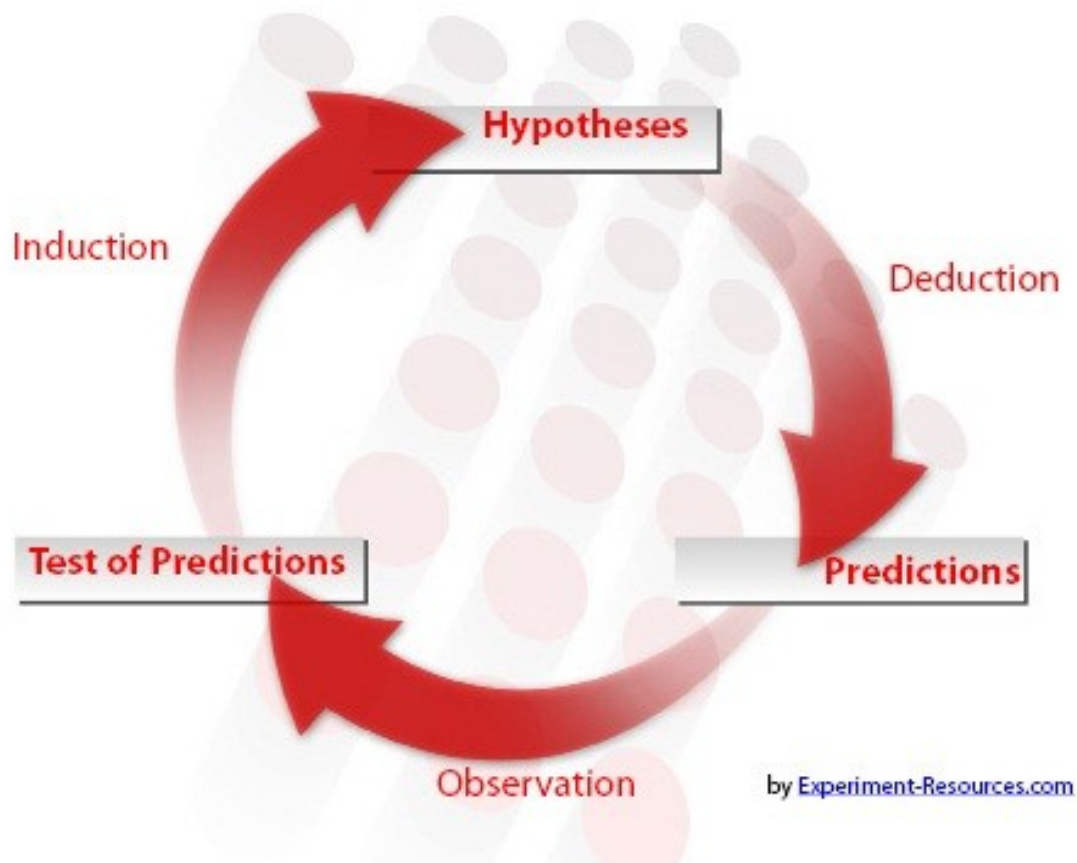
The Wikipedia article explains the principles of [Occam's razor](#). The word literally means the 'law of parsimony' and is a problem-solving principle devised by William of Ockham. He stated that the one with the fewest assumptions should be selected among competing hypotheses that predict equally well. This system although eloquent in thinking is flawed in that it is dependent on current knowledge of particle physics and the tools available to test a hypothesis. In the very early days of particle physics the concept of 'ether' was dismissed due to applying the above law. It is apparent that current thinking including this hypothesis supports the concept of a medium for the propagation of electromagnetic and gravity waves.

Since this hypothesis is fundamentally radical in concept so there is a deliberate attempt at lengthy coverage of well-accepted concepts of physics in order to explain various phenomenon in the context of the hypothesis. I believe the above will lead to major breakthroughs and revelations in various phenomenon covered in the hypothesis. There are many new concepts developed in this hypothesis such as gravitism and gravity entanglement. Gravitism has helped to put an alternative explanation to the Casimir effect. Gravity entanglement has put an alternative mechanism to why all planets orbit the Sun on the same plane. The above topic of Space-time Warping gives an alternative explanation for the anomalous precession of the perihelion of Mercury. I believe that if enough parameters were taken into account this could be proved through Newtonian physics. If Occam's razor were to be applied to the two above hypothesis then I believe that the explanation given in this hypothesis is more plausible.

Karl Popper and Falsifiability

The great scientific philosopher Karl Popper defines the inherent testability of any scientific hypothesis through a term called Falsifiability. The principle of falsifiability is that "if a theory / hypothesis is falsifiable, it is unscientific and if not, then it is scientific".

The cycle of a hypothesis is illustrated below by [Experimental-Resources.com](#)



This hypothesis has the induction leading to the hypothesis with the derived deductions listed in the section "Synopsis" and the predictions including some observations listed in the section "Verifications based on logical and philosophical arguments". Some observation and test of predictions still need to be carried out. I believe that the arguments and the proposed detailed mechanism put forward passes the test of falsifiability with regards to the bulk of the phenomenon discussed excluding the section on "Other dimensions / Spirit world" which cannot currently be proved or verified.

The tools of Occam's razor and Falsifiability although useful are still open to interpretation and dependent on current knowledge of particle physics including the tools available to test the various aspects of a hypothesis. I propose another useful tool I term as "Jigsaw Completeness" to be used in conjunction with Occam's razor and Falsifiability. The section of "Verifications based on logical and philosophical arguments" explains that "Each individual topic is like one piece of a gigantic jigsaw and how well it fits into the neighbouring pieces determines how well the overall 'picture' or model fits the real world". The bigger the jigsaw as defined by the number of individual topics (phenomenon covered) and how 'tightly' the individual neighbouring pieces fit together determines the "Jigsaw Completeness" of a hypothesis. I believe this hypothesis scores particularly well under this criteria especially considering the scope of this hypothesis.

Synopsis

Below is a synopsis of my hypothesis (leaving aside spirituality) underlining the basic concepts / assumptions.

1. The hypothesis re-introduces the concept of the Aether through tiny negatively charged particles called Alpha-negatrons which might turn out to be Neutrino's. Due to the abundance of these particles with a relatively small size surrounding by a much larger negative charge, a compressed three dimensional crystalline structure is formed in the shape of "The flower of life".

2. Electromagnetic and gravity waves propagate through this medium utilizing compression / rarefaction and through the spinning action of these particles. The speed of propagation of any wave in a medium is inversely proportional to the size and distance apart of the particles in the medium. Since the size and distance apart of each alpha-negatron is relatively fixed hence the speed of light is also relatively fixed. Time is caused by the vibration energy inherent in these particles and that links time with the velocity of light.

3. The negatively charged electron spins around the nucleus and also on its own axis, perpendicular to its rotation around the nucleus. Both the direction of rotation of the electron causes a pushing and stirring action of the surrounding negatively charged alpha-negatron particles. The nucleus spins on its own axis and the phenomenon of Nuclear Magnetic Resonance (NMR) is proof of that fact. The positively charged nucleus causes a pulling ripple effect on the surrounding negatively charged alpha-negatrons creating gravity waves in the process.

4. Magnetism and gravitism are field forces created by the stirring action of these particles by electrons and protons in the nucleus. Magnetism is caused by the spinning negatively charged electrons and gravitism is caused by the spinning positively charged protons in the nucleus. Due to the synchronisation of electrons, the magnetic currents can accumulate but due to the lack of synchronisation of the spinning nucleus gravnetic currents are extremely limited in range.

5. The frequency of electromagnetic wave is determined by the type of shock used to create the wave and electromagnetic waves propagate OUT from the source of creation. Normal electromagnetic waves propagate in clusters or packets and in broken strands. Coherent electromagnetic waves such as Laser light still propagates in clusters or packets but continuous strands. Electromagnetic waves propagate in a linear or straight direction. Electromagnetic waves propagate as a sinusoidal bipolar wave with its electric and magnetic field vectors perpendicular to each other. Electromagnetic waves are affected by subatomic particles such as the nucleus of an atom, neutrons, protons, electrons and this can cause the wave to be stopped. The phenomenon of refraction and polarization are made possible due to the effect of external electric or magnetic fields.

6. The frequency of a gravity wave is determined by the positive charge of the nucleus, size of the nucleus, the nucleus's speed of spin, and the interaction of neighbouring nuclei spinning in same or opposite directions. Gravity waves are in

a range and not one fixed frequency propagating IN towards the source of creation such as an object or celestial body such as the Earth. Due to the continuous spinning nucleus in atoms, gravity waves propagate in continuous individual strands not clusters. Gravity waves due to their nature of creation propagate in a non-linear or curved manner and can go around objects they meet on the way, resulting in very weak or no interaction with matter. Gravity waves like electromagnetic waves propagate as a sinusoidal bipolar wave with its electric and magnetic field vectors perpendicular to each other but because the orientation of the electric and magnetic field vectors keep changing due to the nature of its creation, gravity waves behave like dipolar or multi-polar sinusoidal waves.

7. Consciousness is a separate dimension like time. Consciousness is a manifestation of the alpha-positron particle, the positive counterpart of the alpha-negatron. Consciousness and time move in opposite directions. As the rate of Consciousness is increased, the rate of Time is decreased and vice versa.

Verifications based on logical and philosophical arguments

This hypothesis like any other unified theory or hypothesis is only a model of the real world but because the scope of this hypothesis is greater than most, each topic discussed has to be evaluated and scrutinised even more individually in terms of the mechanism used to explain the known and established facts regarding each phenomenon discussed. Each individual topic is like one piece of a gigantic jigsaw and how well it fits into the neighbouring pieces determines how well the overall 'picture' or model fits the real world. This hypothesis explains the role of the alpha-negatron particles, electrons and nucleus (comprising of protons and neutrons) in terms of a detailed mechanism such as spin / movement in explaining the various phenomenon.

The weakest part of any hypothesis or theory are the assumptions made but if they can be verified through mathematical, logical or philosophical arguments then these assumptions are justified as long as the structure of the hypothesis or theory continues to strengthen and there is no breakdown in logic. If there is a breakdown in logic then these original assumptions have to be reevaluated. This hypothesis is based on two fundamental assumptions, one that the Aether is made up of tiny negatively charged particles and secondly that nucleus of an atom possesses spin.

Experimental evidence provides 'solid' proof but failing that mathematical, logical or philosophical arguments are often used when experimental evidence is not available. In recent years, mathematical arguments have been used to provide 'solid' proof but in the opinion of the author they are not any more superior to logical or philosophical arguments. In the case of a chain, the strength of the chain is determined by the weakest link. The trick is to recognise the weakest link or flaw of any type of above arguments and try to strengthen it.

James Clerk Maxwell, one of the greatest scientists of the Victorian era was most notable for his theory of electromagnetic radiation, unifying electricity,

magnetism and electromagnetic radiation which led to the Maxwell's equations. This proved for the first time the true nature of an electromagnetic wave, dipolar oscillating vectors of an electric and magnetic field perpendicular to each other travelling at the speed of light. The above achievement has over the years led to many technological achievements starting with the invention of the radio. Although the nature of an electromagnetic wave was discovered by Maxwell, however it's mechanism of creation was unclear until now, which is disclosed in this hypothesis. The mechanism of creation of an electromagnetic wave is explained in the above section of "Composition of an electromagnetic wave". This provides us with strong direct evidence for the existence of tiny negatively charged particles which would be essential for creating the dipolar nature of an electromagnetic wave which propagate at the speed of light. The section "Composition of a gravity wave" explains how gravity waves differ from electromagnetic waves due to the nature of its creation.

Strong evidence for the speed of light being a constant is provided below. Since the size of these particles and the distance between them is relatively fixed hence the speed of light is relatively fixed or constant. The section entitled "Estimation of the size of an alpha-negatron" provides further proof in terms of mathematical logic estimating the size of an alpha-negatron including spacing. The resultant figure is 1.1×10^{-16} metres, about 200 times smaller than an electron or a proton is consistent with the above logic for the speed of light providing further proof for the existence of negatively charged particles constituting the Aether.

This hypothesis proposes a novel solution to the cause of gravity, that the spinning nucleus is responsible for creating gravity waves through the three dimensional alpha-negatron matrix. The evidence for the nucleus possessing spin comes from the phenomenon of Nuclear Magnetic Resonance (NMR). NMR simply put is a phenomenon by which the spinning nucleus absorbs electromagnetic radiation of a specific frequency (resonance frequency) in the presence of a strong magnetic field causing the nucleus to 'flip' due to its unstable neutron to proton ratio.

The negatively charged alpha-negatrons are everywhere including the space between the nucleus and the neighbouring electrons. They are also in between the spaces of the electron orbital's. The effect of the spinning positively charged nucleus on the surrounding negatively charged alpha-negatrons is that it causes them to spin and creates gravity waves coming IN towards the nucleus, the source. The spinning negatively charged alpha-negatron connects with the neighbouring alpha-negatron like a cog wheel causing it to spin in the opposite direction. This creates waves of a dipolar nature, the mechanism of which is explained in section of "Composition of an electromagnetic wave". The large spinning nucleus in comparison to the alpha-negatrons with its three dimensional distribution of the protons within the nucleus cause the alpha-negatrons to connect to each other in a non linear manner thus making the gravity wave constantly change its electric and magnetic field vectors. The section

"Composition of a gravity wave" explains the mechanism of how the quad-polar or multi-polar nature of a gravity wave is created and how it contributes to its illusive properties such as its weak or virtually no interaction with matter and why they are so difficult to detect.

An important revelation made in this hypothesis is that the negatively charged electron spins around the nucleus and also on its own axis, perpendicular to its rotation around the nucleus like a mini gyroscope. The mechanism for the above is explained under the section "Gyroscopic effect of an electron and the nucleus" correctly accounting for the phenomenon of magnetism, electromagnetism, superconductivity (mechanism of cooper pairing), diamagnetism, super diamagnetism and the Meissner Effect.

There are also many new concepts developed in this hypothesis such as the gravnetic effect, gravity entanglement and time dilation through spin. The gravnetic effect gives an alternative explanation to the Casimir effect and contributes to the well defined electron orbital's. The concept of gravity entanglement is responsible for establishing the 'centre of gravity', gravity disruption through spin and why planets orbit any sun around its equator giving an alternative explanation to Einstein's space-time warping. A spinning object apart from causing gravity disruption due to gravity entanglement will also cause a small degree of time dilation reducing Newton's gravitational constant (G) thus reducing the attractive force (F) between two bodies as illustrated in the section "Gravity Entanglement / Concentration / Disruption".

Max Planck's vision of matter is summed up in his famous quote "All matter originates and exists only by virtue of a force ...We must assume behind this force the existence of a conscious and intelligent Mind. This Mind is the matrix of all matter." At first sight the above quote seems farfetched and unscientific due to its implication for the existence of 'God'. Let us now look at the above quote in context with the findings of this hypotheses. If consciousness, like time is a separate dimension and is interwoven with the fabric of matter, then Einstein's concept of space-time can be extended to space-time-consciousness which is self regulating.

The need for unification

There have been many theories with their own interpretations of the fundamental relationship between physical space, time and the quantum, equally valid within their own context or framework. There has been many attempts at unification including this hypothesis. The work of Prof James Beichler entitled "[The tie that binds the fundamental unit of 'change' in space and time](#)" is an excellent attempt at such a unification. He states that "Simply put, the mathematical formulas usually associated with special relativity can be derived by simple algebraic means from the Heisenberg Uncertainty relationships." He goes on to explain that "To accomplish this, it is necessary to suppress Planck's constant, which raises the question 'what is the quantum?" By mathematical arguments he explains that "Newton's second law of motion can also be derived

by suppressing Planck's constant as well as any reference to the speed of light as a limiting condition. Doing so yields the identity of the 'hidden variables' in the Heisenberg Uncertainty formulas for the first time and this identification, although obvious once it is known, is completely unexpected to say the least."

Prof James Beichler is in my opinion in one of the world's top researcher's in the field of neurophysiology and neurophysics. His work entitled "[The Neuro-Cosmological Basis of Consciousness and Spirituality](#)" lays the foundation for the neurological basis of consciousness. He points out that "Not only neurons extend throughout our bodies, but there are a disproportionately large quantity of neurons in the heart - Only in the heart does the density of neurons approach that of the brain". He goes on to state that "For this and other reasons I have concluded that the brain alone should no longer be considered the home of mind and consciousness in the body". His research concludes that "The key is the microtubule system that makes up the cytoskeleton of the neuron - Microtubules are actually biomagnetic induction coils that form individual nano transceivers". He makes a startling revelation that "The Heart is about 100,000 times stronger electrically & up to 5,000 times stronger magnetically than the brain" but also goes on to point out that "However, the brain is far more magnetically complex than any other organ in the body, which is why we mistakenly 'think' or imagine that mind, consciousness and 'self' are located in the brain alone". In the above paper James Beichler goes on to explain a variety of phenomenon through logical mechanisms and interpretations.

Similarly this hypothesis unveils the true nature of quantum and the relationship between space, time and consciousness instead of hiding under terminology such as "quantum fluctuations of vacuum densities". I believe that this hypothesis is the key to understanding and linking the various theories / hypothesis past and present through its well defined mechanisms. This hypothesis proposes that consciousness is a dimension like time and is part and parcel of the fabric of matter and is omnipresent. Prof Beichler in his above paper puts a mechanism as to how the microtubule system of the neuron becomes a nano transceiver. I believe that the 'signal' of consciousness is deciphered by living organisms according to the sophistication of the neural circuits in order to feel the presence of the 'self' or 'I am'.

Conclusion

The phenomenon of gravity, magnetism, gravitism and electromagnetic radiation manifests as a result of how the alpha-negatrons are moved or disturbed within the three dimensional matrix woven with spinning alpha-negatron particles. Time, consciousness and psi-energy are separate dimensions interwoven in the fabric of the alpha-negatron matrix on the physical plane. A planet's gravitation force pulls and bends the three dimensional matrix made up of alpha-negatrons around the planet and is responsible for the curvature of space-time. Imagine a three dimensional fabric woven with very thin strands of electrically conducting wire. As this fabric is bent, the direction of the passed current though it changes in accordance with the bends in the sections of the three dimensional matrix.

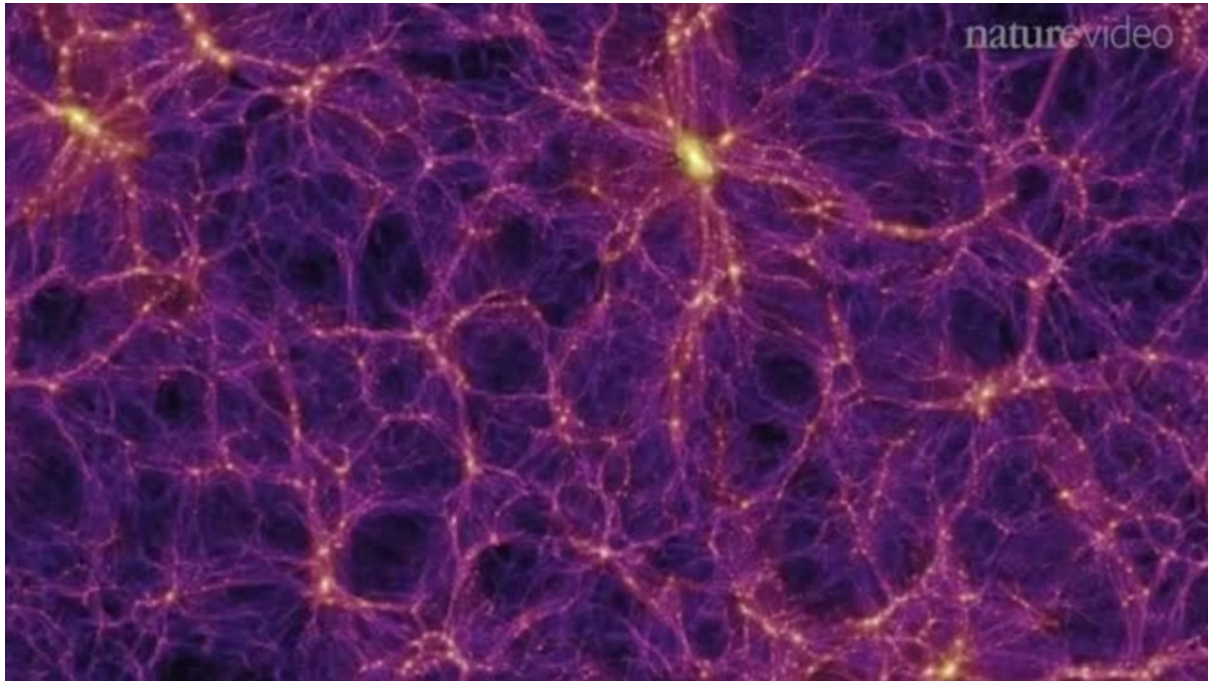
The spin and the direction of orientation of the alpha-negatrons in the matrix determine the direction of propagation of electromagnetic / gravity waves, time and consciousness. In the analogy of the above wire matrix, the bends could be so sharp as to reverse the flow of current or even break the wire causing a termination of the flow of current. This could also happen in the alpha-negatron matrix causing a reversal or even the termination of the propagation of electromagnetic / gravity waves, time and consciousness. Since space, time and consciousness are altered by the gravitational force from planets hence it should be correctly termed the "curvature of space-time-consciousness".

Magnetism is a powerful force and at the subatomic level it is extremely powerful. It keeps the electrons of the atom in well-defined orbits which is responsible for the stability of the atom, which in turn is responsible for the stability of molecules. Gravitism like magnetism is a powerful force but due to the fact that alignment of spins of the nuclei does not happen in the same way as electrons in creating a magnetic field, it works at the subatomic level and only slightly beyond. It is however extremely powerful and is responsible for binding the protons and neutrons within the nucleus and is also responsible for the stability of the nucleus. If these mini magnetic and gravitic fields that hold the atom together were to be disrupted by a strong enough tidal force in the alpha-negatron matrix in the form of electromagnetic radiation at the right frequency and phase then the atom would collapse. This could form the basis for cold nuclear fission and fusion reactors.

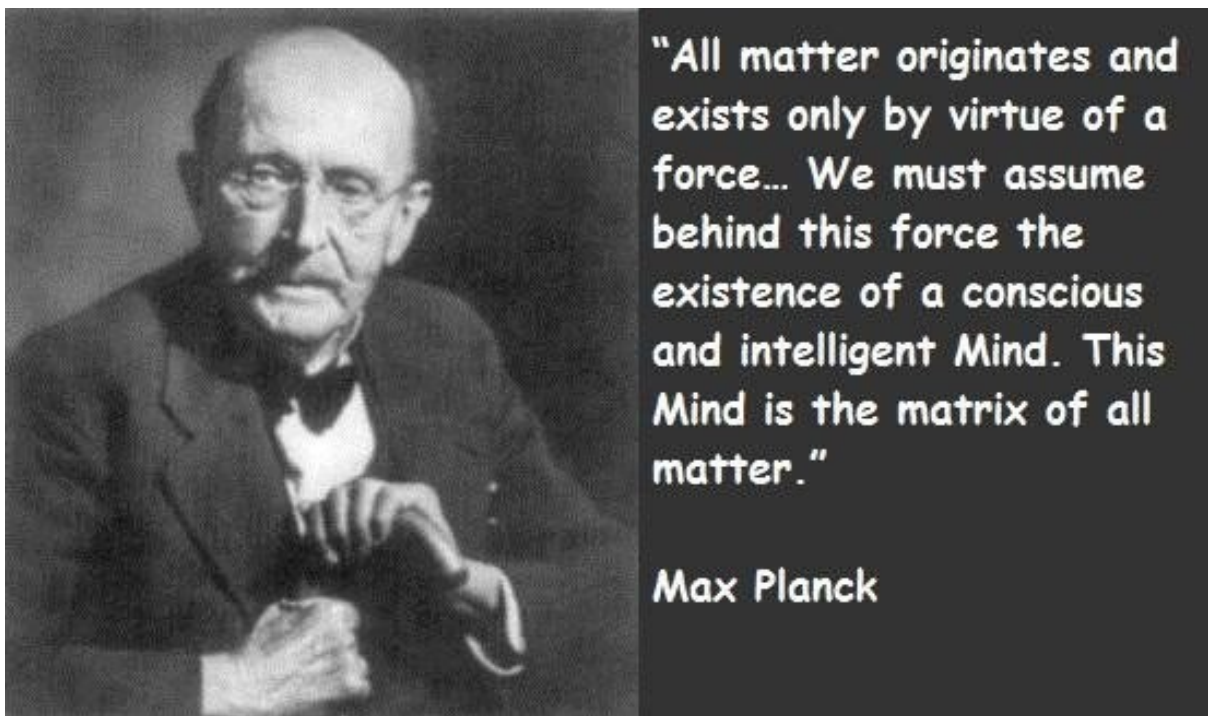
There have been quite a few 'unified theories' in recent years but I believe this hypothesis has brought theoretical physics back on track by reviving the concept of the 'Aether' and by putting an actual mechanism to the various phenomenon.

In an effort to unravel the mysteries of the universe, physicists have concentrated on the nucleus of an atom, hence the building of the Large Hadron Collider thereby completely ignoring what is outside the atom. This 'empty' space in between atoms connects all matter on the physical plane. Most of modern technology is based on the above phenomenon exhibited as a result of these tiny alpha-negatron particles. Intelligence and consciousness has to be based on communication, and there can be no better medium of communication than through these tiny particles. As stated above consciousness is a dimension like time and it pervades in every part of the universe in the physical and spiritual plane.

There is a 'universal mind' based on the collective interaction of all matter, physical and spiritual. An article by the MailOnline in their technical column June 21st 2015 entitled "[The incredible map that reveals our place in the universe](#)" shows interstellar space to look like the neural network of the brain.



Time, conscience and psi-energy pervade everywhere and are interwoven in the fabric of physical and spiritual matter. The interaction of these three primary dimensions can be visualised like a thread or rope with the psi-energy in the middle with time and consciousness wrapped around it in opposite directions like a double helix. This 'thread' shapes the evolutionary process on both the physical and spiritual plane. Lord Krishna is reported to have said in the Bhagavad Gita that "I am the 'thread' that binds the universe".



General Connectivity explaining previous experimental evidence for gravity reduction

Weightlessness

Before examining experiments to produce 'anti-gravity' let us examine the mechanism of how traditionally weightlessness is achieved. NASA's "Vomit Comet" simulates weightlessness for about 25 seconds. The airplane climbs up to a high altitude, and then commences a parabolic dive. During this dive, everything floats inside the airplane, simulating weightlessness. As the airplane climbs up the alpha-negatrons in the plane are moving up with the plane but when the plane takes a dive the alpha-negatrons take time to adjust when they suddenly change direction. The flow of gravity waves is disrupted during this adjustment period and for a while weightlessness is achieved. It seems logical to suggest that radio signals would also be impaired in the plane during this small period. If this were to be found then this would be indirect evidence in support of the above hypothesis.

Experiments in gravity reduction through spin

A number of experiments have demonstrated 'anti-gravity' effects and the standard theories explaining them can be found in an article by Esoteric Science under the heading [Antigravity](#).

Roschin & Godin device, itself a modified version of the Searl SEG machine which consists of sets of rapidly rotating magnets that have shown to significantly reduce the weight of the whole apparatus. Another example of rotating magnetic fields producing 'anti-gravitational' effects is the Hamel device. It consists of two counter rotating wheels of magnets stacked three levels high.

Weight reduction has also been observed with simple rotation of objects but it would seem that the strongest effects are produced by rotating magnetic fields. Hideo Hayasaka and Sakeo Takeuchi have reported a weight reduction in rapidly rotating gyroscopes.

Eugene Podkletnov interestingly demonstrated gravity shielding effect with a rapidly rotating superconducting disk. In the presence of an external magnetic field a disk is spun at some 7000 rpm and anything situated above the disk loses weight.

All of the above methods essentially work by stirring the alpha-negatron matrix thereby disrupting the flow of gravity waves. Magnets spinning would cause a greater disruption than spinning objects on their own. Although rotating magnets disrupt gravity waves, still magnets of normal strength do not affect gravity proving that gravity waves are essentially different in origin from magnetic fields. In the above rapidly rotating gyroscopes experiment interestingly the weight reduction occurs only for clockwise rotation. This is understandable as the earth spins in an anti-clockwise direction therefore the disruption in alpha-negatron matrix would occur when gyroscopes are spun clockwise causing a head on collision of alpha-negatrons as a result of the two opposing spins.

Experiments in 'anti-gravity' through high voltages / radio frequency beams

A number of experiments involving high voltages such as the Townsend Brown gravitor have shown weight reduction, among other unusual effects.

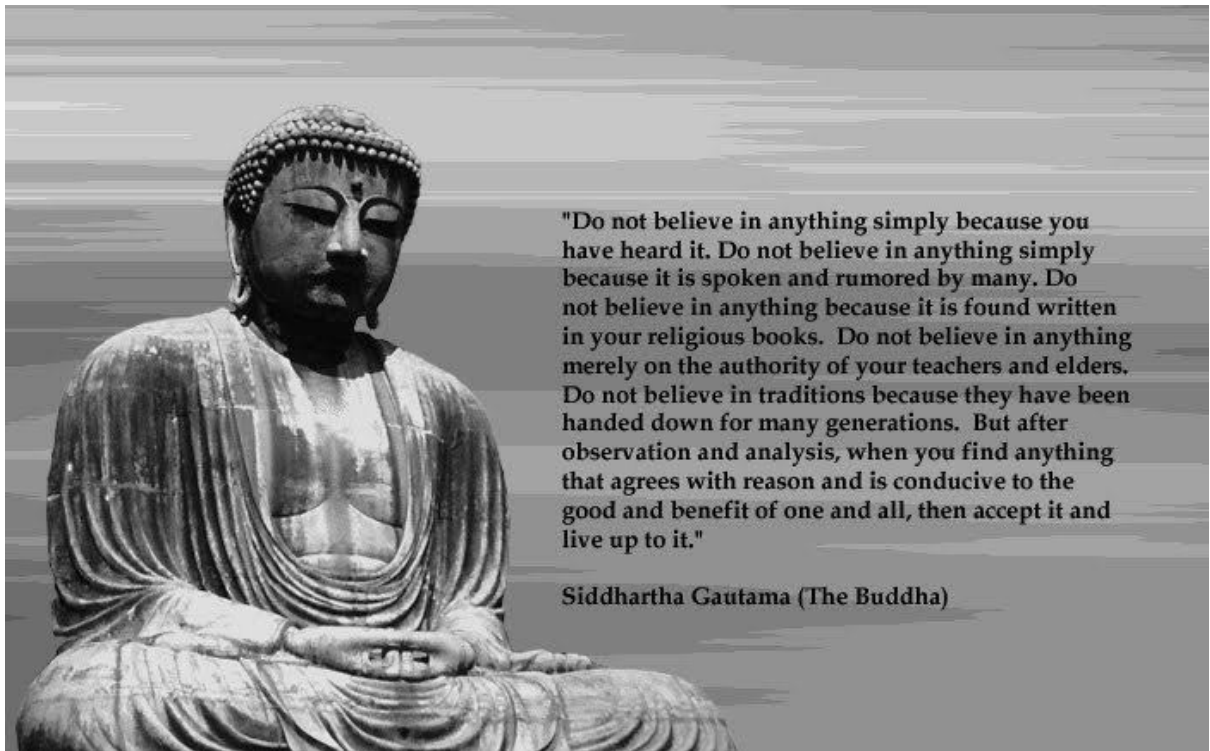
The work of John Hutchison allegedly demonstrates objects being raised into the air and other phenomenon such as the 'crumbling' of metals. He claims to have achieved this by using a combination of high voltages and radio frequency beams but no one seems to be able to duplicate his work.

High voltages could disrupt gravity waves flowing in the alpha-negatron matrix. Radio frequency beams could be directly interacting with gravity waves by reducing their intensity or cancelling them out completely. The 'crumbling' of metals can be explained through General Connectivity as follows. As explained above, strong magnetic and gravitic forces occurring at the sub-atomic level keeps the electrons in well-defined orbits. If these forces are disrupted due to the interaction of high voltage radio frequency beams at the right frequency and phase, then the molecular structure of the metal would collapse causing metal to 'crumble'. There seems to be a lack of reproducibility of response with the work of John Hutchison even by himself and this probably stems from a lack of understanding of what is actually causing this effect.

Conclusion

It is important to remember that the force of gravity does not need to be completely cancelled in order for an object to be lifted into the air. The centrifugal force due to the earth's rotation is always present but is no match to the stronger gravitational force. When the gravitational influence is reduced below that of the earth's centrifugal force then an object will rise into the air as a result.

The above methods of spinning devices represent crude methods in producing anti-gravity. The most efficient method would be through the use of electromagnetic radiation of the right frequency / intensity but sent 180 degrees out of phase with gravity waves thereby cancelling their effect. Due to the low frequency of gravity waves the above is probably best achieved by having two radio waves of different but appropriate wavelengths so that when they interact because of the phase difference created, the resultant frequency is that of gravity waves but 180 degrees out of phase.



"Do not believe in anything simply because you have heard it. Do not believe in anything simply because it is spoken and rumored by many. Do not believe in anything because it is found written in your religious books. Do not believe in anything merely on the authority of your teachers and elders. Do not believe in traditions because they have been handed down for many generations. But after observation and analysis, when you find anything that agrees with reason and is conducive to the good and benefit of one and all, then accept it and live up to it."

Siddhartha Gautama (The Buddha)