

How Gravity Works—and related matters

by

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Abstract: How Gravity Works—a Unified Field Theory

This *explanation of the gravitational mechanism* provides a causal mechanism that reconciles physical phenomena with Newton's equation for the force of Gravity. It shows how electricity and magnetism work together to produce the force of Gravity and in so doing represents the first Unified Field Theory. It explains the reason why the gravitational force is proportional to the masses of the attracting bodies and why the force decreases in accordance with a square law scale. The Gravitational Constant is defined. The reason why objects accelerate to Earth in accordance with a square law scale is explained. The architecture of the atom is explained—the reason why electrons orbit the atom in up to 8 shells/sub-shells; why the shells contain the number of electrons that they do; and why the shells are offset by at least 45°, are all explained.

Conclusion: The hydrogen atom [and helium atom] generate helically polarized electromagnetic radiation (gravity radiation) from polar regions that bombards neighbouring atoms drawing them towards the source of the radiation. Gravity radiation then causes the nucleus of the neighbouring atom to spin axially (the 'motor effect') and, at the same time, synchronizes the spin of the electrons in both atoms. The neighbouring atom then, in turn, generates helically polarized electromagnetic energy (the 'generator effect'). Both atoms spin axially in the same direction. Hence, the gravitational forces from both atoms pull in the same direction and the forces are additive. The gravitational Constant G is shown to be the instantaneous alternating magnetic force between any two electron-magnets in neighbouring atoms and, hence, the gravitational force F is proportional to $G \times m_1 \times M_2$ (where m_1 and M_2 represent the electron count of neighbouring atoms).

electricity gravity and magnetism



three sides of the same coin

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Conclusion; The hydrogen atom [and helium atom] generate helically polarized electromagnetic radiation (gravity radiation) from polar regions that bombards neighbouring atoms drawing them towards the source of the radiation. Gravity radiation then causes the nucleus of the neighbouring atom to spin axially (the 'motor effect') and, at the same time, synchronizes the spin of the electrons in both atoms. The neighbouring atom then, in turn, generates helically polarized electromagnetic energy (the 'generator effect'). Both atoms spin axially in the same direction. Hence, the gravitational forces from both atoms pull in the same direction and the forces are additive. The gravitational Constant G is shown to be the instantaneous alternating magnetic force between any two electron-magnets in neighbouring atoms and, hence, the gravitational force F is proportional to $G \times m_1 \times m_2$ (where m_1 and m_2 represent the electron count of neighbouring atoms).

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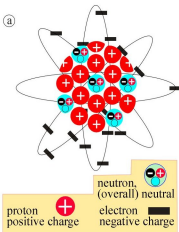
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How Gravity Works

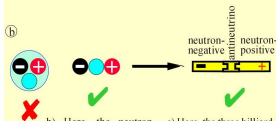
Orthodox Science does not understand the force that causes atoms to attract each other—because scientists do not understand the nature of the force, or the nature of the atom.

The accepted Model of the Atom

The accepted model of the atom (*right*) recognises that complex atoms are made of electric positive charges, protons (shown in red), electric negative charges (black), and neutrons (blue). The neutrons have no overall electrical charge but are known to be made of $\frac{1}{2}$ of a proton, $\frac{1}{2}$ of an electron and a neutral particle sometimes referred to as the 'antineutrino'. But this model *cannot* be correct because it raises three crucial questions; 1. Why—given that positive repels positive—do the positive charges simply not just spring apart? 2. Given that positive attracts negative, what stops the orbiting negative charges from being sucked-in to the positive charges in the nucleus? and, 3. What stops the $\frac{1}{2}$ proton and the $\frac{1}{2}$ electron inside the neutron from being drawn together and annihilating each other?



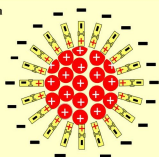
So what makes the complex atom stable (I) ?—the new atom



b) Here, the neutron-negative particle is shown separated from the neutron-positive particle by the neutron-neutral particle (the antineutrino) using the billiard-ball-style convention.

c) Here, the three billiard-ball-style particles have been replaced by a tiny positive battery-like symbol and a tiny negative battery-like symbol that are kept apart by the neutral anti-neutrino. This new representation will from now on, herein, be referred to as the 'spiked-neutron'.

Supporting evidence: Researchers, at the Hahn-Meitner Institute, Berlin, announced that 'neutrons behave like compass needles' (Science Daily, 31.3.2008)



d) In this theoretical scheme the electrons and protons are kept apart by the spiked-neutrons. The positive pole of each spiked-neutron is embedded in the mass of protons contained in the nucleus. The neutron-positive poles push against the positive protons preventing them from springing apart. The neutron-negative poles repel the electrons preventing them from getting closer to the nucleus. The spiked-neutrons act like springs, forcing-out the electrons and forcing-in the protons.

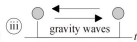
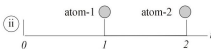
What's the nature of the force?

Isaac Newton defined Gravity as 'the force between 2 bodies' [atoms]—although he never understood what caused it, how it worked, or where it came from. c) However, when we recognise that the Universe began with just 1 atom, it becomes clear that *the force of gravity must travel*. This means that each atom must give-off some form of energy. The only energy known to travel through space is electromagnetic energy, radio waves.

c) Before the creation of the Universe, at time zero, no physical atoms existed. Then, a moment later, at time interval I , the first atom, atom number 1, must have appeared.



i) At *time-1* gravity could not exist because only 1 atom exists, and Newtonian gravity is the force between 'two' atoms.



ii) At *time-2* atom-2 appears and gravity exists. Thus, a gravitational force must *travel* from atom-1 to atom-2, and from atom-2 to atom-1, between time intervals I and 2. iii) This means that gravity must *travel* to establish itself between the atoms.

But how could an atom give off radio waves?

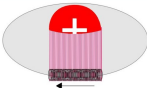
In 1831, Michael Faraday demonstrated that when a coil is swiped through a magnetic field, an electric field [a voltage] is produced across the coil. The corollary is also true; whenever a coil is swiped through an electric field [a voltage] a magnetic field is produced [induced] into the coil. In order to make the atom stable, it was firstly necessary to change the shape of the neutron. In order to enable a gravitational mechanism, we must now change the shape of the electron—into a coil-shape.

Note: The electron is shown cylindrical to facilitate explanation. It need not be cylindrical; it could be round—spherically-coil-shaped.



(a)

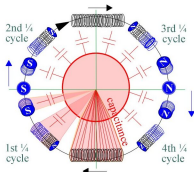
here, hydrogen, the simplest of atoms, is used to explain the principles involved



hydrogen atom

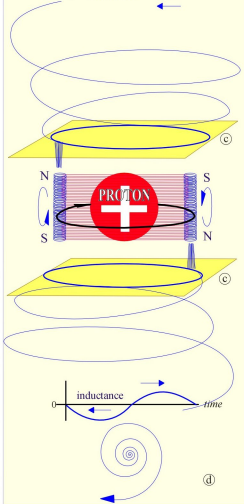
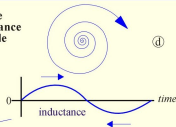
a) An electric field subsists between the orbiting negative electron and the positive proton. The amount of electric field contained in the space between the particles is known as its 'Capacitance'.

(b)



b) As the electron slices through the electric field, a magnetic field is induced into the electron. Because an electric field and an associated magnetic field are always displaced by 90° , the induced magnetic field parries against the associated electric field causing the elevation of the electron to twist to a more vertical position. Once the electron becomes vertical the coils of the electron no longer slice through the electric field. But the electron continues to spin through its own inertia and as it twists to a more horizontal elevation it once again begins to slice through the electric field. More magnetism is again induced into the electron during the second quarter cycle—at the same time as the magnetic field uploaded during the first quarter cycle begins to collapse. The magnetic field around the electron [although it should now be referred to as an 'electron-magnet'] is thus pushed-out into space; it 'radiates' into space. The electron-magnet changes direction as it slices through the electric field during quadrants 3 and 4, thus the associated magnetic field around the electron-magnet reverses, relative to the first and second quarter cycles.

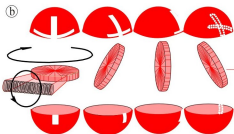
The Inductance Cycle



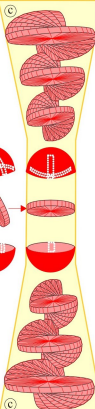
The electromagnetic interaction between the particles causes the electron-magnet to spin once [through 360°] like the opposing blades of a windmill, during each orbit of the proton. c) and d) It can be seen that the electron-magnet radiates helically polarized (corkscrew-style) magnetic energy from the equatorial region to the polar regions. c) Radiation from the northern sector is displaced by 180° from radiation from the southern sector.

The Capacitance Cycle

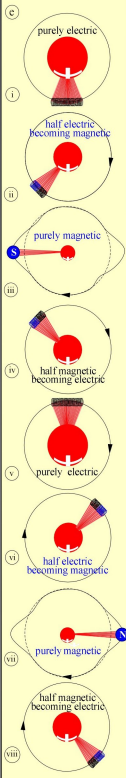
But where does the energy come from?



a) and b) The 'electron-magnet' topples as it orbits the proton and, at the same time, the capacitance between electron and proton varies due to the expansion and contraction of the proton (see e) below). During the cyclical collapse of the magnetic field around the electron-magnet energy is returned to the sphere and a disc of electrical field energy is flipped, displaced and, being forced away from the sphere, radiates into space; c) and d) A corkscrew pattern of electrical energy thus radiates from each pole. The Capacitance cycle is displaced by 90° to the Inductance cycle.



here the electron is;



3 figure 3.

e) As the electron-magnet sucks-in energy from the proton the proton rapidly compresses (shrinks) and cools, as the induced magnetism rises in the electron-magnet. When the electron-magnet becomes vertical and stops sucking-in energy, the proton stops compressing. As soon as that happens the super-cold miniature proton sucks-in ambient heat (above -273.15°C) causing the proton to heat-up and expand rapidly. The surface area of the proton thus gets larger and smaller as the electron-magnet orbits the proton, so the amount of electric field (capacitance) between the particles must vary in a cyclical way [because Capacitance is proportional to the surface area between the particles]. Below -273.15°C the electron cannot access sources of heat to sustain electromagnetic oscillation and the electron, starved of input energy, ceases to orbit the proton. Oscillations cease. The atom ceases radiating corkscrew-style electromagnetic energy and the atom ceases to attract other atoms, e(i) to e(viii). Whenever the electron absorbs energy, it drains the electric field of some energy and the tension between the two particles diminishes, allowing the electron to increase the size of its orbit. Whenever energy is returned, the renewed stronger field pulls the electron back to a position inside the original orbit, momentarily, before returning to its original orbit, e(iii) and e(vii).

How do corkscrew-style electromagnetic radio-waves affect other atoms?

Gravity requires that every atom attracts every other atom in every different direction. Hence, for a gravitational mechanism to be enabled by corkscrew-style radiating waves three conditions must be met: 1. All hydrogen atoms throughout the Universe must be randomly orientated. 2. Corkscrew-style radio-waves from a hydrogen atom must *not* interfere with corkscrew-style radio-waves from other hydrogen atoms, and 3. If corkscrew-style radio-waves from the hydrogen atom are the prime-mover in the gravitational mechanism then other [non-hydrogen] atoms *must* be affected [in some way *switched-on*] by the corkscrew-style radio waves from the hydrogen atom [in order to satisfy Newton's observations that bodies in alignment, like the Sun and Moon, pull in the same direction].

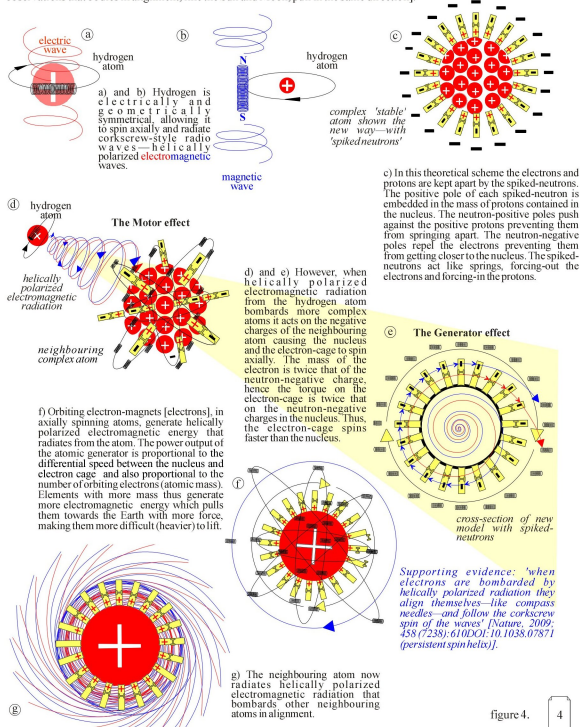
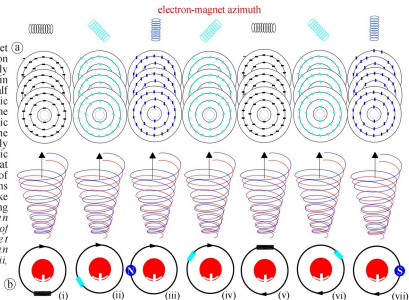


figure 4.

Summary; Hydrogen synchro-spin

b) As the electron-magnet orbits the hydrogen proton it changes from a purely electric particle (shown in black) to one that is half electric and half magnetic (light blue), and then to one that is purely magnetic (deep blue). At the same time it radiates helically polarized electromagnetic energy into space that synchronizes the spin of electrons in nearby atoms causing them to spin—like windscreen wipers rotating through 360° . [Seven consecutive snapshots of the electron-magnet orbiting the hydrogen proton are shown; time i, ii, iii, iv, v, vi and vii].



next atom with 3 or more electrons e.g. beryllium; 4 electrons



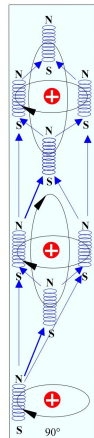
adjacent atom with 3 or more electrons e.g. lithium; 3 electrons



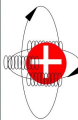
hydrogen atom (prime mover); 1 electron



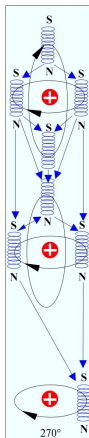
no gravity when electron-magnets are at 0°



electron-magnetic force (gravity) when electron-magnets are at 90° (vertical)



no gravity when electron-magnets are at 180° (horizontal)

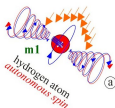


electron-magnetic force (gravity) when electron-magnets are at 270° (vertical)

How gravity works

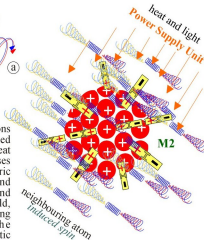
c) A vertical cascade of atoms; helically polarized electromagnetic energy (not shown here) from the hydrogen atom bombards the lithium atom synchronizing the spin of its electron-magnets with that of the hydrogen electron-magnet. The lithium electron-magnets then spin axially and radiate helically polarized electromagnetic radiation that bombards the beryllium atom, synchronizing the spin of its electron-magnets with that of the hydrogen atom. The beryllium electron-magnets then spin axially and radiate helically polarized electromagnetic energy etc. It can be seen that, in a cascade of atoms, helically polarized electromagnetic radiation from the hydrogen atom synchronizes the spin of all electrons in atoms in alignment with the hydrogen atom. As a result the magnetic moments of orbiting electron-magnets in a cascade of atoms attract each other. This is the force of gravity. The electron-magnetic moments alternate during each orbital cycle of the hydrogen electron-magnet, hence gravity cannot be measured.

figure 5.



The Gravitational Constant [G]

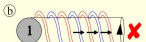
a) The energy to sustain oscillations in the hydrogen atom is obtained from ambient heat. Ambient heat sucked-in by the proton causes changes in the amount of electric field [with the expansion and contraction of the proton] and changes to the magnetic field, caused by the toppling orbiting electron-magnet. G is the 'instantaneous alternating magnetic force between any two electron-magnets in neighbouring atoms'.



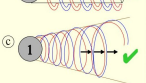
Derivation of Newton's equation

The magnetic force between any two magnets is proportional to the magnetic force of one magnet multiplied by the magnetic force of the second magnet. The magnetic force between two atoms can therefore be calculated by multiplying the electron-magnetic force of one electron-magnet [G , the gravitational Constant] by the number of electron-magnets in atom 1 (a proportion of the mass of atom 1, $m1$) multiplied by the number of electron-magnets in atom 2 (a proportion of the mass of atom 2, $M2$); or as Newton said, the force (F) can be calculated by multiplying G [the magnetic force of 1 electron-magnet] multiplied by $m1 \times M2$. (b) – (d) explain why the result must be divided by the distance (between the two atoms) squared.

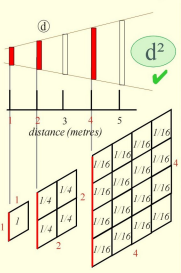
b) A theoretical atom radiating a theoretical gravity wave.



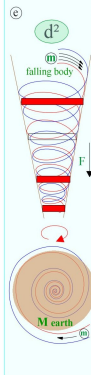
c) A theoretical atom radiating a theoretical gravity wave, adjusted to accommodate Newton's observation that the force decreases in proportion to the distance travelled ((d), below).



d) As theoretical gravity waves radiate from atoms they must decrease in field strength [per metre squared]. For every unit of distance travelled the radiated energy diverges geometrically and thus reduces by the square of the distance travelled (d^2). Italicised numbers inside boxes show the field strength of the radiating electromagnetic energy, in volts per metre squared. [Squares are used here to schematically illustrate the principle—the diverging wave is actually conically-helical, as in (c)].



Why objects accelerate to Earth in proportion to d^2



e) The frequency of the helically polarized EM radiation from the Earth remains constant. However, as m approaches M the spiraling EM radiation accelerates the differential rotation between each atomic nucleus and electron cage of which m is made. As a result the 'relative' atomic frequency increases and hence the output of the 'atomic generator' increases, increasing uniformly the attracting EM Force between m and M in accordance with a square-law scale as m proceeds along the EM spiral. M thus attracts m with square-law [d^2] uniform acceleration.

[m is shown spiralling towards M with the EM wave stationary but, in actuality, m approaches M in a straight line as the wave spirals across m]

Hence Isaac Newton's equation for the force of gravity; where the force is proportional to the masses (m & M) of the two attracting bodies and the strength of the force decreases inversely with the square of the distance between them (d^2).

$$F = GmM/d^2$$

G is Newton's gravitational Constant

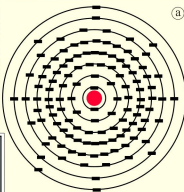
$$6.672 \times 10^{-11} \text{ N m}^2 \text{ kg}^{-2}$$

—the instantaneous alternating magnetic force between any two electron-magnets in neighbouring atoms

figure 6.

Proof that the electron is a coil-shaped electron-magnet—and electron-shell architecture explained

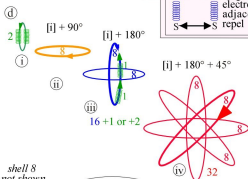
a) Schematic showing the theoretical maximum numbers of electrons filling the maximum number of available shells in an atom. The maximum number of electrons in the shell closest to the nucleus is 2. The maximum number of electrons in the next outermost shell/subshell is 8, followed by shells/subshells containing a maximum of 18, 32, 32, 18, 8, 2. It can be seen that, theoretically, the heaviest atom (illustrated) contains 120 electrons. The number of electrons orbiting an atom is usually balanced [but there are exceptions] with the same number of protons in the centre and (in our 'new atom') the same number of spiked-neutrons protruding from the centre (not shown). This also means that there are a maximum of only 120 different fundamental materials (elements). The heavier ones are more 'massive' and hence said to contain more mass (electrons, protons and neutrons).



b(i – iv) illustrate the electric – magnetic tipping point of the orbiting electron-magnet [EM] at 45° intervals: bi) From 45° – 90° (1/8 of the time) the magnetic field of the EM rises [and it is more magnetic than electric]. bii) From 90° – 135° it falls [but is still more magnetic than electric]. b(iii – iv) The same thing happens between 225° – 270°, and from 270° – 315°, but with opposite magnetic polarity.



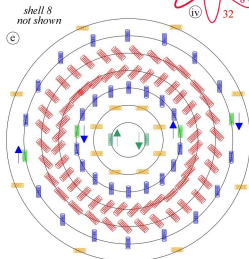
orthodox Science does not understand why the atom is structured the way it is—the reasons are given below



c(i – ii) when a northsouth [N-S] EM meets a northsouth [N-S] EM the two repel each other, and when a northsouth [N-S] meets a southnorth [S-N] the two attract, stick together, and exit the host shell. Hence, as subatomic particles accrete into atoms, EMs inside shells/sub-shells must be separated by at least 45° to avoid annihilation and EMs in one shell must be separated by at least 45° from those in adjacent shells. Hence the constraint of up to 8 EMs per shell/sub-shell $[8 \times 45^\circ = 360^\circ]$ and the requirement for different shell/sub-shell planar orientations.

d) and e) As a general rule orbital shells [or sub-shells of equidistant radii] cannot sustain more than 8 EMs because of considerations set down in b(i – iv) and, to avoid magnetic conflict between shells/subshells, the plane of successive shells/subshells must be progressively offset by at least 45°. However, shells 3 and 6 can sustain up to 2 more EMs in the scheme proposed in (d) and (e) because the magnetic moments from the 2 EMs in shell 1 (being equal and opposite to 2 EMs in shell 3) cancel, and magnetic moments from 2 EMs in shell 3 cancel those of 2 EMs in shell 6, allowing those shells/subshells to sustain up to 18, rather than 16, EMs.

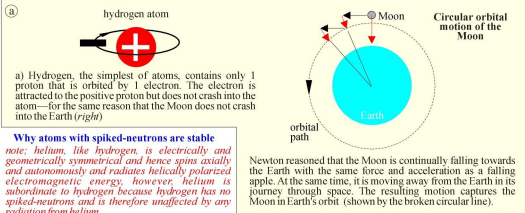
here, (left) to further illustrate the relationship between magnetic moments, EMs in successive shells are shown reoriented; in shell 2 by 90°, in shell 3 by a further 90°, in shell 4, by a further 45°, in shell 5 by a further 90°, in shell 6 by a further 45° and in shell 7 by a further 90°. It can be seen that no magnetic conflicts occur in such a scheme and that the 2 EMs in shell 1 (green) influence the magnetic moments of those in shells 3 and 6, so that those shells can sustain up to 2 more EMs (green) than generally possible. This defined structure confirms that the electron must be coil-shaped and that it behaves as an electromagnetic particle



schematic only—EMs are actually synchronized by gravity waves and [instead] the inclination of each shell/sub-shell is progressively offset as shown in d(i – iv)

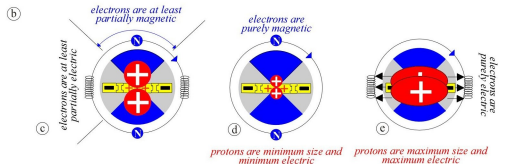
figure 7.

What makes the atom stable (II)?



Why atoms with spiked-neutrons are stable

note: helium, like hydrogen, is electrically and geometrically symmetrical and hence spins axially and autonomously and radiates helically polarized electromagnetic energy; however, helium is subordinate to hydrogen because hydrogen has no spiked-neutrons and is therefore unaffected by any radiation from helium



plan view of a helium atom with 2 electrons, two protons and 2 spiked-neutrons. The electron-magnets alternately possess an increasing and decreasing magnetic field that alternates with an increase and decrease of atomic capacitance. The two forces unite in self-sustained oscillation. The spiked-neutrons prevent the electric-electrons from crashing into the atom

Figure 5c) showed how the electron behaves as a permanent magnet at 90° and 270° from its starting position and how it does not possess a magnetic field at 0° and 180° . The electron is magnetic therefore during only half of the time it orbits the nucleus. We note further that, because a purely electric field and a purely magnetic field are displaced by 90° , a particle cannot be both purely electric and purely magnetic simultaneously, the two are mutually exclusive. It follows that if an electrically negative electron possesses magnetic qualities for half of the time it cannot be simultaneously electrical during that same part of the cycle. The electron, therefore, can only be considered as having electrical properties for half of the time. c) Shows the electric and magnetic possibilities, in plan view, of two electrons as they orbit the nucleus of a helium atom. d) When the electrons are each purely magnetic they cannot be attracted to an electric particle (the proton). Hence the magnetic electron is not attracted towards the nucleus during the quadrants shaded in blue. e) 90° later, the electron is maximum electric, but the charge on the nearby neutron-negative prevents them moving closer to the nucleus. Thus, the electrons cannot be sucked-into the nucleus. b) We also note that during the blue quadrants the protons, drained of energy, physically shrink, compress rapidly, release heat and cool. Hence the capacitance between electrons and protons reduces during the blue quadrants [because capacitance varies with distance between particles and the surface area of each particle]. In regard to the proton; during the blue quadrants, when the electron is maximum-magnetic, the positive electrical charge of each proton (and the force of repulsion between protons) is minimal, hence the protons have little propensity to move apart during the blue quadrants. e) As the electrons move into the grey quadrants the protons begin to suck-in ambient heat and rapidly expand. As the protons expand the distance between them and the electrons reduces and their surface area increases, increasing the amount of capacitance between them. It can thus be seen that when the electric particle is maximum-electric, the proton is also maximum-electric and attraction between the electrons and protons is maximum. The protons are thus stretched between the pair of electrons and have no propensity to spring apart; which explains why the maximum, and minimum, number of electrons in the first orbital shells of atoms containing spiked-neutrons must always be 2.

definitions:

Electric field is the electric component of electromagnetic radiation [infrared electromagnetic radiation [heat] emitted from stars. Electric field is sucked-into all atoms by the 'atomic electron-proton expansion-compression oscillatory mechanism' [figure 3].

Electric charge is the quantity of electric field held between a proton (or a group of protons) and an orbiting electron, or group of electrons [figure 3e].

Electric current. An electric field, applied across a cascade of atoms (e.g. a length of copper wire) forces orbiting electrons away from individual atoms, creating positive ions that attract non-domiciled electrons from the supply-side of the electric field to create coherent electron flow (electric current) [FUTURESCIENCE figure 35].

Magnetic field is the magnetic component of electromagnetic radiation emitted from stars. **Magnetic field** is also generated by an electron cutting through an electric field [figure 2] as a result of the atomic electron-proton expansion-compression oscillatory mechanism [i.e. atoms suck-in electric field. Orbiting electrons slice through the field and produce magnetism]. **Magnetic field** is also the magnetic component of electromagnetic radiation produced by the neutron-negative particle (inside a spiked neutron) cutting through the electric field inside all atoms [FUTURESCIENCE; figures 37 and 38]. Moreover, the surplus of neutrons, together with the electron architecture of certain elements (iron, cobalt, nickel and neodymium-iron-boron), allows the magnetic fields generated by individual atoms to aggregate into a coherent unified magnetic field known as '**permanent magnetism**'.

The three types of Hydrogen

Atoms containing only 1 proton are referred to as 'Hydrogen'. There are three types of hydrogen; atoms with 1 proton and 1 electron (figure 9(ai)) are named *Protium*. Atoms with 1 proton, 1 neutron and 1 electron (figure 9(bi)) are named *Deuterium* (heavy hydrogen), and atoms with 1 proton 2 neutrons and 1 electron (figure 9(c)) are named *Tritium*. Each of these have different electromagnetic properties (as shown by figures 9(bii – biii) and 9(cii – ciii)).

Complex atoms are comprised of protons, neutrons and electron, hence all atoms (except protium) can be said to be made from atoms of deuterium. Deuterium, then, should be seen as 'normal-type' hydrogen, with protium and tritium seen as 'variant isotopes'.

How Protons and Neutrons accrete into atomic nuclei

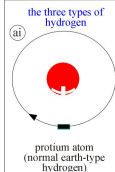
A proton will repel a neutron-positive charge and figure 9(bii – biii) shows how the neutron-negative electron-magnet inside a captured neutron behaves like a miniature electron-magnet and orbits a proton, hence, a neutron can orbit a proton without touching the proton. The neutron-negative, in this case (deuterium), behaves as an electron orbiting in a first '*virtual*' orbital shell. The positive proton will still have a propensity to attract any passing free negative electron, but because a captured negative electron cannot orbit the proton in the same orbital plane as the neutron-negative electron-magnet [for reasons given in figure 7(d – e)] the orbital planes of the electron and neutron-negative will be displaced by 90°, as shown in figure 9(bii). Hence, deuterium cannot radiate helically polarised electromagnetic energy (gravity waves).

A proton:neutron combination may be joined by another neutron (figure 9(ci – ciii)). In this case, the magnetic moments of the two neutron-negatives attract to form a stable pair either-side of the proton. The neutron electron-magnets maintain a constant azimuth as they orbit the proton (they do not 'topple' as they orbit). The positive proton will still have a propensity to attract any passing free negative electron but because a captured negative electron cannot orbit the proton in the same orbital plane as the neutron-negative electron-magnet [for reasons given in figure 7(d and e)] the orbital planes of the electron and neutron-negatives will be displaced by 90°, as shown in figure 9(cii). Hence, tritium cannot radiate helically polarised electromagnetic energy (gravity waves).

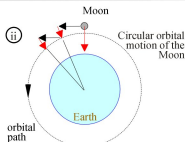
How 2 deuterium atoms fuse together to form Helium

Figure 10 shows the conditions required to make 2 deuterium atoms fuse together to make 1 helium atom. Fusion can take place only when the particles are positioned in the way shown. It is important to note that each neutron-negative electron-magnet magnetic field is locked-together magnetically with each of the electron-magnet magnetic fields. Because of this the neutron electron-magnets topple with the orbiting electromagnets. Helium, like hydrogen, thus radiates gravity waves.

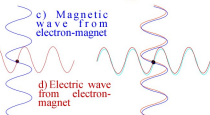
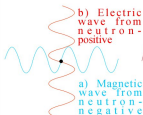
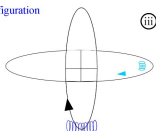
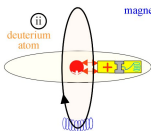
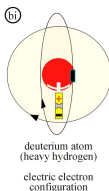
The Electromagnetic properties of Hydrogen



a) Hydrogen, the simplest of atoms, contains only 1 proton which is orbited by 1 electron. The electron is attracted to the positive proton but does not crash into the atom—for the same reason that the Moon does not crash into the Earth (right)

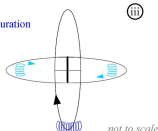
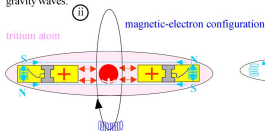
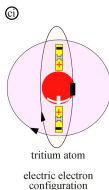


Newton reasoned that the Moon is continually falling towards the Earth with the same force and acceleration as a falling apple. At the same time, it is moving away from the Earth in its journey through space. The resulting motion captures the Moon in Earth's orbit (shown by the broken circular line).



(a and b) + (c and d)

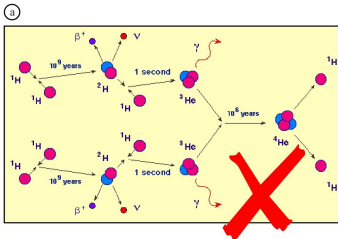
Figure 7 showed how the first two orbital shells are offset by 90° . In this case, the neutron-negative occupies the first orbital 'radius'. The electron-magnet orbit must therefore be offset by 90° , as shown. Because of this, the electric wave from the neutron-positive clashes with the magnetic wave from the orbiting electron-magnet and vice versa and the two electromagnetic waves cancel. Hence, deuterium cannot radiate gravity waves.



The two neutron-negative electron-magnet fields are attracted magnetically and thus form a stable union as they spin around the proton. The plane of the electron-magnet, as with deuterium, is offset by 90° . The electromagnetic gravity waves from the neutron electron-magnets and electrons thus cancel. Tritium, therefore, does not radiate gravity waves.

figure 9.

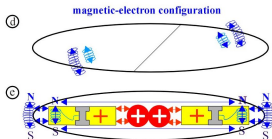
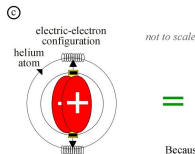
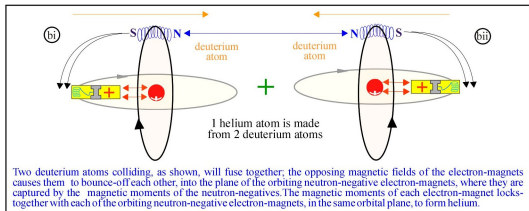
How to make Helium?



Physicists believe that the proton-proton chain-reaction (*left*) explains how helium is made, inside stars. They imagine this because they believe the atom is electrical, when it is, in fact, electrical, for only half of the time and magnetic for half of the time. By ignoring the magnetic properties of the atom they ignore 50% of the available information, which explains why they cannot understand how helium is actually made. They also cannot understand why hydrogen and helium are the most effective of elements, when used for super-cooling.

How is helium actually made? And, what makes liquid hydrogen, and helium, so cold?

How 2 deuterium atoms fuse together to form 1 Helium atom



Because the electron-magnets share the same orbital plane as the neutron-negative electron-magnets, they drag the neutron-negative electron-magnets along with them as they topple and orbit the nucleus. All of the magnetic moments are thus coupled-together. Hence, the gravity waves from the neutron-negative electron-magnets and those from the electron-magnets are in phase. Only protium and helium are electrically and geometrically symmetrical, allowing them to spin axially and autonomously and radiate gravity waves—they both [autonomously] suck-in ambient heat and re-radiate the energy as gravity waves. That's why liquid hydrogen (protium) and helium are the most effective and efficient super-cooling elements.

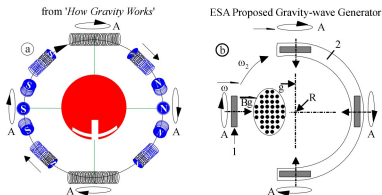
At 0° and 180° the electrons are electric and negatively charged. The protons are, hence, stretched between the electrons. The neutron-negative electric charges help repel the orbiting electrons and prevent them from crashing into the protons.

How to make the elements

Work-in-Progress

In 2006, two renowned physicists at the European Space Agency (ESA), in Vienna, discovered that spinning CD drives somehow generate a tiny gravitational field above the disc. Experiments with shielding showed that the force was not due to any other extraneous factors, such as air-flows around the disc. They then built a device consisting of (b, below) 4 permanent magnets [labelled as '1'] toppling around plane 'A', equally spaced around a rotating disc [2], that emulated the effect. They did not understand how the device worked, but filed for Patent protection for their 'Gravity Generator' with the International Patent office in Austria.

Now that we understand how gravity works, it is easy to see how the 4 toppling magnets in (b) will produce helically polarized magnetic waves (gravity waves), in exactly the same way as they are produced by the toppling electron-magnet in a hydrogen atom, (a).



Details of the Patent Application:

Method for Generating a Gravitational Field & Gravitational Field Generator

Pub.No.: WO/2007/082324 International Application No.: PCT/AT2007/000002
 Publication date: 26.07.2007 Applicants: Austrian Research Centres GMBH-ARC [AT/AT]
 Donau-City-Strasse 1, A-1220 Wien (AT) (All except US)
 Tajmar, Martin [AT/AT; (AT) (US Only); De Matos, Clovis J. [FR/FR]; (FR) (US Only)
 Inventors: Tajmar, Martin: (AT) De Matos, Clovis J.: (FR) Agent: Widhack, Helmut; Landstrasse
 Hauptstrasse 50, A-1030 Wien (AT). Priority Data: 19.01.2006.

The International Patent Office could find nothing wrong with the device. It did appear to work but, on the 21st October, 2008, the Patent Application was denied on the grounds that: 'A person skilled in the Art does not know how a gravitational field can be generated', meaning that 'no-one knows how gravity works'. The Examiners' preferred to recognise that the observed effect may be due to some other unknown force. Notwithstanding, the device and the experiments that led to its design amount to prima facie experimental evidence that supports the efficacy of *How Gravity Works*. However, failure of the Patent Application, using their apparatus, is unimportant because there is a far simpler way to generate gravity waves using a method I term 'Periodic Scaling' (see overleaf).

Therefore the ESA Patent Application for **Method for Generating a Gravitational Field & Gravitational Field Generator**, Pub. No.: WO/2007/082324 International Application No.: PCT/AT2007/000002 needs to be re-written and re-submitted explaining how gravity works, supported by 'How Gravity Works' by Maurice Cotterell

E-Cat generator not 'cold fusion'

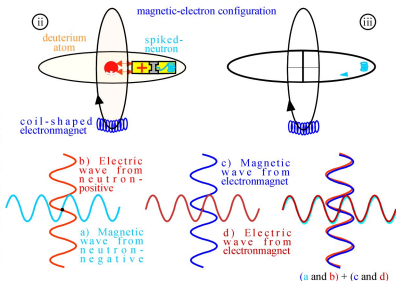
The Energy Catalyzer (also called E-Cat) is a purported *cold fusion* or Low-Energy Nuclear Reaction (LENR) heat source built by inventor Andrea Rossi with support from physicist Sergio Focardi. An Italian Patent, which received a formal but not a technical examination, describes the apparatus as a 'process and equipment to obtain exothermal reactions, in particular from nickel and hydrogen'. Rossi and Focardi say the device works by infusing heated hydrogen into nickel, transmuting it into copper and producing heat. An International Patent Application has received an unfavourable International preliminary report on patentability because it seemed to 'offend against the generally accepted laws of physics and established theories' and to overcome this problem the Application should have contained either experimental evidence or a firm theoretical basis in current scientific theory. (<http://www.peswiki.com>)

How they think it Works: The Energy Catalyzer works—they believe—by placing nano to micro sized particles of nickel powder in a reactor along with pressurized hydrogen gas and special undisclosed (for proprietary reasons) catalysts. When the contents of the reactor is heated (using a series of resistors in the reactor) to approximately 400 to 500°C., nuclear reactions start taking place. The strength of the reaction can be changed by varying the pressure of the hydrogen in the reactor. The output energy can be up to 400 times the input energy. No precious metals or radioactive substances are placed in the reactor. After the reactor is turned-off the reactor can be opened and no radiation can be detected. The process *appears*

to transmute nickel into copper and trace amounts of other elements such as zinc. It will not work with deuterium (heavy hydrogen)—but they don't know why. Now that we understand how gravity works we can understand how the e-cat generator works; it actually works by gravity wave excitation—Periodic Scaling (see next page); the hydrogen fuel, used in the process, sucks-in ambient heat and converts the heat to gravity waves—that's why liquid hydrogen is the most effective super-coolant. The corkscrew-style electromagnetic gravity waves from the hydrogen atoms then excite the nickel atoms causing the nickel to get hotter. The hydrogen fuel then sucks-in more heat from the nickel and radiates more gravity waves that again bombard the nickel. Some of the fuel is consumed in the process. This cumulative excitation continues until the availability of heat in the ambient air, and nickel, is constrained by energy transfer considerations.

**FREE
ENERGY?
YES
but it's not
'Cold Fusion'**

The first two atomic orbital shells are offset by 90°. In this case, the neutron-negative occupies the first *virtual* orbital 'radius'. The electron-magnet orbit must therefore be offset by 90°, as shown. Because of this, the electric wave from the neutron-positive clashes with the magnetic wave from the orbiting electron-magnet, and vice-versa, and the two electromagnetic waves cancel. Hence, deuterium cannot radiate gravity waves.

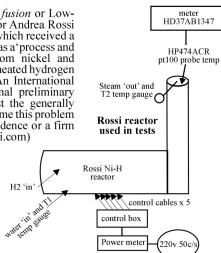


Here's the 'smoking-gun'; the E-Cat generator will not work with deuterium [heavy hydrogen]—because deuterium cannot radiate gravity waves

Proof, if proof were needed, that the process must work by 'Periodic Scaling'

figure 13.

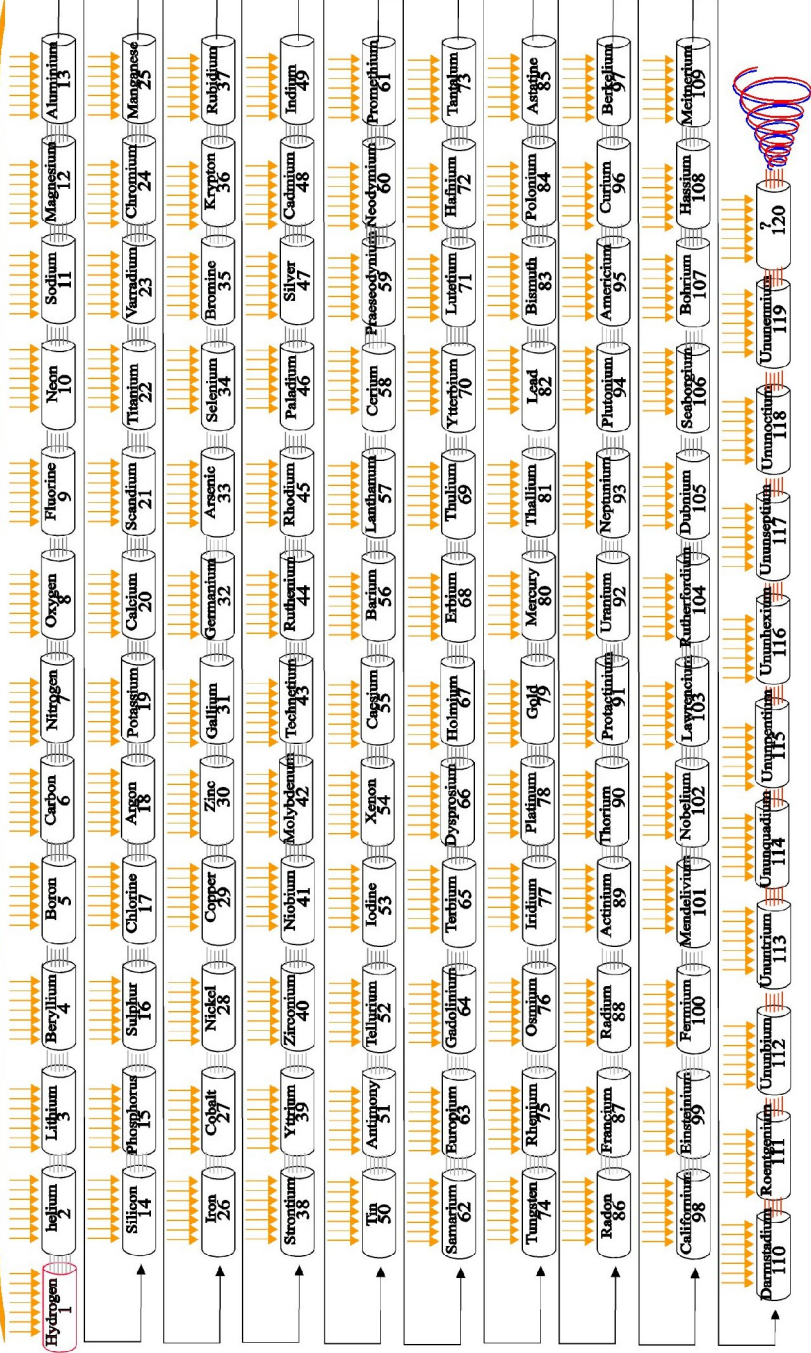
14



Hydrogen is the prime mover in the gravitational mechanism because it spins axially and autonomously and, hence, radiates gravity waves

Fill each of 120 containers with one each of the elements and align the containers in a straight line in rising atomic number order. How does it work? Gravity waves from the hydrogen atoms in the hydrogen container will bombard the container next in line containing helium. The helically polarized electromagnetic gravity waves from the hydrogen container will act upon the spiked-neutrons in the helium atoms causing the helium atoms to spin axially in the same direction. The helium atoms will now generate and radiate helically polarized gravity waves, sucking-in ambient heat to fuel the process. In this way ambient heat is converted to gravity waves and more heat. Helically polarized gravity waves from the helium atoms will act upon the spiked-neutrons in the lithium atoms causing those atoms to spin axially in the same direction. The lithium atoms will now generate and radiate helically polarized gravity waves, again, sucking-in ambient heat to fuel the process. This sets up a chain reaction along the line of containers: hydrogen, the prime-mover, activates every atom in the chain. Containers along the chain will become increasingly hotter and massive amounts of gravitational energy and heat will radiate from the end of the chain following atom 119, ununennium. [from *FUTUR/SCIENCE—forbidden science of the 21st-century* by Maurice Cottrell].

The E-Cat generator uses 'Periodic Sealing' to generate heat in the same way; the hydrogen fuel, used in the process, sucks-in ambient heat and converts the heat to gravity waves—that's why liquid hydrogen is the most effective super-coolant. The corkscrew-style electromagnetic gravity waves from the hydrogen atoms then excite the nickel atoms causing the nickel to get hotter. The hydrogen fuel then sucks-in more heat from the nickel and radiates more gravity waves that again bombard the nickel. Some of the fuel is consumed in the process. This cumulative excitation continues until the availability of heat in the ambient air, and nickel, is constrained by energy transfer considerations.



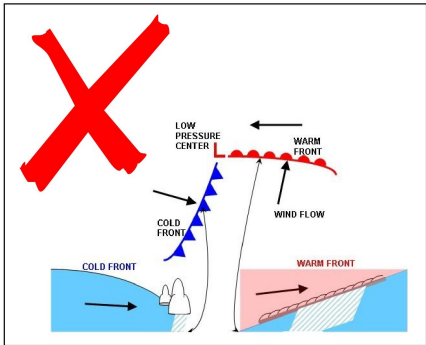
Confidential

How to make water from hydrogen gas and oxygen gas

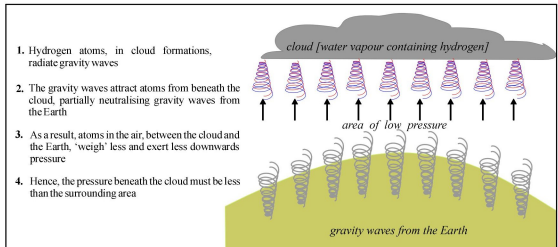
Work-in-Progress

Confidential

How a low pressure weather system is caused



Now that we understand how gravity works we can understand how a low pressure weather system is really caused:

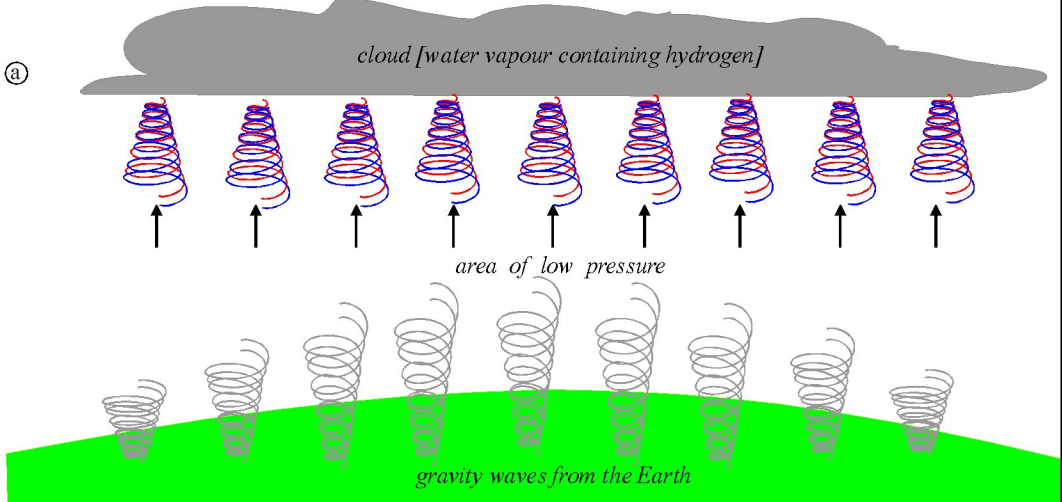


everything you thought you knew about the weather is wrong

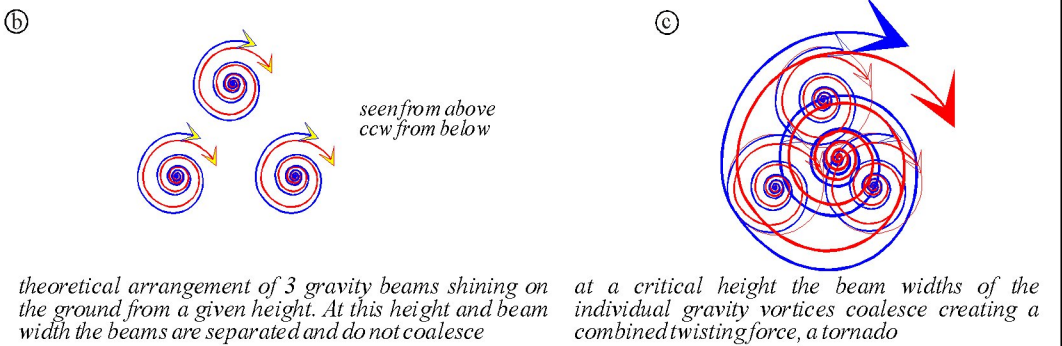
How to create a man-made tornado

Scientists do not understand how a tornado is made, because they don't understand how gravity works...

Hydrogen atoms, in cloud formations, radiate gravity waves which attract atoms from beneath the cloud—partially neutralising gravity waves from the Earth. As a result, atoms in the air between the cloud 'weigh' less and exert less downwards pressure. Hence, the 'low pressure' beneath the cloud must be less than the surrounding area.



The development of a tornado depends upon the cloud density, the humidity and temperature of the air and the height of the cloud from the ground. When gravity vortices touch each other they coalesce to create a common centre of rotation and attractive force



a beam of gravity waves, generated by an orbiting satellite, could short-circuit gravity wave beams from rain clouds, providing the critical mass to create a tornado

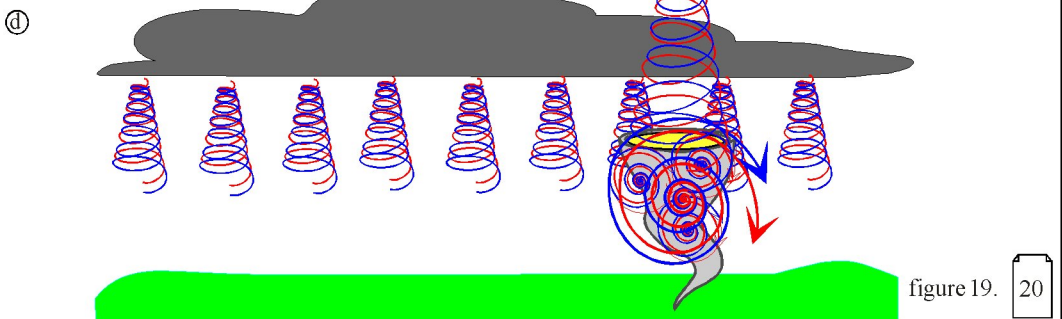
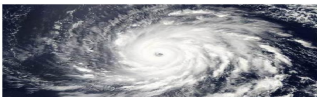


figure 19.

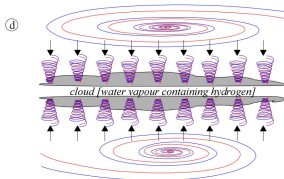
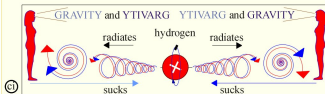
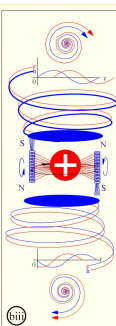
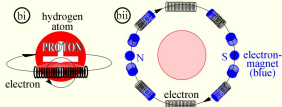
The cause of double-spiral cloud formation in Hurricanes

(a)

Scientists do not understand why the cloud formation of a hurricane follows a double-spiral pattern—because they do not understand how gravity works. Now that we understand how gravity works, it's easy to see why:



There are two types of gravity wave; gravity waves that travel towards the observer are known as GRAVITY waves. Gravity waves that travel away from the observer are known as YTIVARG waves. The two are separated by 180° because of the way they are generated inside the hydrogen atom (see the boxed illustration, right).



Hot evaporated sea water, 5° – 20° either-side of the equator, creates cloud that radiates GRAVITY and YTIVARG waves that coalesce and aggregate into spiral gravity vortices, above and below the cloud. Low pressure beneath the cloud sucks-in more cloud and a double-spiral hurricane cloud pattern adopts the pattern of the vortices. As more cloud is sucked-in the amount of GRAVITY and YTIVARG increases, accelerating the process. Heat from the ocean feeds the hydrogen atoms creating more and more GRAVITY and YTIVARG. When the disturbance reaches land the input temperature falls, depriving the hydrogen atoms of input energy, reducing the amount of GRAVITY and YTIVARG and the strength of the hurricane.

figure 20.

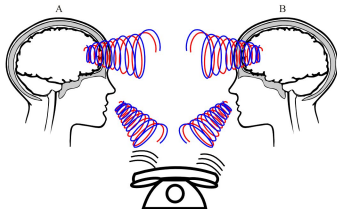
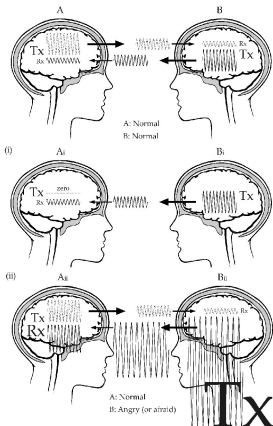
How telepathy works

Subject A generates electrical impulses (thoughts). These electrical signals, in common with any electrical activity, radiate into space. The thoughts of A are shown as Tx (transmit). This electromagnetic wave, under normal conditions, travels from the brain of A. The bone and tissue of A reduce the level of the radiated signal. Subject B is in turn bombarded by this same wave from A, but the tissue and bone of B further attenuate the wave, so that by the time A's wave reaches the brain of B it is very weak (denoted as Rx, the received wave, inside the head of B). The received wave is below the level of B's own brainwaves, and hence A's weak wave is lost, submerged in the 'noise' of B's own thoughts. For B it is like attempting to distinguish a faint whisper inside a room full of loud music. The same would be true for the radiated thoughts of B which impinge on A.

(i) shows that subject Ai has learned to switch-off his brain completely; subject Ai therefore does not radiate any electrical activity. This is possible through mind control (meditation) which, with practice, empties the mind of all thoughts. Ai can now read the thoughts of Bi—which explains why lesser creatures, like dogs, whose brain activity levels are low (compared to humans) are able to detect the thought of their owners, and also why they are said to be able to 'sense' fear. It also explains why all scientific experiments, seeking to understand telepathy, are doomed to failure because the only way to experiment with telepathy is to 'switch off' the brain, which clearly precludes participation in the experiment.

(ii) shows another other condition where telepathy is possible; clearly, if the brainwave of Bii can be amplified, then Bii will transmit a much larger signal than normal. By the time it reaches the brain of Aii it will still be a 'louder' level than Aii's own brainwaves, and Aii will be able to detect the thoughts of Bii while fully conscious.

There are two ways to force Bii to amplify the electrical signals within his own brain, having done this the thoughts of Bii can be detected (his mind can be read). The first way is through fear, the second through anger. To read the thoughts of others it is necessary only to make them angry.

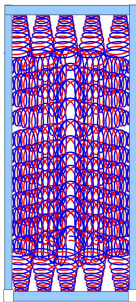
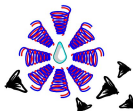


Now that we understand how gravity works we can understand how telepathy works; normally, the relatively low frequency of brainwaves prevents them from traveling more than a few metres through space, however, brainwaves modulate the radio frequency of gravity waves, given-off by all humans, allowing them to travel thousands of miles. They also bombard telephone handsets and are thus carried over the international telephone networks. Have you ever thought of someone and—just then—the phone rings? That's telepathy.

Gravity wave Barrier

How does it work ?

1. Hydrogen atoms, in raindrops, radiate gravity waves
2. Flies see in the ultraviolet range—they can see gravity waves
3. Raindrops injure or crush flies
4. In order to survive, flies avoid raindrops



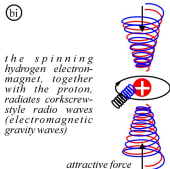
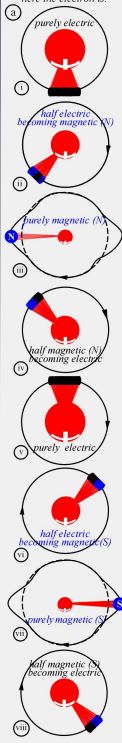
The loop of 1" plastic pipe is filled with water that radiates gravity waves. Flies *avoid the gravity wave barrier to avoid injury from raindrops.*
[note; works best with mosquitos and tiny flies]

Uses: Gravity wave barriers could be fitted to factory-sealed double-glazed door-frames and window frames; to isolate food preparation areas; to create fly-free medical hygiene zones, or; to ensure fly-free industrial clean-room process areas.

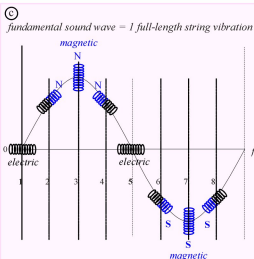
What is Music—why does some music make us feel good, and some music make us feel bad?

As the coil-shaped hydrogen electron orbits the hydrogen proton it slices through the electric field between the particles and a magnetic field is induced into the electron. The induced magnetic field then parries against the electric field, causing the electron to twist vertically. Hence, the spinning hydrogen 'electron-magnet' changes from a purely electric particle to a half-magnetic-half-electric particle, to a purely magnetic particle, as it orbits the hydrogen proton, resulting in 7 different electromagnetic states;

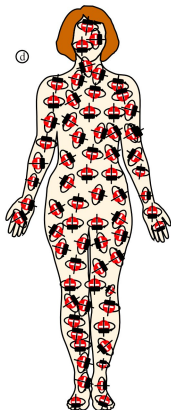
here the electron is:



hydrogen atoms, in the air, water, blood, and living tissue, point in different directions randomly;



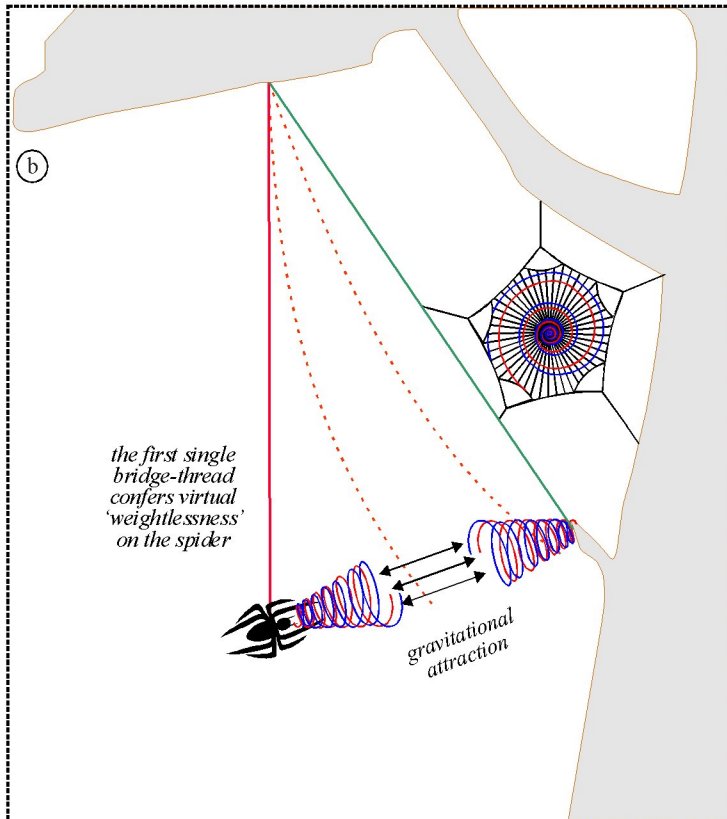
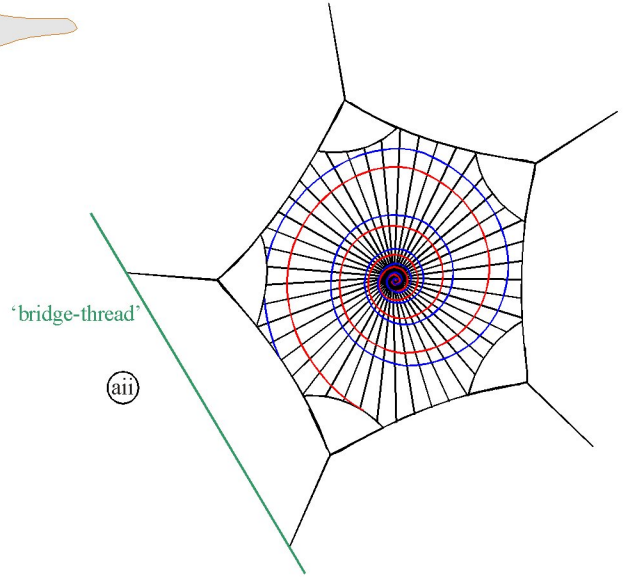
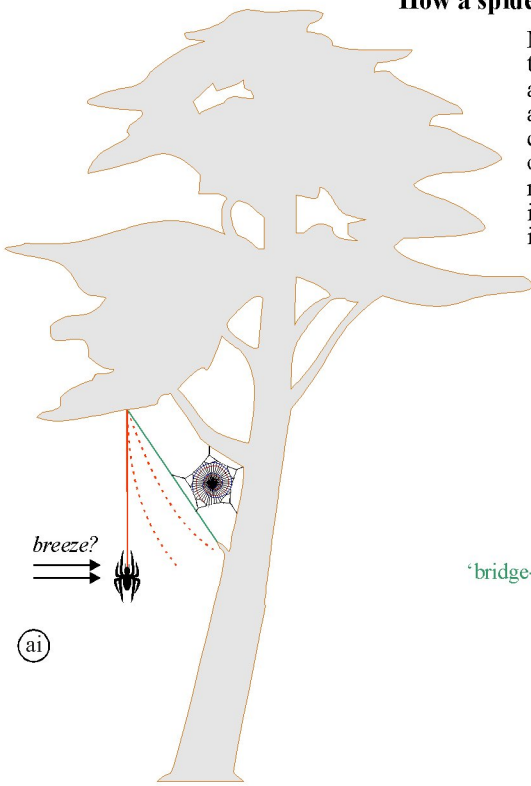
As the electron-magnet orbits the proton it can assume only 3 pure energy states, corresponding to; electric, magnetic or electromagnetic (balanced), that occur at 8 different angular nodes (figures (i) – (viii)). However, because the electric vibrations are exactly the same (figures (1) and (5)) only 7 different states of purely electric, purely magnetic and purely electromagnetic activity subsist. Gregorian monks, aware of these 'heavenly' states, learned to augment the vibrations using 7 different harmonic incantations that later became known as the musical notes of Ut, Re, Me, Fa, So, La, Ti; corresponding to the modern-day notes of Doh, Ray, Me, Far, So, Lah, Tee, Doh [the so-called 8th note, Doh, does not belong to the series but is actually the first note of the next so-called 'octave']. Hence, harmonious musical vibrations inspire electron-magnetic vibrations that resonate with 1/8th [or 2/8ths—in the case of purely electric] of the atoms in the body at any one time, making us feel good. Vibrations that do not accord to the electron-magnet wavelength intervals are conveyed as sharps or flats that cause unease. God, is light (electric, magnetic and electromagnetic vibration). In singing the praises of God, the Gregorian Monks became one with the Godly energy inside them.



The ear converts vibrations into electromagnetic signals that impinge upon the brain, stimulating electromagnetic activity in 1/8 of the atoms in the body, at just the right time—like the pushing of a child on a playground swing—providing purely electric, or magnetic, or electromagnetic impetus to orbiting electron-magnets in those atoms, at just the right time. This results in variations in the amount of gravity waves produced by those atoms. Some music actually does make us 'heavier' [for trillions of a second] and some music makes us 'lighter'; hence the expressions of 'light' music and 'heavy' music.

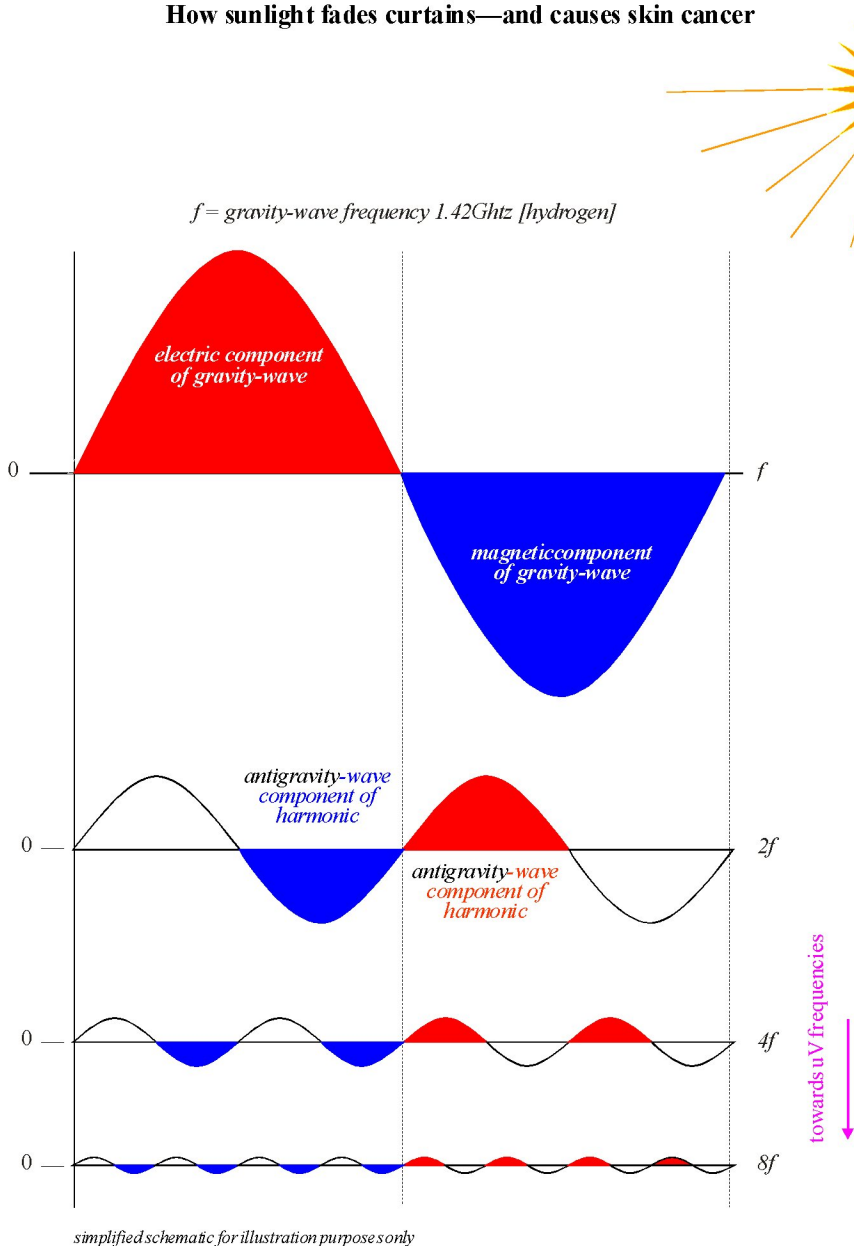
How a spider builds a web

Modern-Science says that, in order to begin building a web, the spider hangs from a single thread (the 'bridge-thread') and waits for the wind to blow it to the first anchor-point, far away. The spider, then, tightens the bridge-thread and construction of the web follows. But this cannot be the case, otherwise indoor spiders, away from the wind [or any movement of air] could never begin to build a web. Which, in turn, would mean that spiders could not build webs indoors—but they do.



Now that we understand how gravity works, it's easy to see what's really going-on; the bridge-thread (red, and then green) confers virtual 'weightlessness' on the spider. Gravity waves from hydrogen atoms, in the water molecules inside the spider—and from the closest part of the tree—create a mutual force of attraction that draws the spider to the tree, although it appears that the spider is floating in the breeze; which explains why spiders do not need the wind to make a web indoors. Because the *radials* diverge, from the centre of the web outwards, the web produces an electromagnetic gravity-wave *spiral* pattern [in the ultra-violet wavelengths] that can be seen by the spider, which follows the pattern to construct the web *spirals*. This explains why the spider, in the 1973 Skylab experiment, was unable to begin building a web until it had taken a drink of water—the inferred conclusion was that the spider was dehydrated and 'too weak' to begin building a web. But that was the wrong conclusion; the spider could not generate enough gravity waves to begin building the web until it had been fueled with hydrogen, in the water.

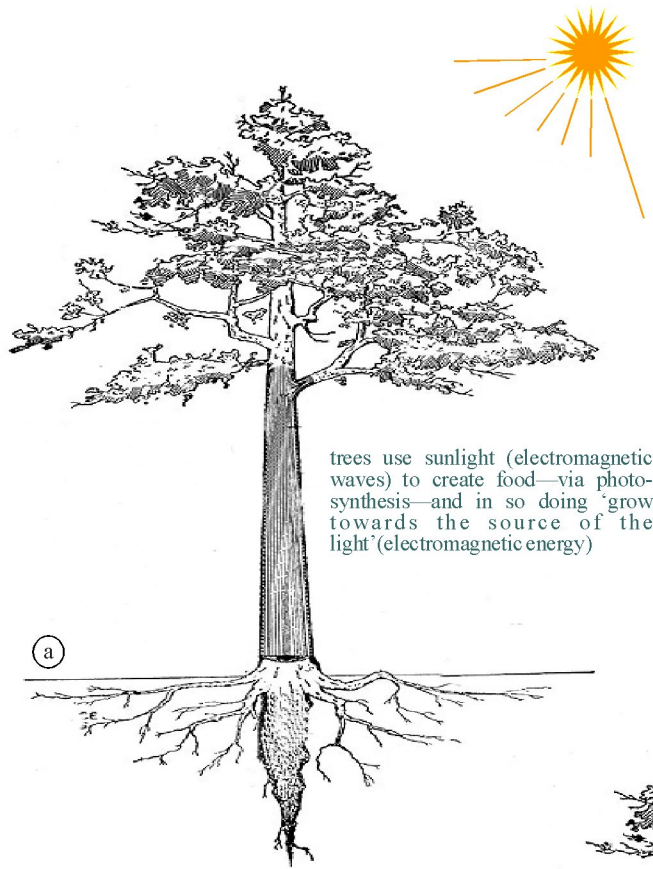
How sunlight fades curtains—and causes skin cancer



Fundamental gravity waves are comprised of many harmonics. Harmonic half-waves (in-filled, as shown, above) oppose the fundamental (f) gravity waves and, hence, amount to 'pulses of antigravity-radiation'. Antigravity radiation, in the ultraviolet (uV) wavelengths*, has the ability to decouple molecular bonds in hydrogen-containing matter, causing the molecular disintegration of that matter; which explains why uV radiation, from the Sun, causes the molecular disintegration of curtain fabric (drapes)—over long periods of time—and why it causes the molecular disintegration of living tissue (skin cancer).

*note: ScienceDaily (January 7, 2011): 'the Orion nebula produces *circularly polarized light [antigravity-radiation]* at levels of 17% in the infra-red wavelengths. It is calculated that it also radiates in the ultraviolet, **radiation which is able to break the [gravity] bonds between the atoms of ice molecules**'.

How tree roots find their way to water



tree roots are also attracted to electromagnetic energy—gravity waves. Hydrogen, in water, gives-off gravity waves; so roots grow towards the source of the gravity waves, that's how roots find their way to water

