

How to make virtually-free hydrogen gas and oxygen gas using antigravity energy

by

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Abstract: It is possible to cause the molecular disintegration of water to produce virtually-free hydrogen gas and oxygen gas.

Conclusion: Electric-antigravity energy may be used to cause the molecular disintegration of water into its constituent parts to produce copious amounts of virtually-free hydrogen gas and oxygen gas.

Contents	i – ii
Abstract	
Conclusion	
Contents	
Preface	iii
Introduction:	
The accepted model of the atom	1
What makes the atom stable?—the ‘new’ atom	
Composition of the stable ‘new’ hydrogen atom	
Composition of the stable ‘new’ helium atom	
Circular orbital motion of the moon	
How Gravity Works	2
Abstract	
Conclusion	
The nature of the gravitational force	
How atoms generate and radiate radio waves —the Inductance cycle	3
How atoms generate and radiate radio waves —the Capacitance cycle	4
How corkscrew-style radio waves affect other atoms	5
Why falling objects accelerate to Earth	6
The Gravitational Constant [G]	
Derivation of Newton’s equation	
Why objects accelerate to Earth in proportion to d^2	
Proof that the electron is a coil-shaped electron-magnet —and electron-shell architecture explained	7
The Gravitational force is alternating magnetism	8

Summary: How Gravity works	9
Why all objects fall at the same acceleration and speed	10
Atomic Bonding	11
Ionic Bonding	
Co-valent Bonding	
Hydrogen bonding is gravity-wave bonding	
The 5 types of Antigravity:	12
Mechanical centrifugal Antigravity	
Mechanical-inertial Antigravity	
Electromagnetic Antigravity	
Electric Antigravity	
Solar gravity-wave Antigravity	
Types of Radio waves:	13
Normal man-made Radio wave	
The Atomic Gravity wave	
How to de-couple gravity bonds in water using Antigravity energy to create virtually-free hydrogen gas and oxygen gas	14
Proof that gravity-waves are non-sinusoidal and, hence, comprise of many harmonics	15
How to make hydrogen using Antigravity energy: Prototype development	16
Antigravity hydrogen generator: Prototype development low voltage method	17
Antigravity hydrogen generator: Prototype development high voltage method	18
Antigravity hydrogen generator: Prototype development high voltage method [with z-spin compensation]	19
An explanation of z-spin (I): Proof that the electron is a coil-shaped electron-magnet—and electron shell architecture explained.	20
An explanation of z-spin (II): Proof that the electron is a coil-shaped electron-magnet	21
Appendix I: Why atoms with spiked-neutrons are stable	22
Appendix II Why Landers crash into Mars	23
Introduction:	
Observation	
Abstract	
Conclusion	
The net strength of the ‘attractive force—within the atmosphere of a spinning planet	24
Effect of an increase in F on the Gravitational Brake	25

Preface

This new 2024 consolidated Paper;

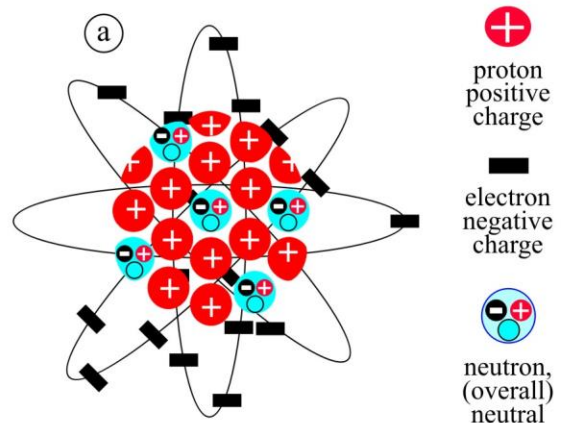
- Explains why the atom is stable: Why the positive protons in the centre of an atom do not spring-apart, why the negative electrons do not get sucked-into the positive nucleus, and why the neutron-negative particle and the neutron-positive do not annihilate each other.
- Explains why the atom is constructed the way it is; with 2.8.18.32.32.18.8.2 electrons in 8 orbital shells.
- Explains why the shells are configured as they are.
- Explains the cause of electron spin.
- Explains the cause of orbital electron perturbation [orbital electron ‘wobble’].
- Explains why an electric current produces a magnetic field and why the magnetic field is 90° to current flow.
- Explains how gravity works; why all objects ‘fall’ to the ground.
- Explains why all objects ‘fall’ to the ground at the same speed and acceleration.
- Explains why cryogenic materials and spinning discs levitate.
- Explains the cause of gyroscopic inertia.
- Explains why objects caught within a tornado become weightless.
- Explains the cause of double-spiral hurricane formation.
- Explains the cause of double-spiral galaxy formation.
- Explains what G [the gravitational constant] is.
- Explains how the gravitational force is ‘alternating magnetism’.
- Explains that ‘hydrogen bonding’ is actually ‘gravity-wave bonding’.
- Explains the 5 types of antigravity.
- Explains how ‘electric antigravity’ can be used to cause the molecular disintegration of water to produce virtually-free copious amount of hydrogen gas and oxygen gas.
- Explains how ‘solar gravity wave antigravity’ causes the molecular disintegration of colour molecules in curtain fabric and how it causes the molecular disintegration of fabric over time.
- Explains how ‘solar gravity wave antigravity’ causes skin cancer.
- Provides a generic design for a ‘virtually-free hydrogen’ generator; using low voltage, high voltage, and high voltage with z-spin compensation.
- Explains why landing-craft have crash-landed on Mars; due to the slower speed of axial rotation (and reduced size) of the planet—and the consequential reduction in centrifugal force—and the concomitant increase in the ‘net attractive force’ of Mars.

Introduction

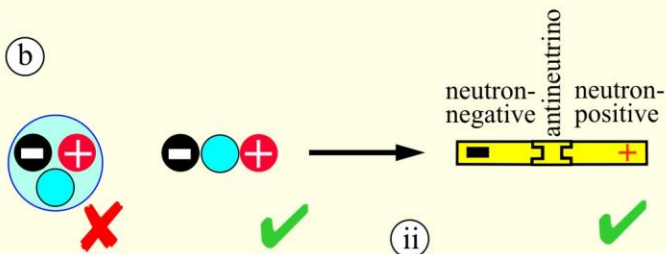
Before we can understand what ‘antigravity’ is, and how it works, we need to question ‘what kind of atom is ‘stable’ i.e ‘capable of accommodating a gravitational mechanism?’ What causes atoms to attract each other?’ and ‘How does gravity work?’.

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 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?

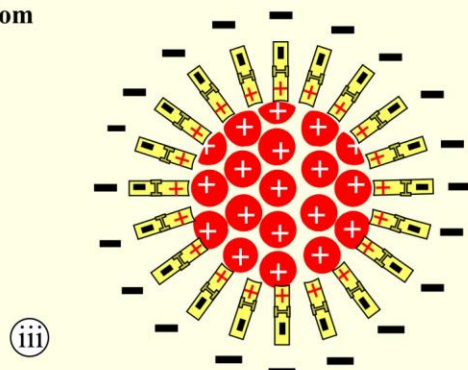


What makes the complex atom stable?—the ‘new’ atom



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

(ii) Here, the three billiard-ball-style particles have been replaced with 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’.



(iii) 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. [A 3-d perspective resembles the spiked-shell of a chestnut].

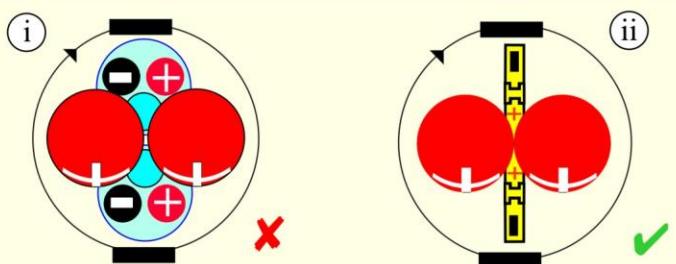
Supporting evidence: Researchers, at the Hahn-Meitner Institute, Berlin, announced that ‘neutrons behave like compass needles’ (Science Daily, 31.3.2008)

Composition of the stable ‘new’ hydrogen atom



a) Hydrogen, the simplest of atoms, contains only one proton which is orbited by 1 electron. The electron orbits the proton for the same reason the moon orbits the Earth (*right*).

Composition of the stable ‘new’ helium atom

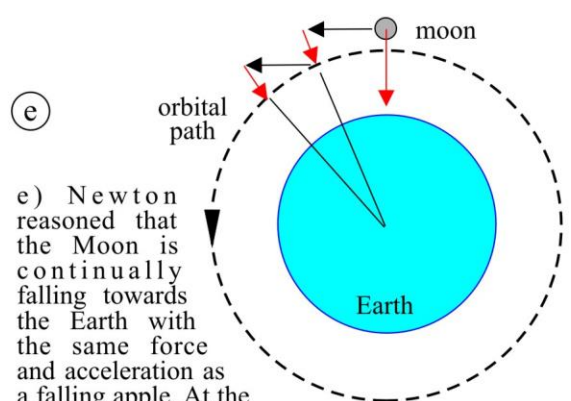


di) Helium atom containing 2 protons, 2 electrons and 2 neutrons—shown the conventional way.

dii) Helium atom containing 2 protons, 2 electrons and 2 spiked-neutrons—shown the new way.

note; see also Appendix 1

Circular orbital motion of the Moon

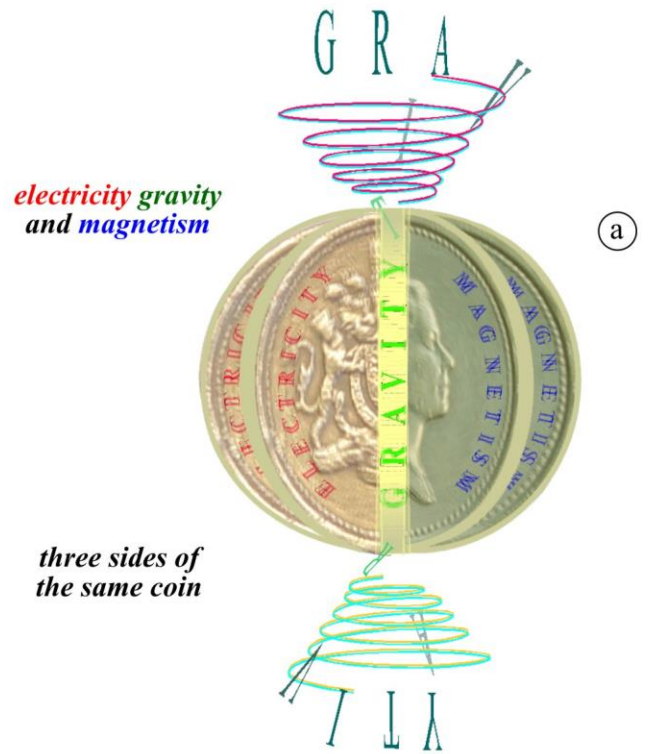


e) Newton reasoned that the Moon is continually falling towards the Earth with the same force and acceleration as a falling apple. At the same time, it is moving away from the Earth in its journey through space. The resulting motion captures the Moon in Earth’s orbit (shown by the broken circular line).

figure 1.

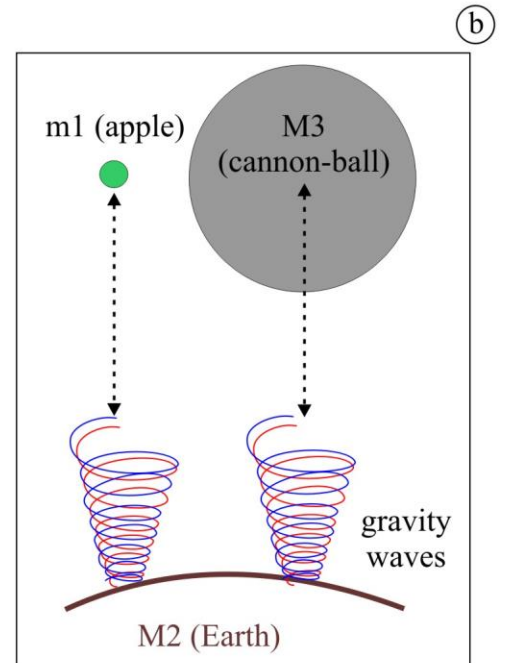
How Gravity Works

Abstract: 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).



Why all bodies fall at the same acceleration and speed

Conclusion: As a falling atom [or m_1] approaches the source of the gravity waves [the Earth, or M_2], the relative frequency of the gravity waves passing through m_1 increases, resulting in an increasing force of attraction—as predicted by Isaac Newton—but only up to a point, beyond which the increasing *centrifugal force* on the electrons prevents the electrons from following the synchronizing spin of the gravity waves; then, the gravitational force, from M_2 upon m_1 , will cease. Thus, centrifugal force creates negative feedback, resulting in an ‘automatic brake’ on any increase in the falling-speed of m_1 towards M_2 —i.e. every atom accelerates to a speed of 32 feet per second [after Galileo], at which point orbiting electron-magnets fail to respond to gravity waves: Consider two objects m_1 and M_3 falling towards M_2 [Earth]. When released, both objects will accelerate. But M_3 , the heavier object (with more mass) will reach 32 feet per second *before* m_1 . So the ‘gravitational brake’ will be applied to M_3 *before* m_1 . M_3 thus becomes weightless, momentarily, allowing m_1 to catch-up. Then m_1 and M_3 begin to accelerate again, together, from the same new position. The alternating magnetic waves from M_2 switch on and off 1,420,405,800 times every second [the hydrogen frequency] hence the ‘automatic brake’ activates 1,420,405,800 times every second. Hence, all objects fall at the same speed. This mechanism explains why and how spinning discs, and objects caught in a tornado, levitate.



The nature of the Gravitational force

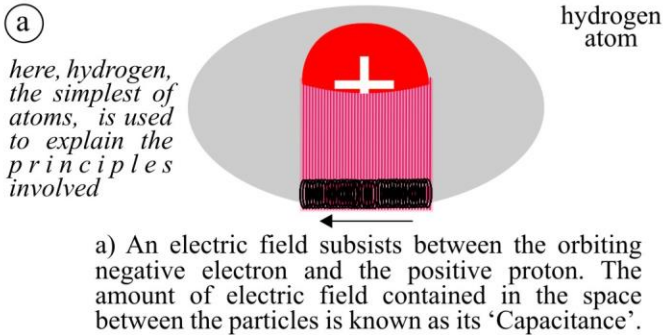
As far as we know, there are only two states of being in our Universe; matter and energy. Each atom, therefore, can send-out only either matter, or energy, or both. In order to send-out matter all atoms would disintegrate over time; which is not known to happen. And, if all particles did disintegrate and send-out particles that bombard neighbouring atoms, then each atom would simply be ‘pushed-away’ by the onslaught of particles; not ‘drawn-together’. Which leaves just one possibility; each atom must give-off some form of energy that travels through space to draw neighbouring atoms together.

As far as we know, the only form of energy capable of travelling through space is electromagnetic energy; radio waves. Which means that the gravitational mechanism, however it may work, requires that all atoms radiate ‘radio waves’. But each man-made radio ‘wave’ is known to comprise of two distinct waves, an electric wave and a magnetic wave that move through space at 90° to each other. With this in mind, it is at first difficult to see how two atoms might be drawn together by such an arrangement. And yet our reasoning assures us that this must be the case. So, what kind of radio wave, radiating from an atom, might be capable of drawing a neighbouring atom towards itself?

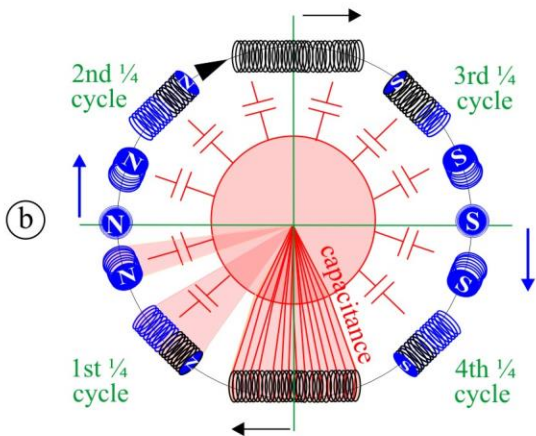
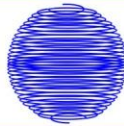
All atoms generate and radiate radio waves, but how they do has never-before been explained:

How atoms generate and radiate radio waves—the Inductance cycle

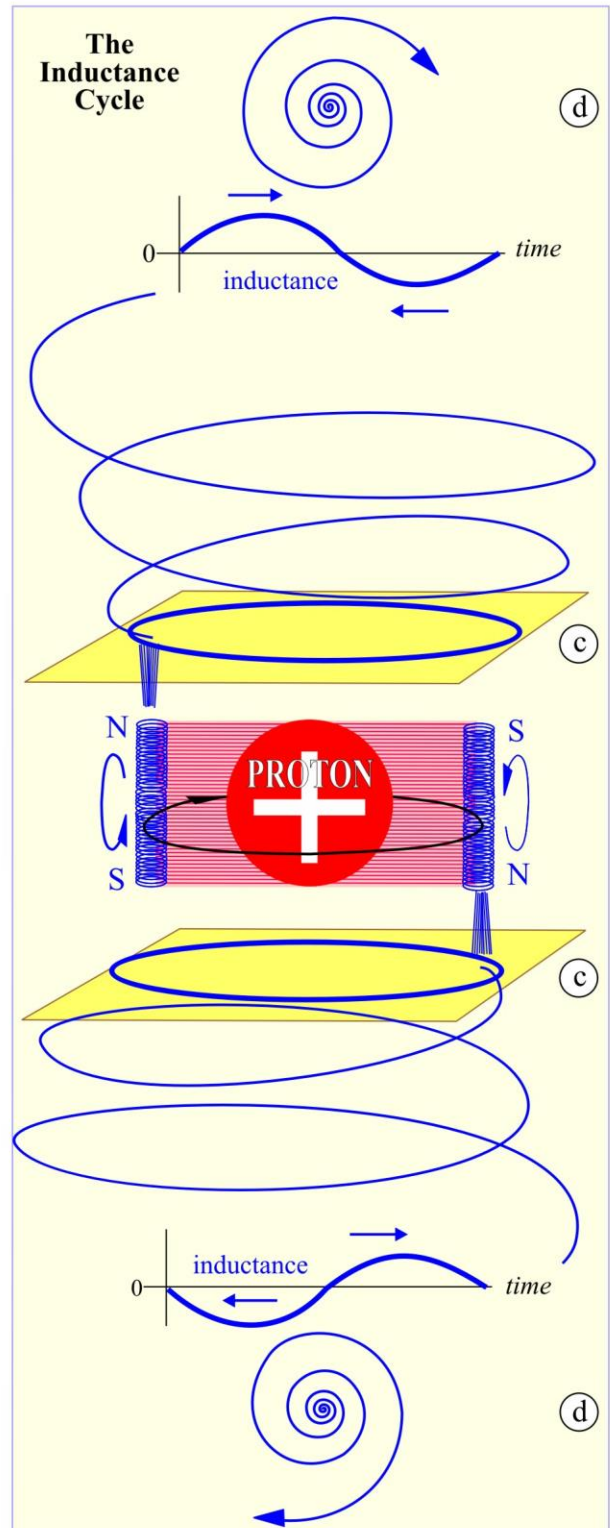
In 1831, Michael Faraday demonstrated that whenever a coil is swiped through an electric field a magnetic field is produced [induced] into the coil. In order to make the atom stable, it was firstly necessary to change the shape of the neutron. In order to understand how atoms generate and radiate electromagnetic waves we must now change the shape of the electron—into a coil-shape.



Note: The electron [electron-magnet] is shown cylindrical to facilitate explanation. It need not be; it could be round—spherically-coil-shaped—or any shape; as long as it is coiled.



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.

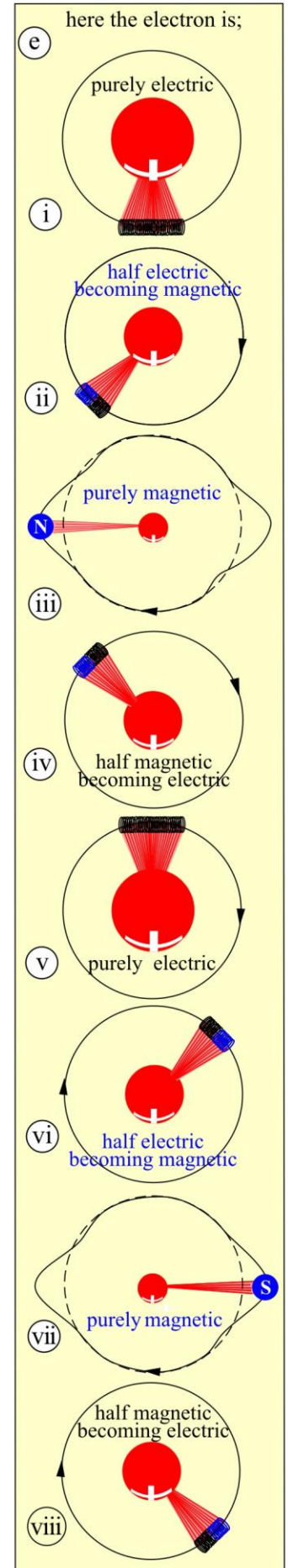
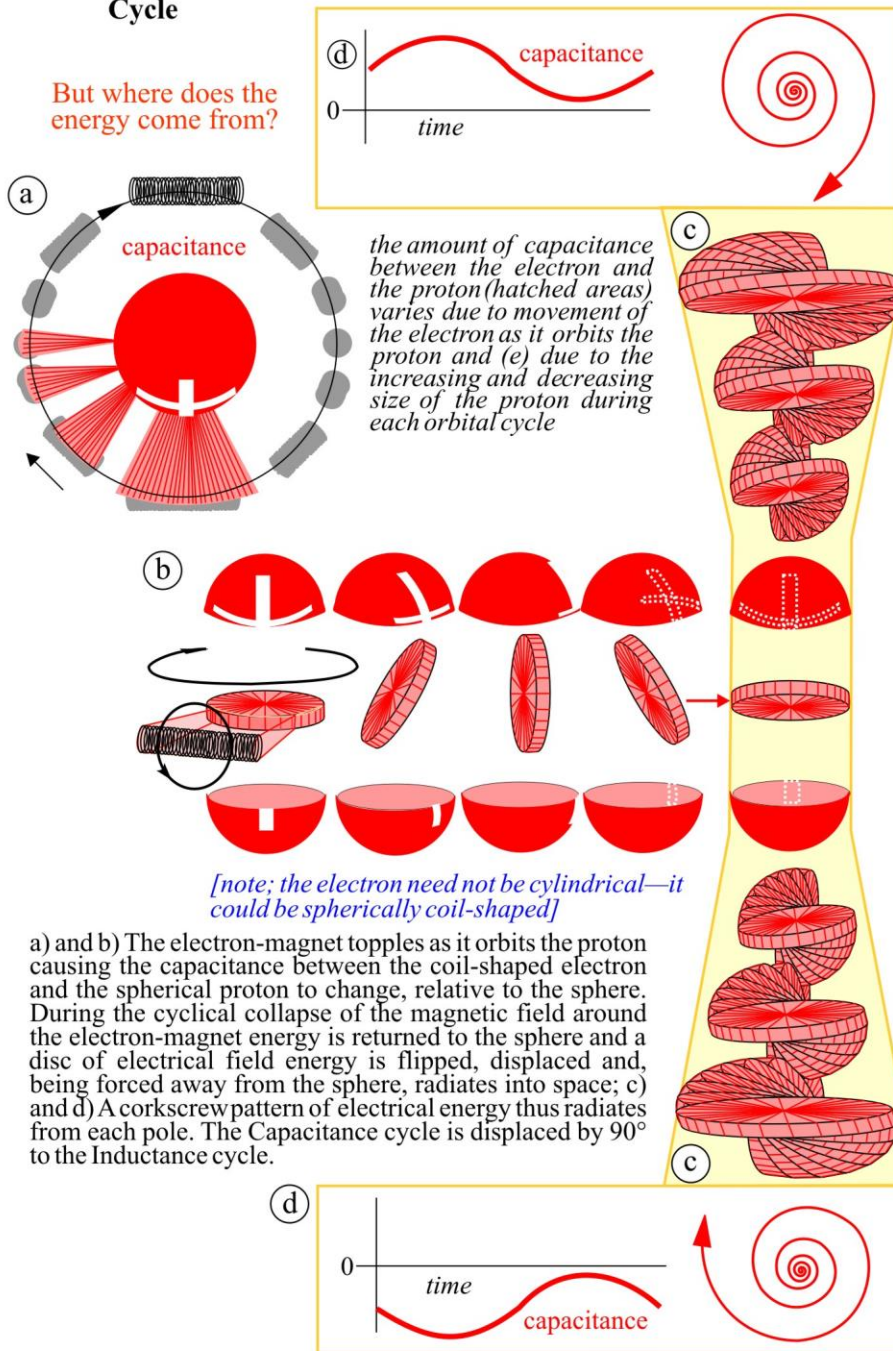


The electromagnetic interaction between the particles causes the electron-magnet to spin once [through 360°] like the opposing blades of a windmill, during each orbit of the proton. c) and d) It can be seen that the electron-magnet radiates helically polarized (corkscrew-style) magnetic energy from the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

How atoms generate and radiate radio waves—the Capacitance cycle

The Capacitance Cycle

But where does the energy come from?



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; **which explains why cryogenic materials levitate**. 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). Thus, an orbiting electron-magnet experiences a 'mechanical cycle' where the proton expands and contracts [e(i) to e(viii)] and the electron-magnet 'spins'. This, for the first time, explains the cause of electron spin and the known orbital perturbation [wobble] of the electron.

figure 4.

How corkscrew-style 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].

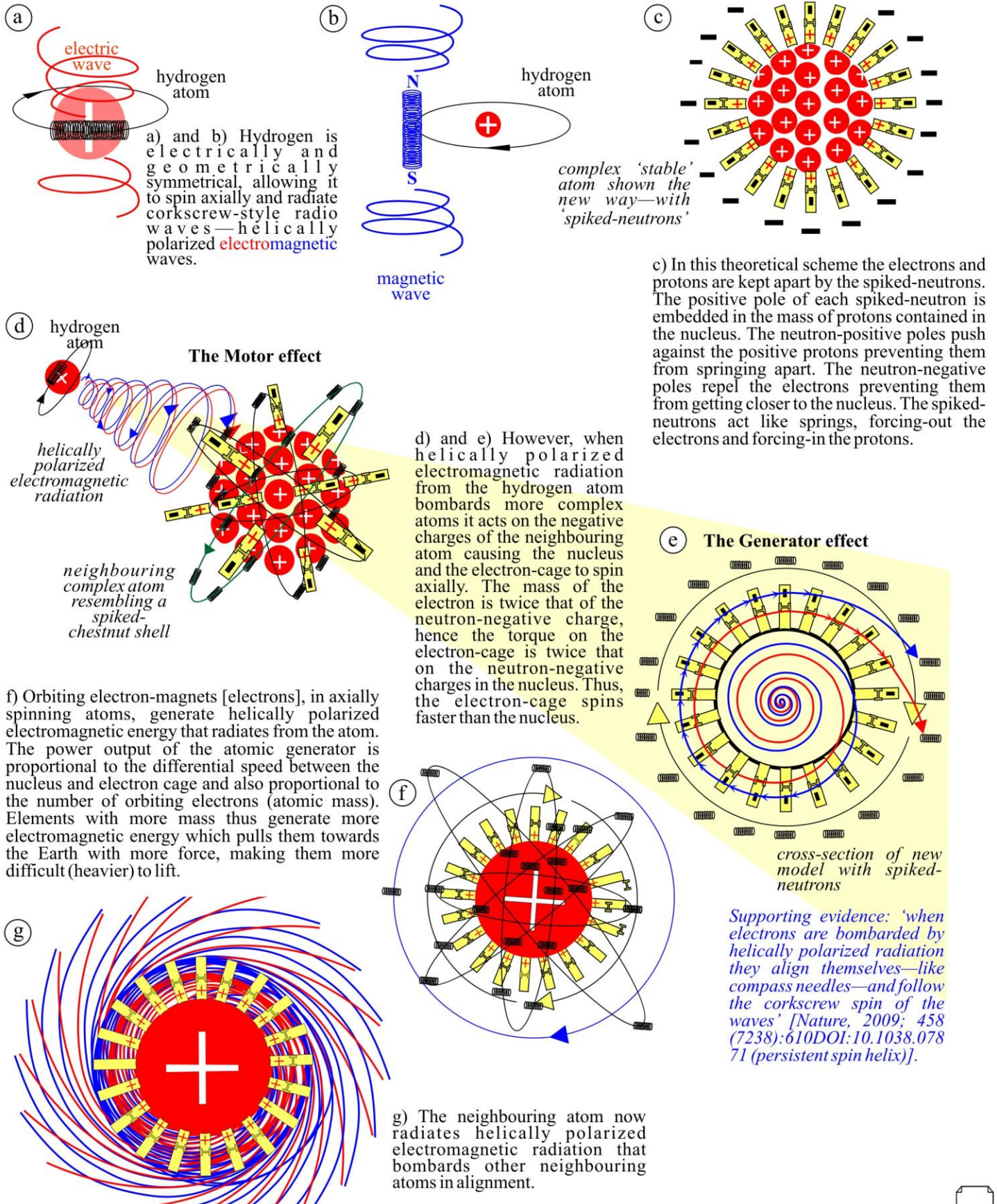
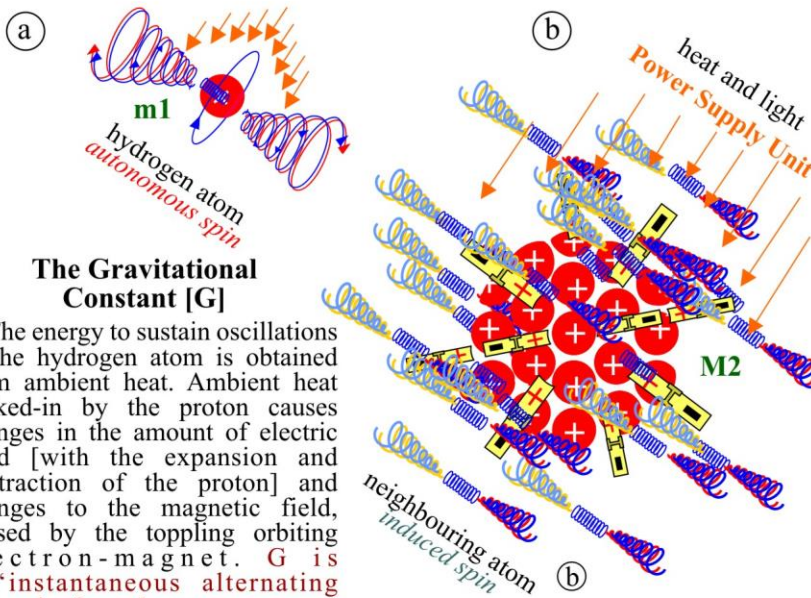


figure 5.

Why falling objects *accelerate* to Earth

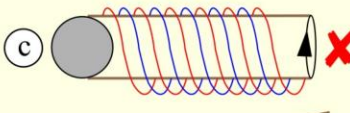
Derivation of Newton's equation

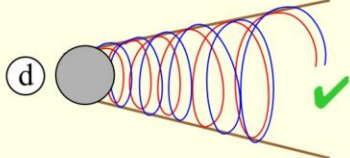


The Gravitational Constant [G]

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'.

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, m_1) multiplied by the number of electron-magnets in atom 2 (a proportion of the mass of atom 2, M_2); or as Newton said, the force (F) can be calculated by multiplying G [the magnetic force of 1 electron-magnet] multiplied by $m_1 \times M_2$. (c) - (e) explain why the result must be divided by the distance (between the two atoms) squared.

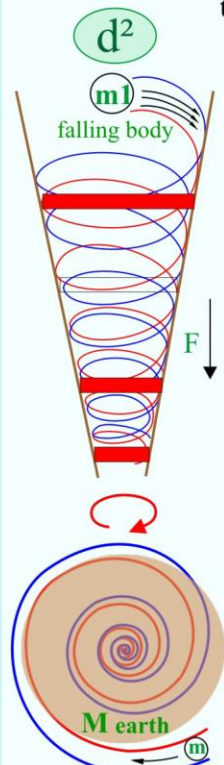
c) A theoretical atom radiating a theoretical gravity wave. 

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

e) 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 (d)].

1	1	1	1	1
2	1/4	1/4	1/16	1/16
3	1/4	1/4	1/16	1/16
4	1/16	1/16	1/16	1/16
5	1/16	1/16	1/16	1/16

f) Why objects *accelerate* to Earth in proportion to d^2



f) The frequency of the helically polarized EM radiation from the Earth remains constant. However, as m_1 approaches M_2 the spiraling EM radiation accelerates the differential rotation between each atomic nucleus and electron cage of which m_1 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_1 and M_2 in accordance with a square-law scale as m_1 proceeds along the EM spiral. M_2 thus attracts m_1 with square-law [d^2] uniform acceleration.

[m_1 is shown spiralling towards M_2 with the EM wave stationary but, in actuality, m_1 approaches M in a straight line as the wave spirals across m_1]

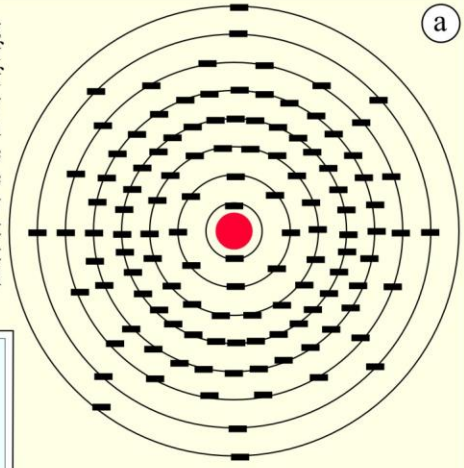
Hence Isaac Newton's equation for the force of gravity; where the force is proportional to the masses (m & M) of the two attracting bodies and the strength of the force decreases inversely with the square of the distance between them (d^2).

$$F = GmM/d^2$$

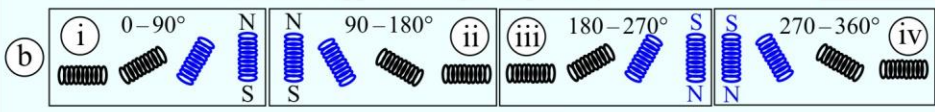
G is Newton's gravitational Constant
 $6.672 \times 10^{-11} \text{ N m}^2 \text{ kg}^{-2}$
 —the instantaneous alternating magnetic force between any two electron-magnets in neighbouring atoms

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

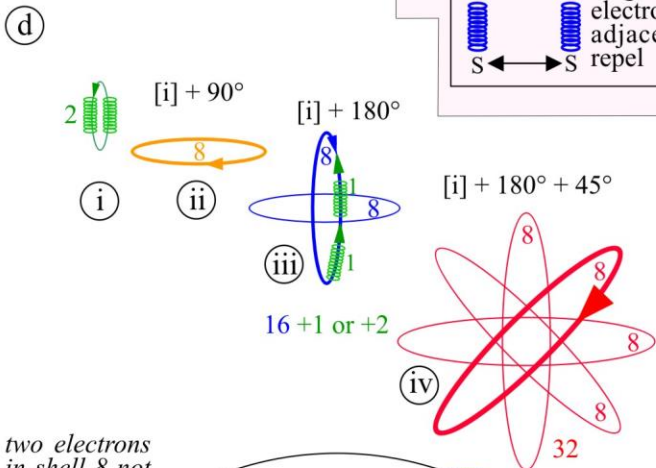
a) Schematic showing the theoretical maximum numbers of electrons filling the maximum number of available shells in an atom. The maximum number of electrons in the shell closest to the nucleus is 2. The maximum number of electrons in the next outermost shell/subshell is 8, followed by shells/subshells 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) when a N-S electron-magnet meets a N-S electron-magnet in an adjacent shell they repel

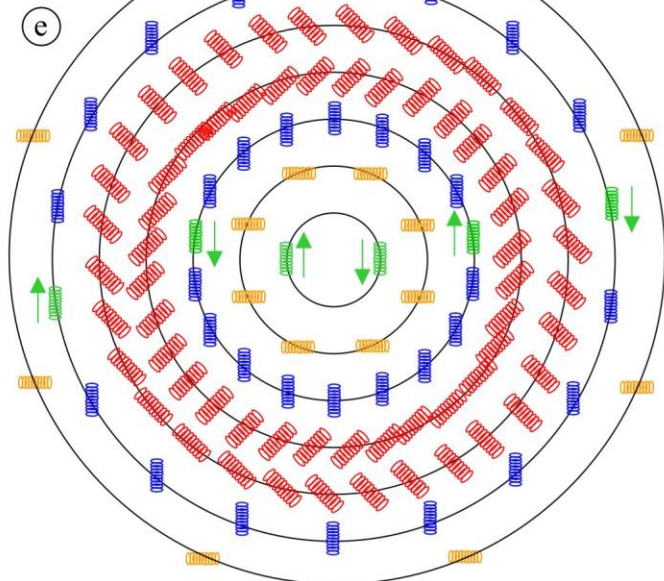
(ii) when a S-N meets a N-S the two coalesce and the pair can no longer remain in the shell. Only atoms with a [maximum] sequence of 2.8.18.32.32.18.8.2 survive.

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 x 45° = 360] 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 reorientated; 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

two electrons in shell 8 not shown



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

figure 7.

[recap] 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 force is alternating Magnetism



1. 93% of atoms in the Universe are hydrogen atoms.

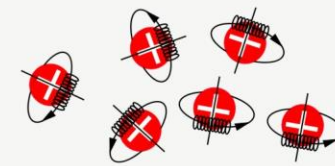
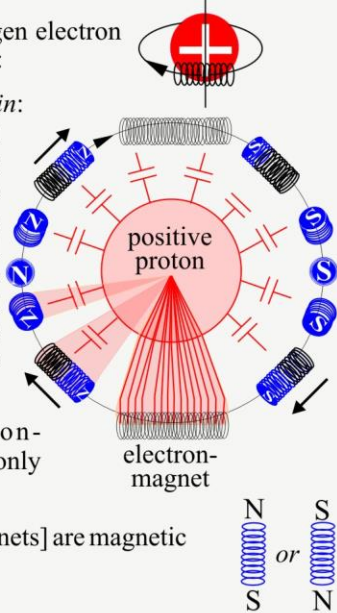
2. The coil-shaped hydrogen electron orbits the hydrogen proton:

3. *The cause of electron-spin:*

As the coil-shaped electron slices through the electric field, between the proton and electron, a magnetic field is induced into the electron. The induced magnetic field then parries against the electric field, causing the electron to spin, vertically.

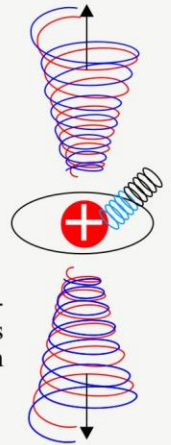
4. Electrons [electron-magnets] are electric for only half of the time: 

5. Electrons [electron-magnets] are magnetic for only half of the time:  or 



6. Hydrogen atoms point in different directions randomly.

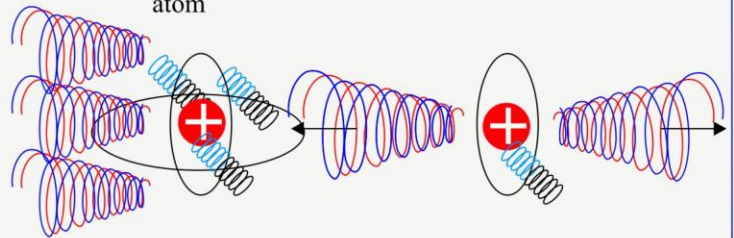
hydrogen



7. (right). The spinning hydrogen electron-magnet, together with the proton, radiates corkscrew-style electromagnetic waves from polar regions.

neighbouring atom

hydrogen



8. Gravity waves, given-off by hydrogen atoms, synchronize the spin of electrons in neighbouring atoms. The neighbouring atom then radiates gravity waves of its own that, in turn, bombard other neighbouring atoms, causing those atoms to radiate gravity waves in the same way. The force of gravity is ‘the alternating magnetic force experienced between electron-magnets in neighbouring atoms when the orbital inclination of electron-magnets is not zero degrees to the orbital plane’ (figure 9).

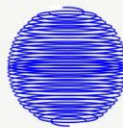
(i)

Notes;

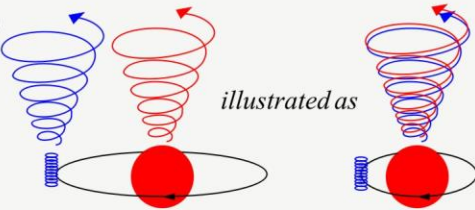
(b)



The electron [electron-magnet] is shown cylindrical to facilitate explanation. It need not be; it could be round—spherically-coil-shaped—or any shape; as long as it is coiled.



(ii)



illustrated as

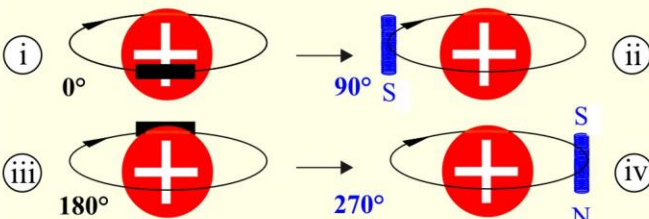
the (blue) electron-magnet radiates the magnetic wave, the (red) proton radiates the electric wave

(c)

hydrogen atom

electron-magnet shown in electric mode at 0°

electron-magnet shown in magnetic mode (N:S) at 90°



electron-magnet shown in electric mode at 180°

electron-magnet shown in magnetic mode (S:N) at 270°

[recap]; the coil-shaped ‘electron’ slices through the electric field between the electron and proton. A magnetic field is induced into the electron-magnet—when it is horizontal—causing it to spin-and-topple as it orbits the proton. Hence, the electron-magnet changes from an electric particle to a magnetic particle every 90° . This explains why an electric current produces a magnetic field and why the magnetic field is 90° to the direction of current flow. It also explains why all objects fall to the ground

Summary: How Gravity Works

Schematic of electron-magnetic forces between a cascade of atoms [the example shown consists of hydrogen (1 electron-magnet) neighbouring with lithium (3 electron-magnets) neighbouring with Beryllium (4 electron magnets) to illustrate the different numbers of shells/subshells and orbiting electron-magnets of the different elements]: The hydrogen electron-magnet, and proton, radiate corkscrew-style electromagnetic waves that synchronize the spin of electron-magnets in the neighbouring cascade of atoms. The force of gravity is the alternating magnetic force experienced between electron-magnets in neighbouring atoms when the orbital inclination of electron-magnets is not 0° to the orbital plane. It can be seen that, when electron-magnets are in the magnetic mode, neighbouring atoms are drawn together. When neighbouring atoms are in the electric mode they re not drawn together. Hence **the 'gravitational force between atoms switches on and off at the hydrogen frequency; 1,420,405,800 times every second'**.

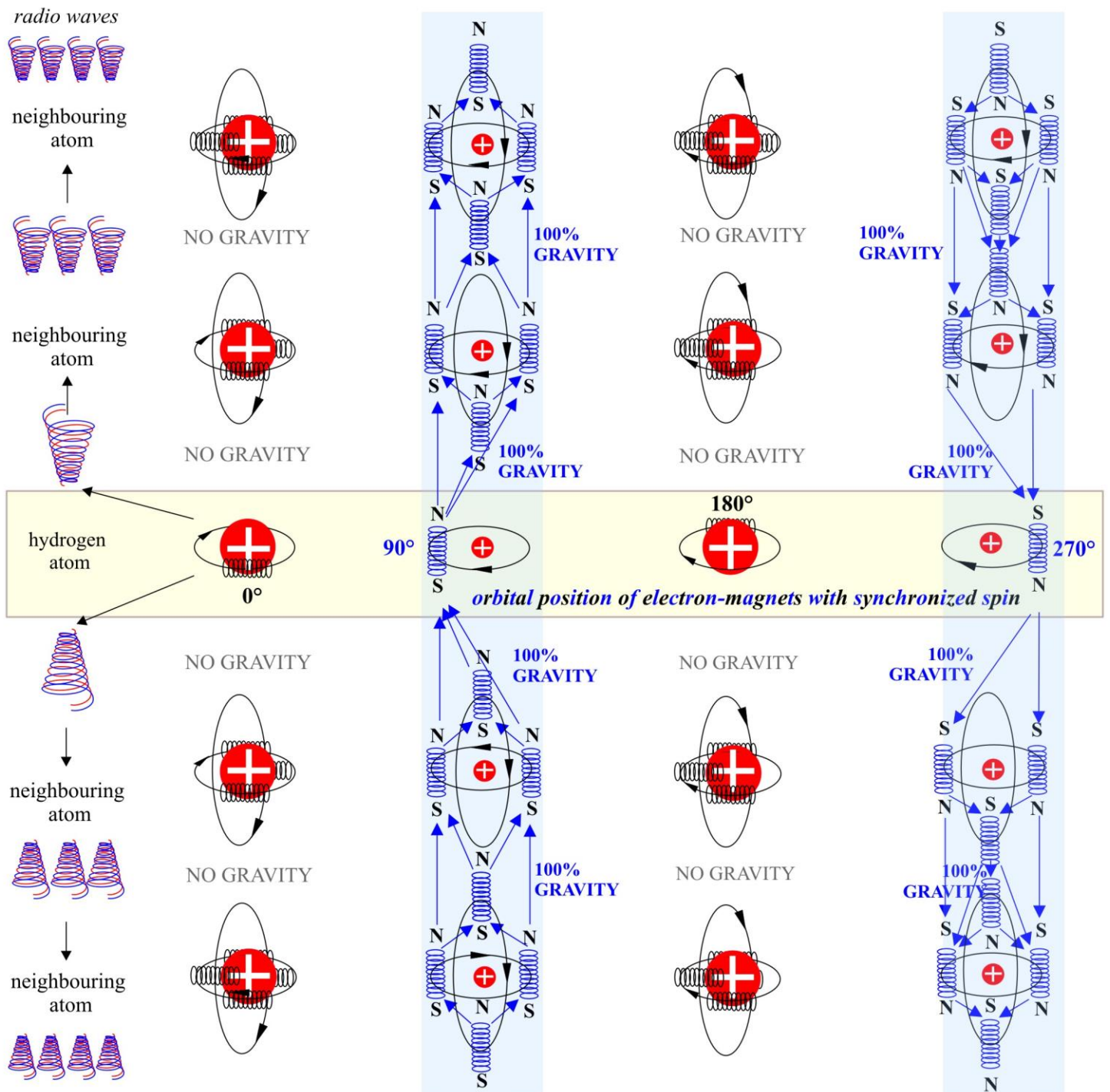


figure 9.

Why all objects fall at the same acceleration and speed

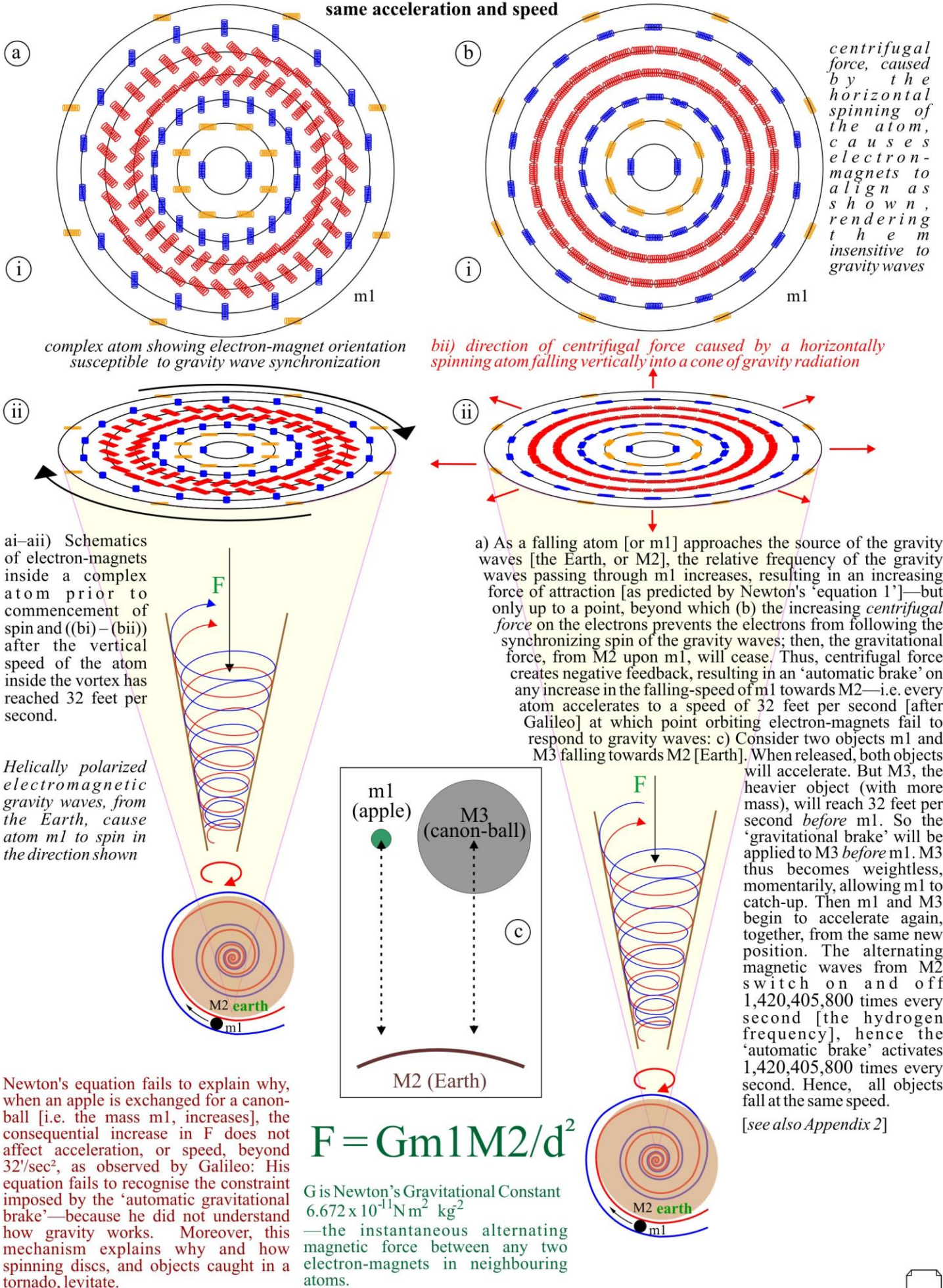


figure 10.

Now that we understand how gravity works we need to take a new look at how atomic bonding occurs between atoms:

Atomic Bonding

Ionic Bonding

In their natural state, the number of negative charges (electrons) in an atom is, generally, balanced by the number of positive charges (protons). But some atoms acquire an extra positive charge, or charges, and some atoms acquire an extra negative charge, or charges. These 'unbalanced atoms' are referred to as ions. An atom with more positive charges than negative charges is called a 'positive ion' and an atom with more negative charges than positive charges is called a 'negative ion'. When a positive ion is brought into close proximity with a negative ion the two attract each other and are drawn together because the charges are of a different polarity. The ionic charges cause the atoms to bond together permanently into a stable group of atoms known as a molecule.

Covalent bonding

Covalent bonding is defined as a 'chemical bond produced when two atoms share one or more pairs of electrons (usually each atom contributes at least one electron)'. It occurs when the weakly-bound electrons in the outer orbital sub-shells of atoms lasso a neighbouring atom to increase their own outer sub-shell electron count in an attempt to achieve structural stability.

But the orthodox definition is ambiguous and contradictory because although this sharing of electrons may happen, for example, in the bonding of electrons from the weak outer shells of say 'oxygen and carbon and oxygen', to form the compound-molecule of carbon dioxide (CO₂) it cannot work in the case of the hydrogen atom without stripping each individual hydrogen atom of its single individual electron, in which case it would cease to be a hydrogen atom. Because of this, an alternative School of thought has arisen suggesting that hydrogen must bond in a different [mysterious] way, referred to as '**hydrogen bonding**'; but orthodox Science has thus far failed to provide an alternative explanation.

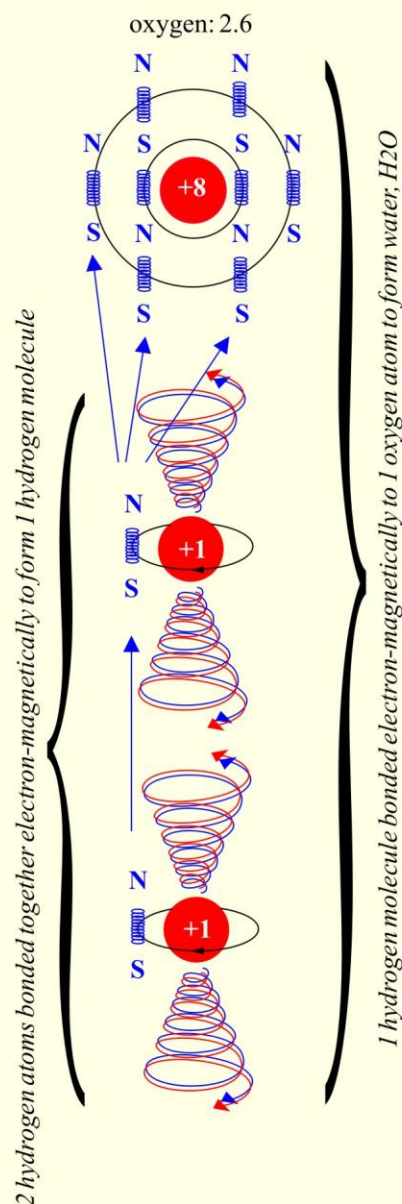
Hydrogen bonding is gravity-wave bonding:

Notwithstanding: As we have seen, ionic bonding is known to be inter-dependent; a positive ion attracts a negative ion and a negative ion attracts a positive ion in equal measure. The same is known of covalent bonding; a valence electron from atom A lassoes its neighbour and a valence electron from its neighbour, atom B, lassoes atom A in equal measure. But with hydrogen bonding the bonding differs in that it is known to be uni-directional, one-way only; **hydrogen bonds to the neighbouring atom, but the neighbouring atom does not bond to hydrogen.**

This distinction is of great importance, because we know that hydrogen radiates helically polarized electromagnetic gravity waves that attract neighbouring atoms, but neighbouring atoms do not attract hydrogen, because hydrogen does not contain 'spiked-neutrons'. This means that 'hydrogen bonding' must, therefore, in fact, be '**gravity-wave bonding**'.

Given that water is known to comprise of two atoms of hydrogen (i.e. 1 hydrogen molecule) that is bonded to 1 atom of oxygen, two things become clear: (i) because hydrogen atoms point in different directions randomly—and neighbouring atoms have no effect on hydrogen atoms because they have no spiked-neutrons—then 'magnetic-chance' dictates that only a maximum of 1/8 of hydrogen atoms will bond with another hydrogen atom to become a hydrogen molecule. These hydrogen atoms—with synchronized spin—will then bond 'gravitationally' with a neighbouring atom because the electromagnetic waves from the hydrogen molecule will cause the oxygen atom to spin axially and they will synchronize the spin of electrons in the oxygen atom with those in the hydrogen molecule. Hence to disassociate hydrogen from oxygen we need only to break the gravitational bonds holding the two together.

Electrons in the hydrogen molecule have synchronized spin and are, therefore, bonded together electron-magnetically. Those electrons radiate helically-polarized (corkscrew-style) radio waves that synchronize the spin of electrons in the neighbouring oxygen atom with those of the hydrogen molecule. Hence the hydrogen molecule is electron-magnetically bonded to the oxygen atom.



Evidence to support the molecular disintegration of matter hypothesis; ScienceDaily (January 7, 2011): 'the Orion nebula produces *circularly polarized light* [helically-polarized electron-magnetic energy] in the ultraviolet wavelengths, which is able to break the *covalent* bonds between the atoms of ice molecules'. *note*: The 'circularly polarized light'(above) must actually be 'helically-polarized' and the 'covalent bonds' must be 'gravity bonds'—because hydrogen cannot bond covalently. This statement explicitly ratifies the molecular disintegration of matter hypothesis. **When helically-polarized electromagnetic energy (antigravity radiation, at the hydrogen frequency, or a harmonic of the hydrogen frequency) bombards water, the water molecules can be expected to disintegrate, producing virtually-free hydrogen gas and oxygen gas.**

The 5 types of Antigravity

(i) **Mechanical-centrifugal Antigravity:** As we have seen. Hydrogen, the prime-mover in the gravitational mechanism, radiates helically-polarized (corkscrew-style) electromagnetic waves that synchronize the spin of electrons in neighbouring atoms. When a body, such as a large wheel, is set to spin, centrifugal force, acting on electrons inside the wheel, stops those electrons from spinning and, hence, stops them from following the synchronized spin of electrons in neighbouring atoms. It mechanically ‘freezes’ the electrons inside the wheel. This means that, once the wheel spins fast enough and centrifugal force exceeds the force of gravity from the Earth, the wheel is no longer attracted to the Earth by gravity waves from the Earth.

When a gyroscope (a spinning wheel) is pointed towards, for example, true-North, it will, when mounted on gimbals allowing it to move freely in any direction, continue to point in the same direction in space, as long as it keeps spinning. It will be unaffected by gravity waves. Orthodox Science does not understand the cause of the phenomenon that can only be understood with an understanding of how gravity works: The effect is utilized in ‘gyro-compass’ navigational aids and ‘positioning-systems’ onboard ships and aircraft; in preference to the less-accurate permanent-magnet type of compass.

Another example of this type of Antigravity can be observed inside a tornado, where the vortex of water vapour [containing hydrogen] synchronizes electrons inside objects caught inside the tornado, resulting in ‘weightlessness’ of those objects; which explains why cars and houses are so easily raised-up inside the vortex. Because the centrifugal force is continuously in the same direction this type of antigravity may be described as analogous to ‘D.C.’ Antigravity. The 2nd type of Antigravity is:

(ii) **Mechanical-inertial Antigravity:** This type of Antigravity is created whenever a physical object is subjected to inertial forces. An example of this is the flight of the bumble-bee [it being contrary to wing-area-to-lift ratio considerations]. When its wings beat backwards and forwards the inertial forces acting upon the electrons inside the wings prevents them from synchronizing with the spin of gravity waves from the Earth. This may be described as ‘A.C.’ Antigravity. The 3rd type of Antigravity is:

(iii) **Electromagnetic Antigravity** This is produced when a complex man-made electromagnetic field shields an object from gravity waves from the Earth, resulting in ‘weightlessness’. An example of this is shown in a Youtube video link that features a dead crow floating above current-carrying conductors in mid-air, above a suburban road in Canada. Once we understand how electromagnetic antigravity works we can understand how this is possible [<https://www.youtube.com/watch?v=Uz1mkl0tBFk>] (*search: Motionless B.C. bird suspended mid-air continues to puzzle many*). Firstly, the crow was electrocuted between two separate overhead current-carrying cables as it tried to land on one of the wires. The complex electromagnetic fields from the cables then shield the crow from gravity waves from the Earth enabling it to ‘float’ above and between the cables. The 4th type of Antigravity is:

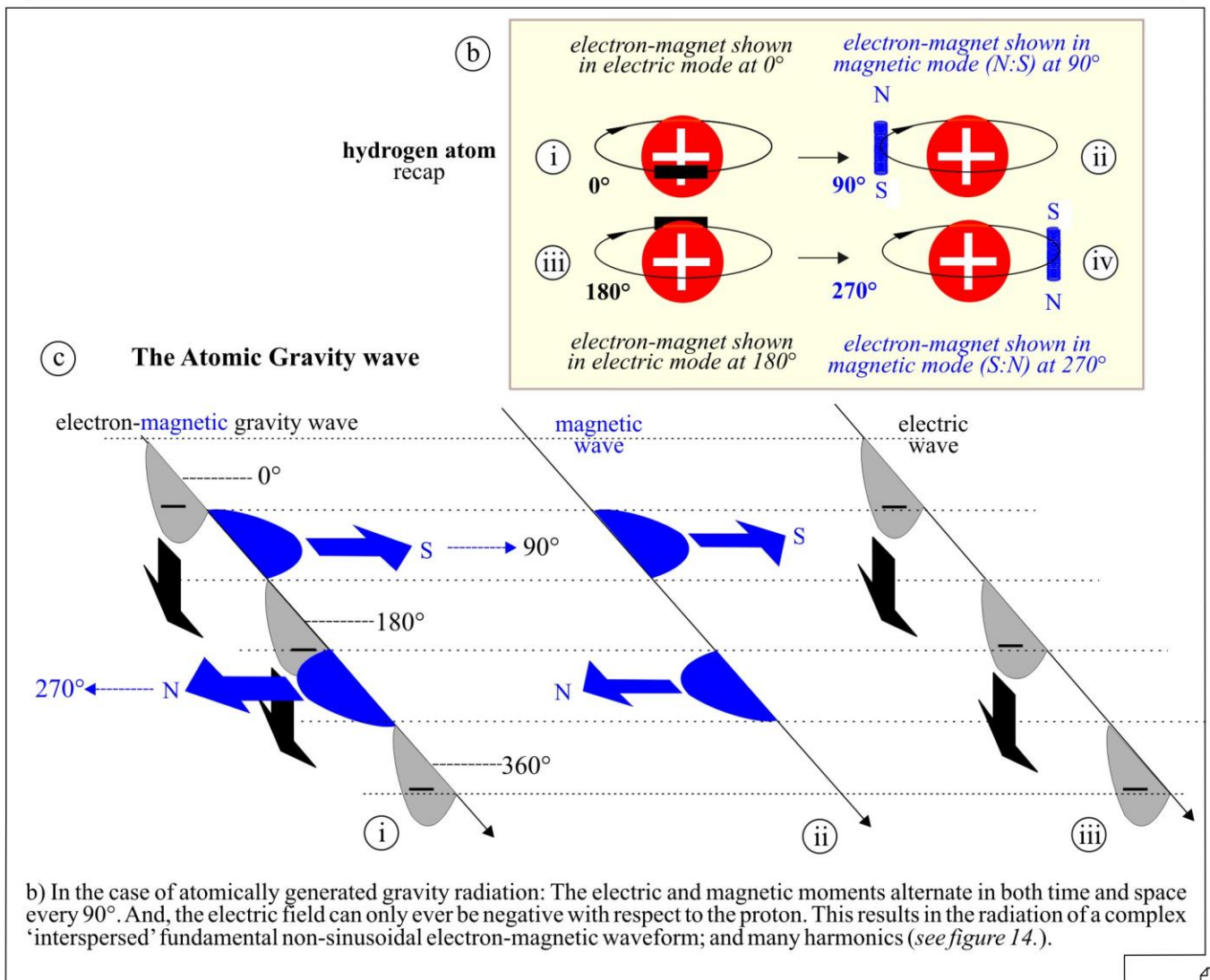
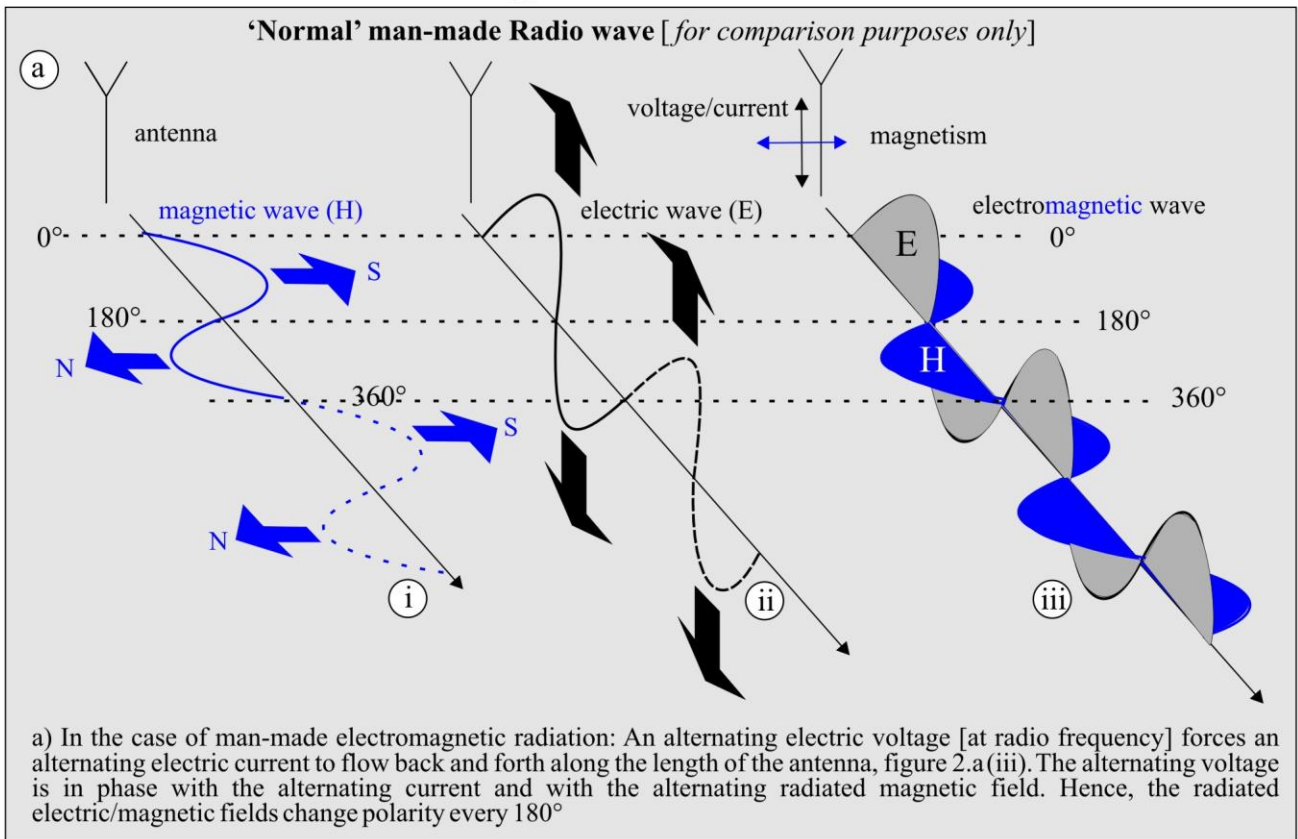
(iv) **Electric Antigravity** This is when an electron in a hydrogen atom, or electrons in a hydrogen molecule, are prevented from spinning using a man-made electric field tuned to twice the hydrogen frequency of 1.42 Ghtz (= 2.84Ghtz), resulting in the [virtually-free] molecular disintegration of the water molecule into hydrogen gas and oxygen gas (see figures 13– 14 that follow).

The 5th type of antigravity is:

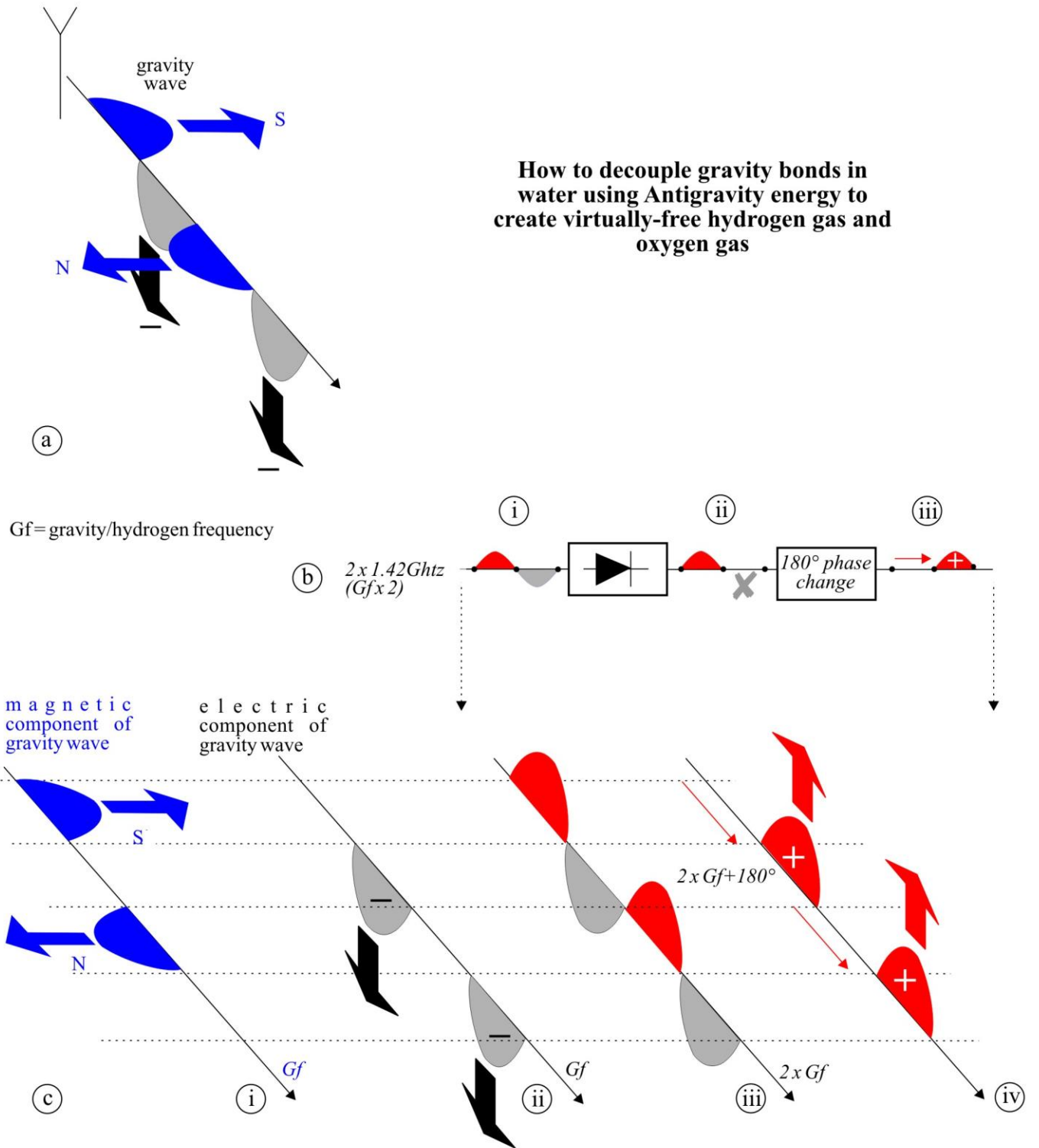
v) **Solar gravity-wave harmonic Antigravity.** The Sun gives-off gravity waves. We can see, from figures 13 – 15, that the hydrogen gravity wave is non-sinusoidal and hence comprises of many harmonics. Some of the harmonics (shown in figure 15) are out of phase with the gravity wave that gave rise to them. This radiation is the type that causes the molecular disintegration of colour molecules and window curtain (drape) fabric, resulting in the fading of colour and disintegration of those fabrics over time. [It must be Antigravity, rather than ultraviolet (uV) because uV does not travel through glass]. The same radiation also causes the molecular disintegration of human skin, resulting in skin cancer.

Methods (iv) and (v) will now be considered: Now that we understand how hydrogen bonding works we can devise a method to break the bonds using a man-made electric wave tuned to twice the hydrogen frequency to decouple the hydrogen molecule from the oxygen atom.

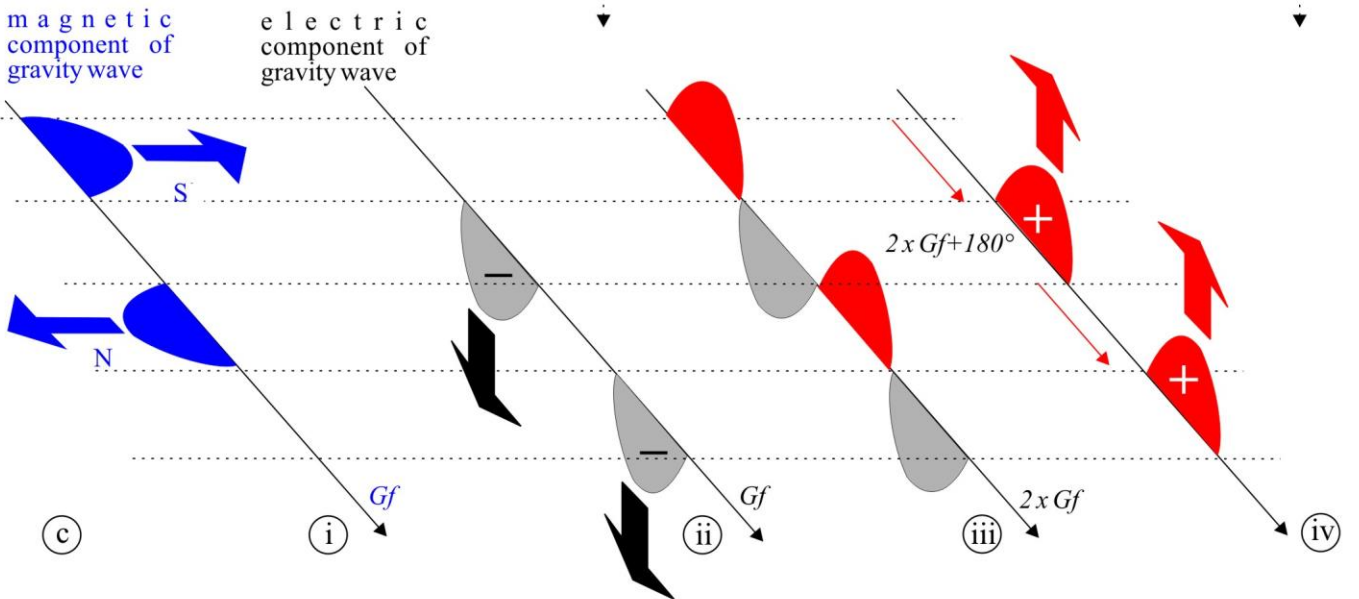
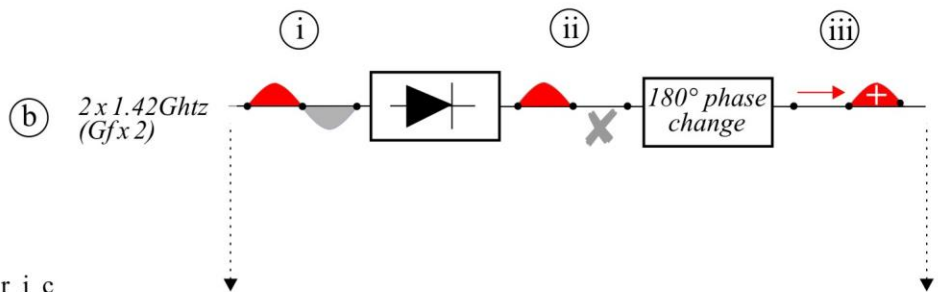
Types of Radio waves



How to decouple gravity bonds in water using Antigravity energy to create virtually-free hydrogen gas and oxygen gas



$Gf = \text{gravity/hydrogen frequency}$



(iii) Artificially generated electric wave at $2 \times Gf$

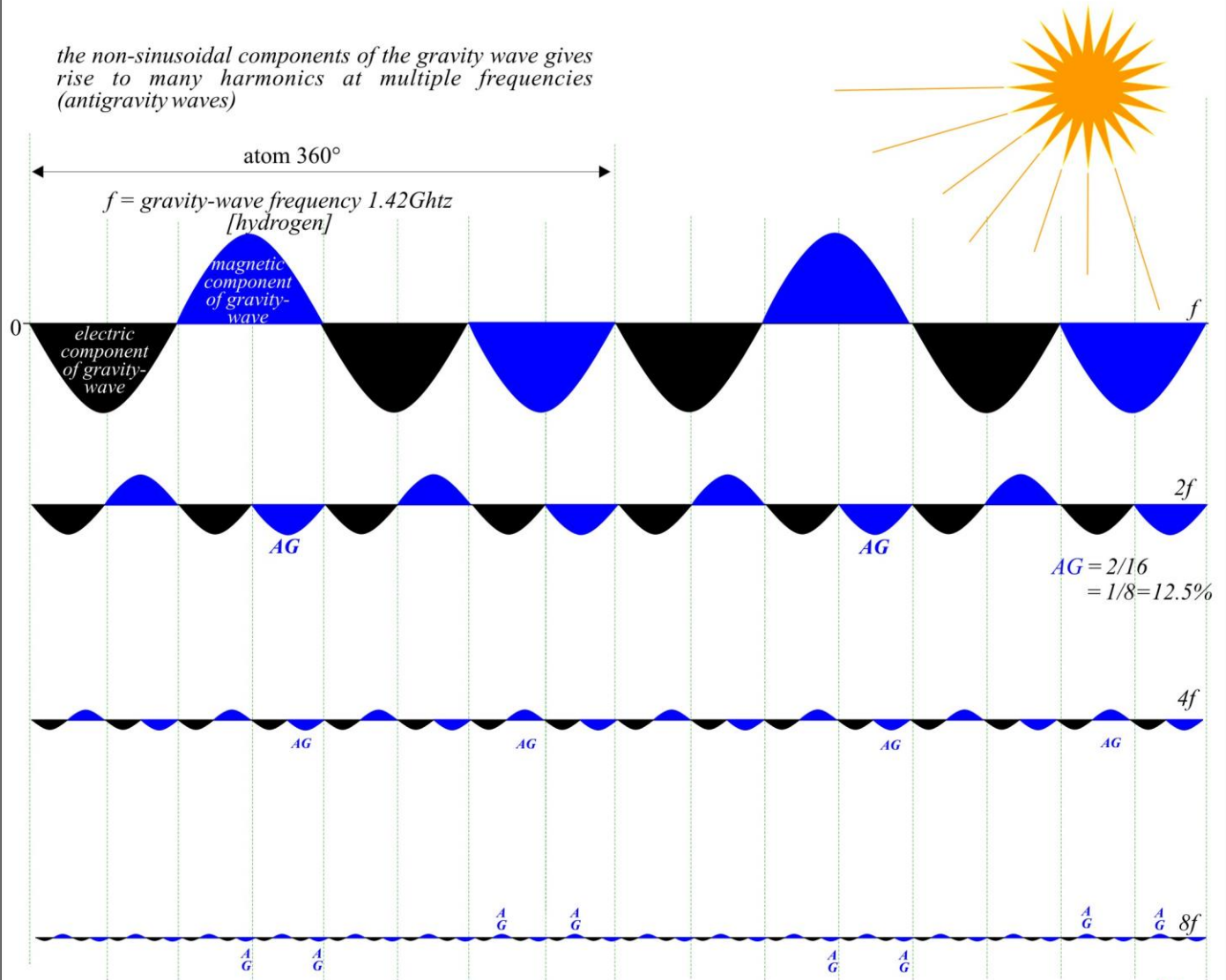
(iv) Half-wave rectified artificially generated electric wave at $2 \times Gf$ phase-shifted by 180° to cancel-out the electrical part of the gravity wave in **(ii)**.

Because hydrogen radiates helically-polarized (corkscrew-style) radio waves [that synchronize the spin between electrons in the oxygen atom with those in the hydrogen molecule] the hydrogen molecules are electron-magnetically (gravity-wave) bonded to the oxygen atoms. The artificially-generated electric wave (figure 14c(iii)) acts upon the hydrogen electrons because it is tuned to $2 \times$ the hydrogen frequency, but does not affect the spin of electrons in the oxygen atoms. Hence, when the external artificial electric wave bombards water the electrons in the hydrogen lose synchronicity with those in the oxygen atoms; i.e. the electron-magnetic bonds between the hydrogen and oxygen are destroyed, resulting in disintegration of the water into virtually-free hydrogen gas and oxygen gas.

figure 14.

Proof that Gravity-waves are non-sinusoidal and, hence, comprise of many harmonics:
How gravity waves fade curtains—and how gravity waves and uV harmonics cause skin cancer

the non-sinusoidal components of the gravity wave gives rise to many harmonics at multiple frequencies (antigravity waves)



simplified schematic for illustration purposes only

$$2f \text{ Anti Gravity radiation (AG)} = 8/64 = 12.5\% @ 1/3 = 4.16\%$$

$$4f \text{ Anti Gravity radiation (AG)} = 8/64 = 12.5\% @ 1/9 = 0.057\%$$

$$\text{Total} = c. = 4.2\%$$

towards uV

Fundamental gravity waves are comprised of many harmonics. The magnetic component of harmonic half-waves (in-filled, as shown, above) oppose the fundamental (f) gravity waves and, hence, amount to ‘pulses of antigravity radiation’, in the ultraviolet (uV) wavelengths*, which has the ability to decouple molecular bonds in hydrogen-containing matter, causing the molecular disintegration of that matter; which explains why approximately 4.2% of gravity waves from the Sun cause the molecular disintegration of curtain fabric—over long periods of time. Gravity waves, and Harmonics in the uV range, also cause the molecular disintegration of water* and of skin tissue (skin cancer).

**note; ScienceDaily (January 7, 2011): ‘the Orion nebula produces circularly polarized light [antigravity-radiation] in the ultraviolet wavelengths, which is able to break the [gravity] bonds between the atoms of ice molecules’.*

How to Make Hydrogen using Antigravity Energy: Prototype Development

Michael Faraday (1791 – 1867) was unaware of the atom, unaware that atoms radiate electromagnetic energy in the form of radio waves, unaware of alternating current, and unaware of gravity waves. Faraday's electrolysis depends upon the primitive ripping-apart of hydrogen from oxygen determined through experimentation, using D.C. voltage.

The principle of the new method is simple; change the voltage feeding the electrolyser from D.C. volts, to 'pulsed D.C.', where the frequency of the pulses corresponds to twice the hydrogen frequency [$2 \times 1.420.4058\text{Ghtz}$]. The phase of the pulsed energy then needs to be shifted by up to 90° in time [180° in space] to create 'antigravity energy' [evidenced by the appearance of gas bubbles] which will decouple the bonds holding together the hydrogen and oxygen molecules [and the hydrogen atoms].

Three methods of achieving this are considered; one using Low Voltage and two using High Voltage.

The Low Voltage electrolyser is designed to allow a very low level (infinitesimal) 'convection current' to pass through the electrolyte between the electrodes, but the current itself plays no part in the decoupling of hydrogen bonds, rather, the antigravity voltage-pulses, through the water, provide the impetus to break the bonds.

In the High Voltage method, the electrolyser electrodes are placed either-side of a glass container which is partially-filled with water. Hence no electrical current flows *through* the electrolyte. Notwithstanding, a 'displacement current' can be said to flow between the electrodes, but the current itself plays no part in the decoupling of hydrogen bonds, rather, the antigravity voltage-pulses provide the impetus to break-apart the bonds. The glass container, the water, and any air between the electrodes, together provide the dielectric medium.

A second method using high voltage, which compensates for 'z-spin' is also considered.

Caution: Gravity *energy* and Antigravity *energy* are capable of decoupling hydrogen from oxygen, that is to say, both may cause the 'disintegration' of water. In the same way, man-made electromagnetic gravity *waves*, and antigravity *waves*, that *radiate* from an 'antenna-like' source [like radio waves] are capable of the same effects.

The human body is comprised of 75% water, hence antigravity *energy* and electromagnetic antigravity *waves* may, given the right conditions, disintegrate human tissue.

This is most unlikely, using the Low Voltage method, because for ill-effects to be experienced the human body would need to be positioned between the electrodes. The low voltage method is unlikely to produce any harmful electromagnetic gravity or antigravity *waves* that radiate from the electrodes.

The High Voltage method may produce electromagnetic gravity *waves* and/or antigravity *waves* that radiate from the electrodes; such leakage being of the incident, and not of the essence. Moreover, the effects of such waves will diminish in proportion to the square of the distance (in metres) from the electrodes, hence *distance* can be used to provide a safe working environment. Moreover, the electrodes, using the high voltage method have been deliberately sized, at 0.625 of the antigravity wavelength, to inhibit such radiation.

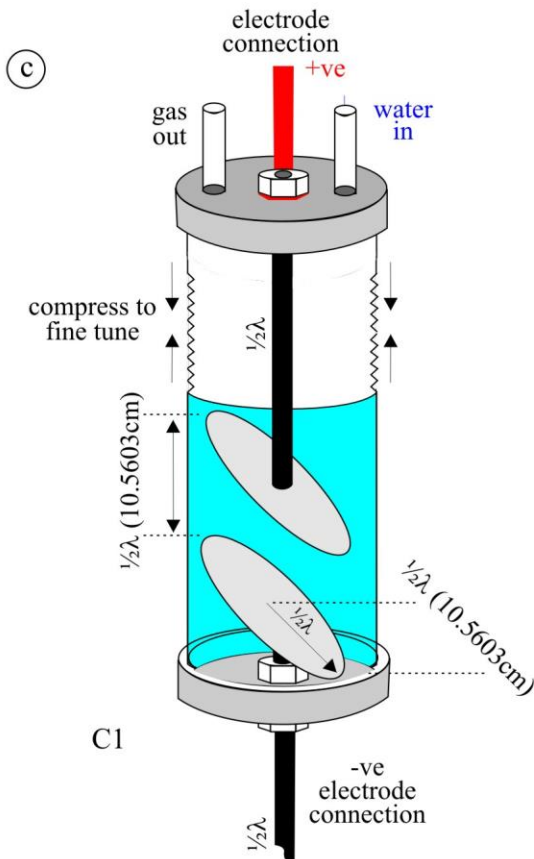
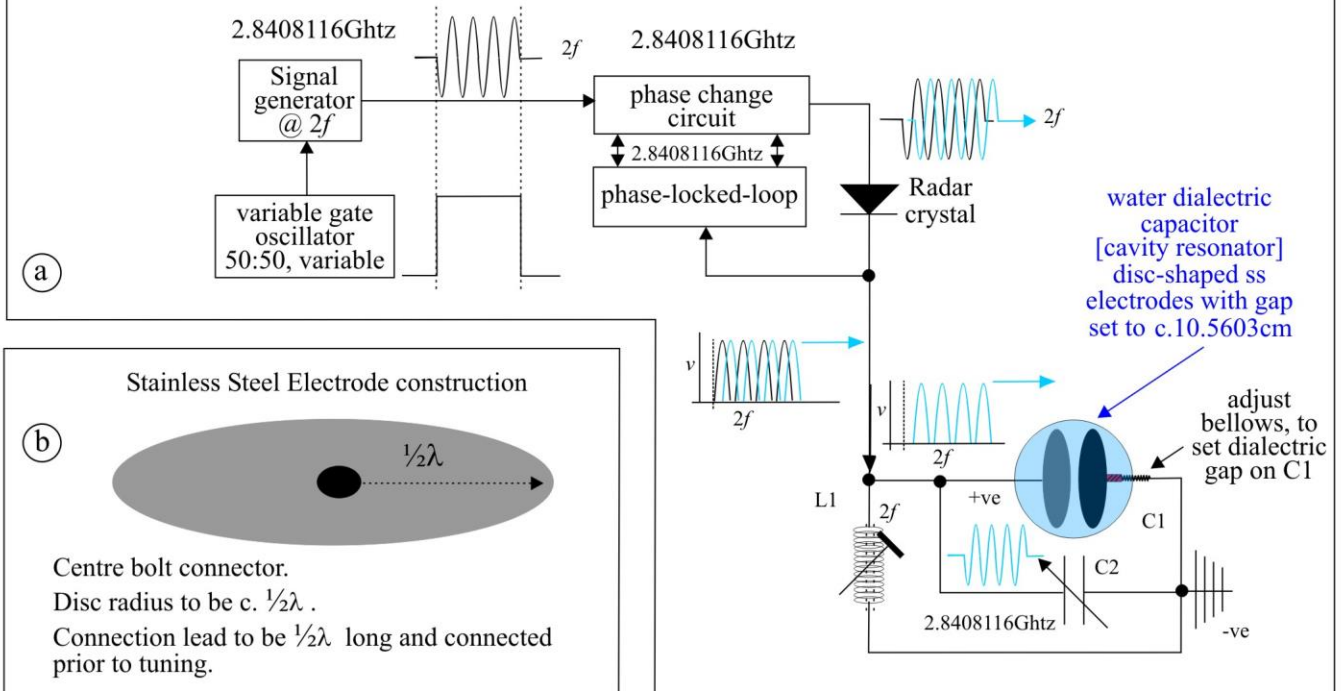
Antigravity Hydrogen Generator: Prototype development

Low Voltage method

Purpose; To determine optimal plate dimensions and plate gap for C1, optimal resonant frequencies and optimal phase-shift for max gas production.

'Start' settings

Set frequencies to $2f = 2.8408116\text{Ghtz}$
 Set electrode-plate radius to $\frac{1}{2}\lambda$ (10.5603cm)
 Set gap on cavity resonator capacitor c. $\frac{1}{2}\lambda$ (10.5603cm)



a) The signal generator sends a gated R.F. sine-wave signal, at twice the hydrogen frequency, to a phase change circuit which is able to vary the phase of the output signal by up to 180° . The output is fed via a radar crystal which clips the negative half cycles. +ve pulses are fed to a tuned circuit comprising of a coil (L1) and water-filled (dielectric) capacitor (C1), which are designed to operate as a cavity resonator. Thus, low voltage [c.+2Vpulsed] 'antigravity energy' travels through the water dielectric of the resonator to electrical-Earth causing decoupling of the hydrogen bonds that hold-together the oxygen and hydrogen molecules in the water. A feedback signal is passed-back from the cavity resonator to the phase-locked-loop which automatically shifts the phase of the delayed signal to compensate for frequency variations caused by changes in gas-pressure and temperature. b and c) Each electrode is constructed to resonate, with input connections at wavelength nodes. The method will not work unless the tuning of the cavity resonator and associated connections corresponds to resonant frequency requirements. Circulation of the water in the capacitor will increase gas production. The signal generator, phase change circuit, phase-locked-loop and load [L1, C1 and C2] must all be tuned to 2.8408116Ghtz. Then, the phase of the pulsed signal must be changed to obtain maximum gas bubble production. The dielectric-gap, on the water-filled capacitor, must be manually adjusted to obtain maximum gas bubble production, and then C2 must be adjusted to compensate for variations in capacitance caused by changing the gap on C1.

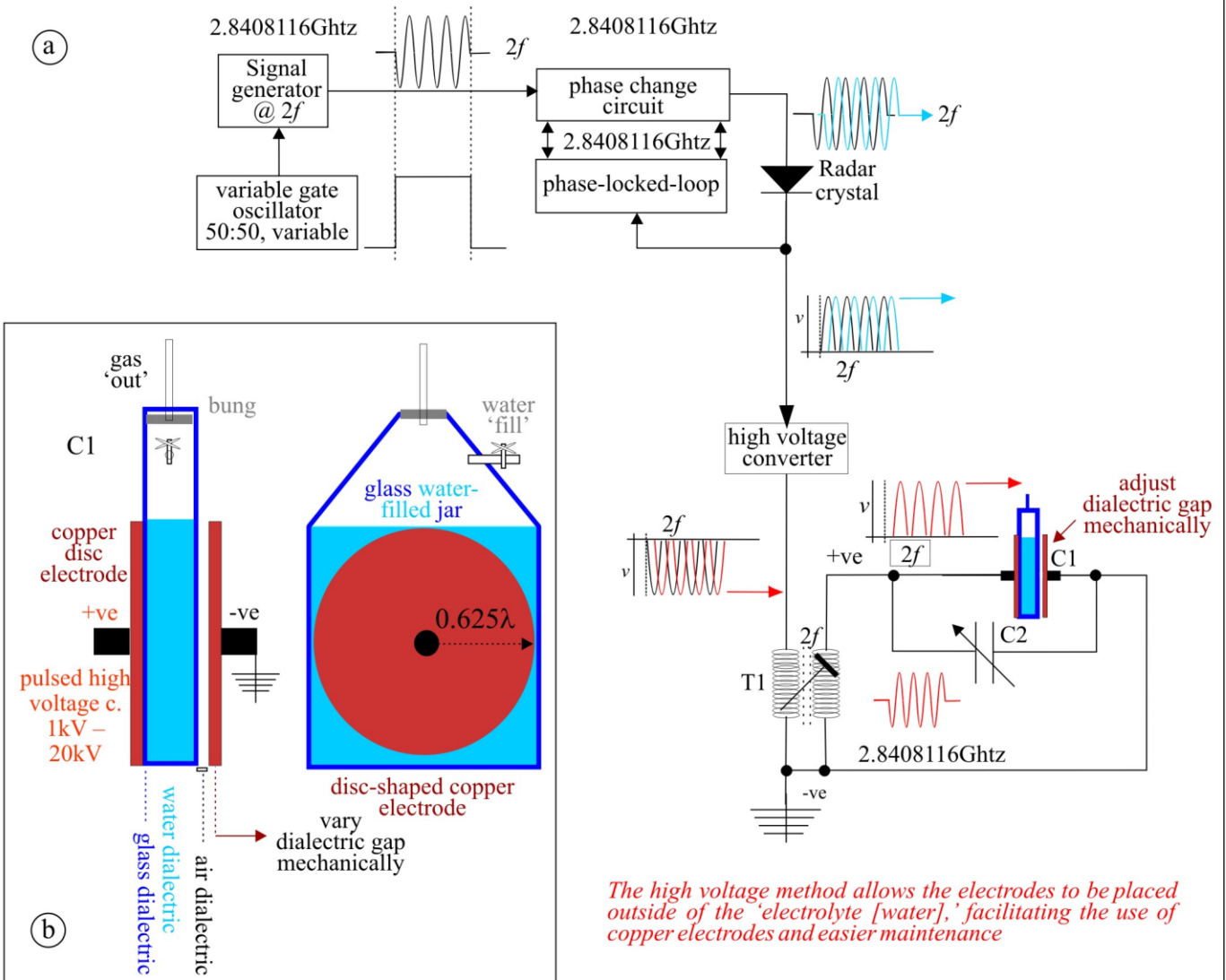
Antigravity Hydrogen Generator: Prototype development

High Voltage method

Purpose; To determine optimal plate dimensions and plate gap for C1, optimal resonant frequencies and optimal phase-shift for max gas production.

'Start' settings

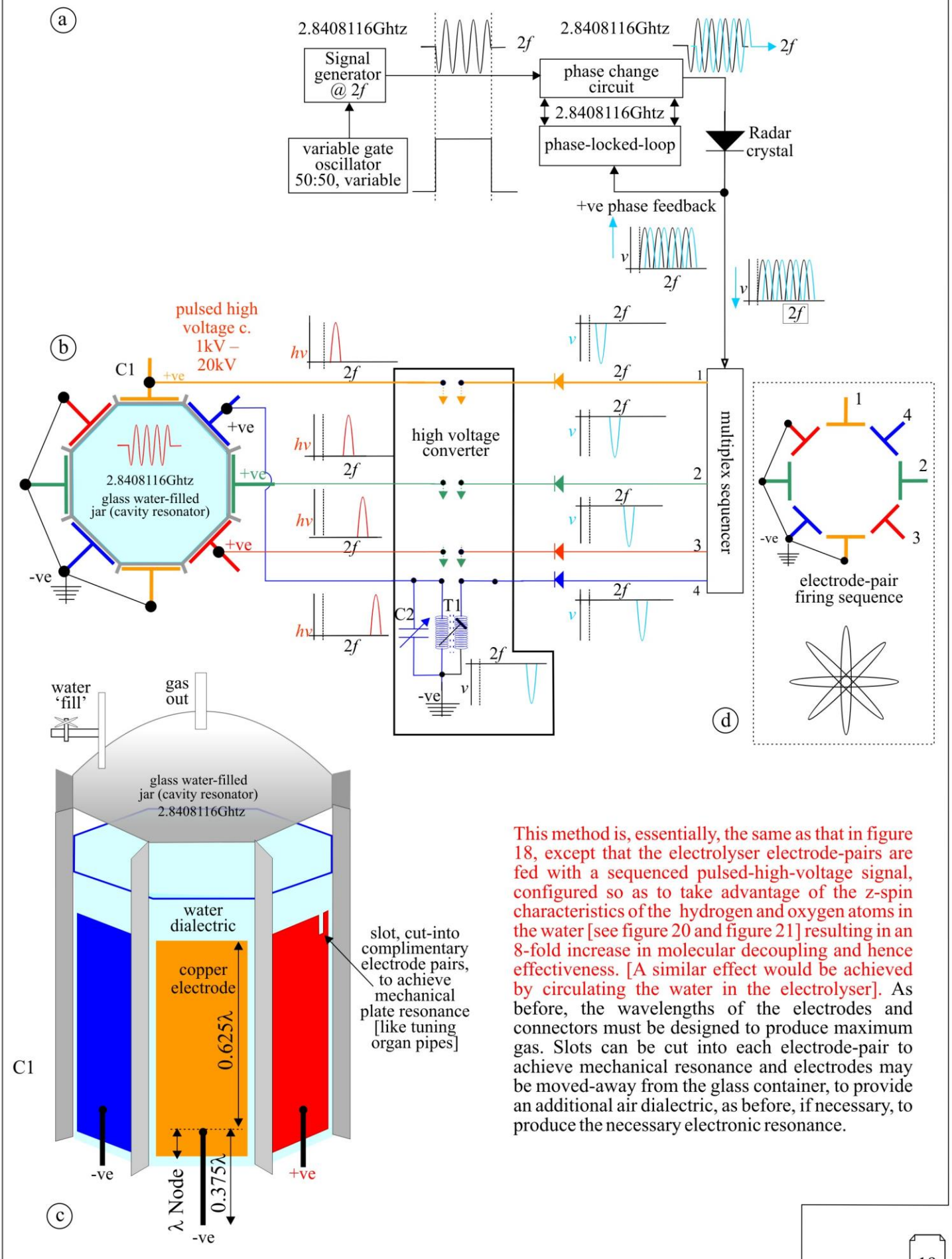
Set frequencies to $2f = 2.8408116\text{Ghtz}$
 Set electrode-plate radius to 0.625λ (15.84045cm)
 Set gap on cavity resonator capacitor c. $\frac{1}{2}\lambda$ (10.5603cm)



a) and b) The signal generator sends a gated R.F. sine-wave signal, at twice the hydrogen frequency, to a phase change circuit which is able to vary the phase of the output signal by up to 90° in time [180° in space]. The output is fed via a radar crystal which clips the negative half cycles. +ve pulses are fed to a tuned circuit comprising of a transformer (T1) and water-filled (dielectric) capacitor (C1), which are designed to operate as a cavity resonator. Thus, high voltage 'antigravity energy' stresses the water molecules in-between the electrodes, causing decoupling of the hydrogen bonds that hold-together the oxygen and hydrogen molecules in the water. A feedback signal is passed-back from the cavity resonator to the phase-locked-loop which automatically shifts the phase of the delayed signal to compensate for frequency variations caused by changes in gas-pressure and temperature. Each electrode is constructed to resonate, with input connections at wavelength nodes. The method will not work unless the tuning of the cavity resonator and associated connections corresponds to resonant frequency requirements. Circulation of the water in the capacitor will increase gas production. The signal generator, phase change circuit, phase-locked-loop and load [T1, C1 and C2] must all be tuned to 2.8408116Ghtz . Then, the phase of the pulsed signal must be changed to obtain maximum gas bubble production. The dielectric-gap, on the water-filled capacitor, must be manually adjusted to obtain maximum gas bubble production, and then C2 must be adjusted to compensate for variations in capacitance caused by changing the gap on C1. The radius of the electrodes is set at 0.625λ to inhibit radiation of gravity waves and/or antigravity waves from the electrodes.

Antigravity Hydrogen Generator: Prototype development

High Voltage method [with z-spin compensation]



This method is, essentially, the same as that in figure 18, except that the electrolyser electrode-pairs are fed with a sequenced pulsed-high-voltage signal, configured so as to take advantage of the z-spin characteristics of the hydrogen and oxygen atoms in the water [see figure 20 and figure 21] resulting in an 8-fold increase in molecular decoupling and hence effectiveness. [A similar effect would be achieved by circulating the water in the electrolyser]. As before, the wavelengths of the electrodes and connectors must be designed to produce maximum gas. Slots can be cut into each electrode-pair to achieve mechanical resonance and electrodes may be moved-away from the glass container, to provide an additional air diaelectric, as before, if necessary, to produce the necessary electronic resonance.

figure 19.

An explanation of 'z-spin' (I): Proof that the electron is a coil-shaped electron-magnet

—and electron-shell architecture explained [*this illustration is the same as figure 7.*]

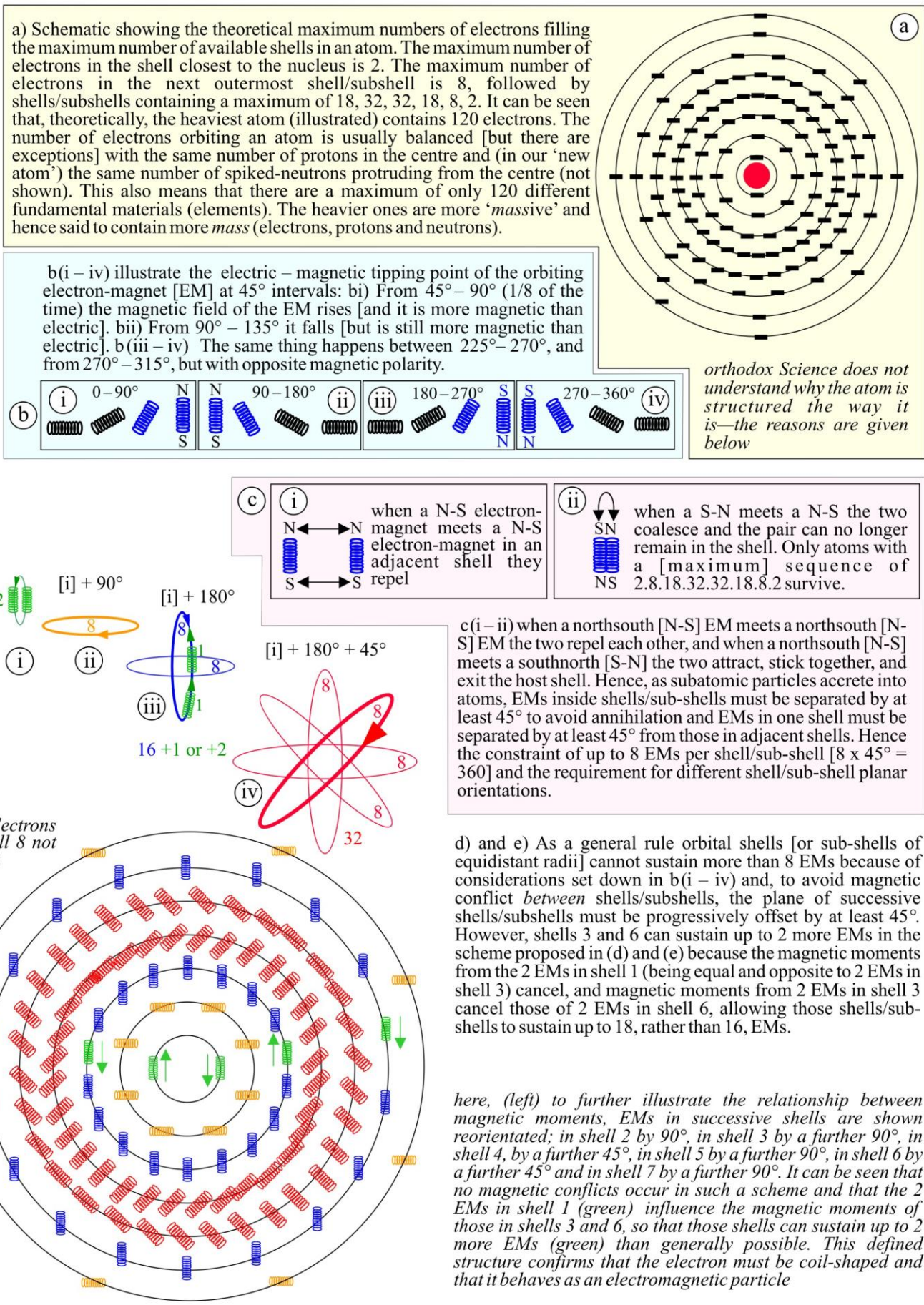
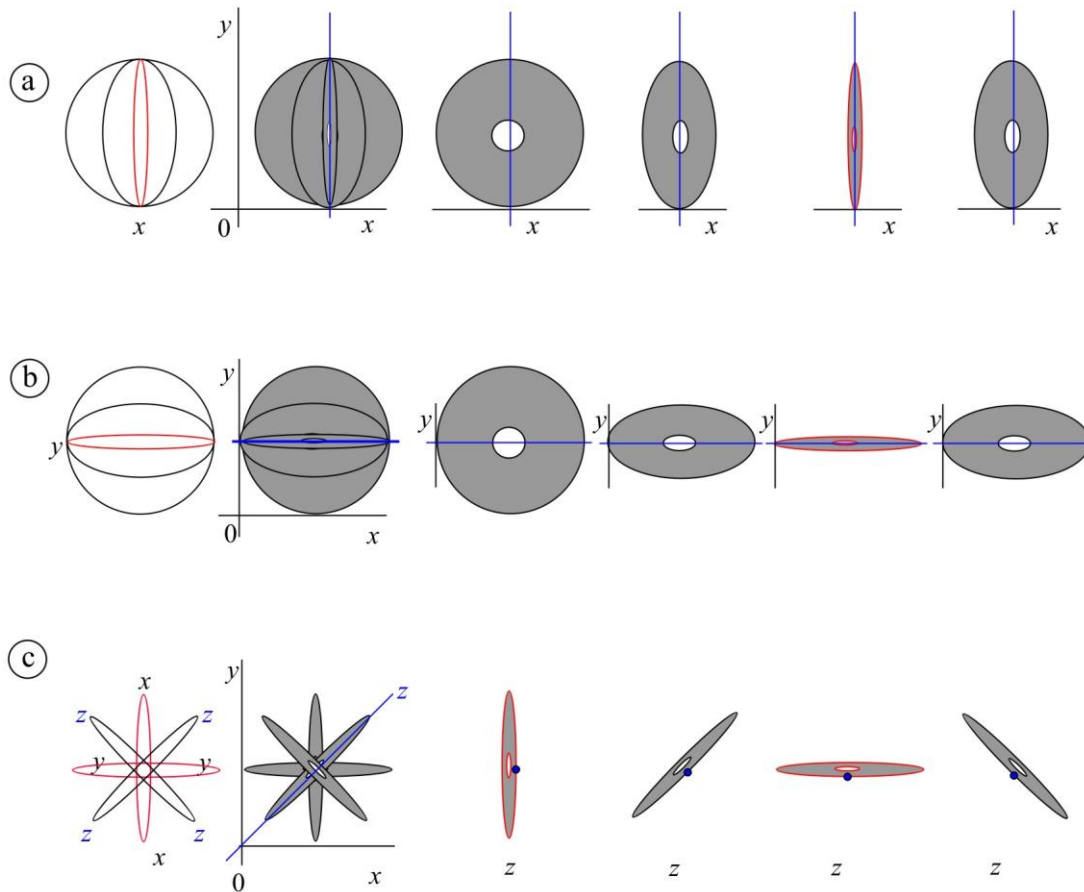
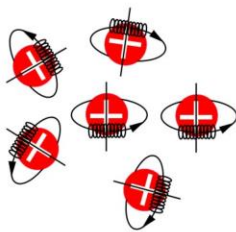


figure 20.

An explanation of ‘z-spin’ (II): (Proof that the electron must be a coil-shaped electron-magnet)



‘Disc analysis’ showing that three-dimensional atoms survive because each plane is shifted by at least 45° to its neighbour as the orbital plane shifts *within a sphere*: a) Shows four orbital planes (4 discs) separated by 45° each, spinning on an x-axis, that ensures separation of 45° between the 8 disc segments (where each disc represents an orbital plane containing orbiting electron-magnets). This scheme ensures separation of 45° between orbiting particles horizontally, but not vertically. In the same way (b) shows the orbital planes of 4 spinning discs each separated by 45° on the y-axis. This scheme ensures separation of 45° between orbiting particles vertically, but not horizontally. c) Shows the orbital planes of 4 discs spinning on the z-axis; note that the z-axis at times passes through the x-axis [(a), red]. The same happens in (b) where the z-axis passes through the y-axis [(b), red]. z-spin, three-dimensional planar-spin is the only configuration that embraces all three dimensions and so ensures that no magnetic conflicts subsist between spinning electron-magnets [where the requirement for separation is at least 45°]; **which explains why the atom is constructed the way it is—the z-spin characteristic (c) confirms that orbiting particles must be made of spinning electron-magnets where the magnetic moments of the orbiting particles—repulsion and attraction—results in self-separation of the orbiting particles by 45° in three dimensions.** This illustration accommodates electron-magnets in shells 1,2,3 and 4 (containing 2,8,18 and 32 electron-magnets), thereafter the scheme repeats backwards (32,18,8 and 2).



hydrogen atoms point in different directions randomly

Hydrogen atoms must be distributed randomly. This has to be the case, otherwise gravity would not work in all directions. This means that the magnetic moments of the hydrogen electron must fall within the influence of only one of 8 possible magnetic orientations; North-facing, South-facing, West-facing, East-facing, NW-facing, NE-facing, SW-facing or SE facing. z-spin incorporates all of these possibilities. Hence, when a population of hydrogen atoms is bombarded by antigravity energy, from a single directional source, then only a maximum of 1/8th of those atoms will be affected by the radiation. Re-orientation of the antigravity energy, in accordance with sequential z-spin considerations, will radiate hydrogen atoms in all 8 of the possible orientations, resulting in 8-times more molecular decoupling. This is why ‘z-spin compensation’ is used in figure 19. An alternative to this would be circulation of the water (the electrolyte) within the electrolyser, which is difficult to do, and difficult to maintain.

APPENDIX 1

Why atoms with spiked-neutrons are stable

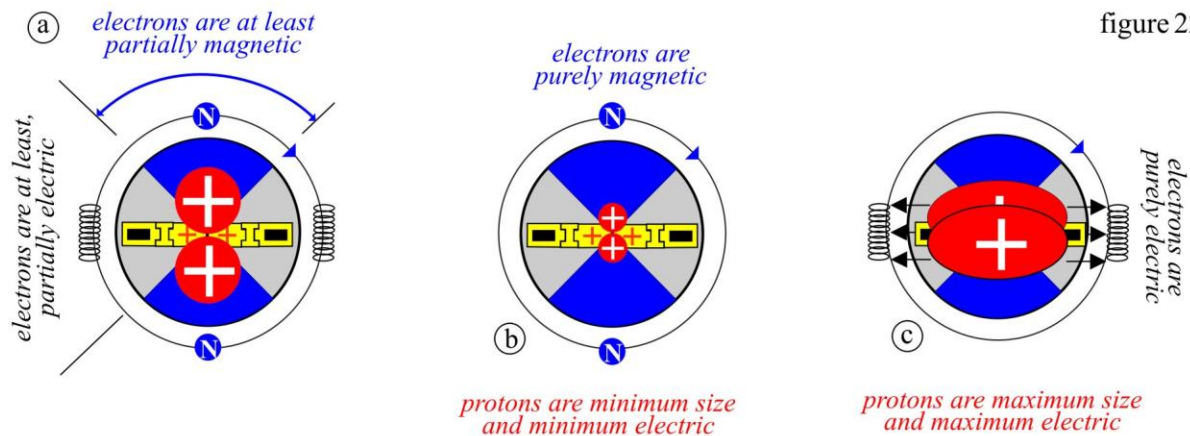


figure 22.

a), b) and c) Plan view of a helium atom containing 2 spiked-neutrons, 2 protons and 2 electron-magnets. 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.

Previous illustrations 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 magnetic field and a purely electric field are displaced by 90° , a particle cannot be purely both 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

Figure 22 (above) shows the electric and magnetic possibilities, in plan view, of two electrons as they orbit the nucleus of a helium atom. b) 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. c) 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 is minimal and the force of repulsion between protons, minimal, hence the protons have little propensity to move apart during the blue quadrants. c) 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. This is why the maximum, and minimum, number of electrons sustainable in the first orbital shell of atoms containing spiked-neutrons is 2.

We conclude that orbiting electron-magnets possess an increasing and decreasing magnetic field that alternates with an increase and decrease of atomic capacitance. The two forces unite in self-sustaining oscillation, where the proton increases and decreases in size and shape, alternately losing heat and sucking-in heat from its surroundings.

This unique electromagnetic interchange between the electron, neutron and proton, further explains why the gravitational force ['electron-magnetism under the influence of helically polarized electromagnetic radiation'] cannot be measured because the magnetic moments alternate in polarity as the electrons orbit the nucleus; meaning that the gravitational force attracts in a forward motion, and then in a backwards motion, during one orbital cycle of the electrons, as illustrated by figure 9. That is to say, that, in plan view (figure 21b)), the electrons both show N polarity and then 180° later, they both show S polarity, thus producing an alternating mutually attractive magnetic force. At the same time, the atom radiates alternating helically polarized electromagnetic energy that synchronizes the spin of electrons in neighbouring atoms.

APPENDIX 2

Why Landers crash into Mars

Introduction

The ‘net attractive force’ of a planet depends on both the force of gravity of the planet and centrifugal force generated by the spin of the planet. It follows that planets smaller than the Earth, or those that spin more slowly than the Earth, will generate lesser amounts of centrifugal force resulting in a greater amount of ‘net attractive force’ on those planets relative to the Earth. On such planets the ‘net attractive force’ will be stronger; which explains why so many planetary spacecraft have crash landed on Mars and Venus.

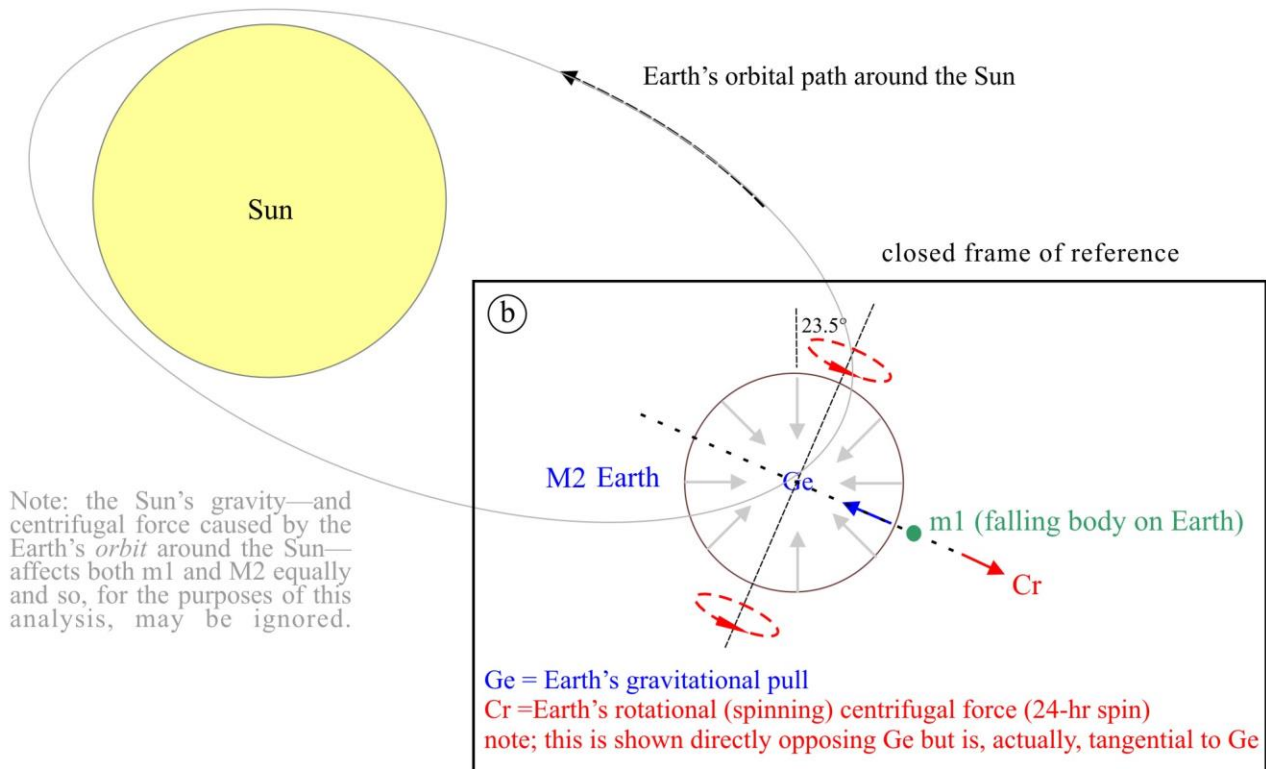
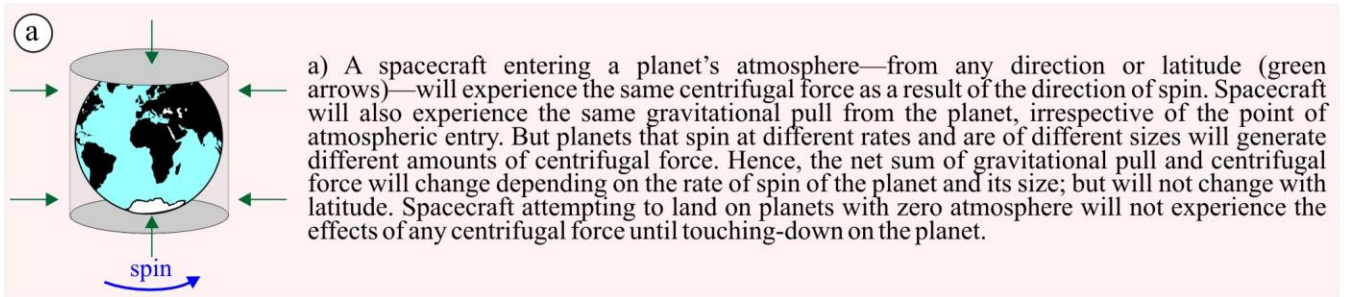
Observation: 10 out of 18 Mars-Landers (55%) have crash-landed into the surface of Mars.

Abstract: This section explains that Mars Landers crashed because their rate of descent towards the Martian surface was too fast. The excess speed arose due to a miscalculation of the ‘net attractive force’ on the planet’s surface. The miscalculation arose due to a misunderstanding of how ‘gravity’ works.

Conclusion: The ‘net attractive force’ within the atmosphere of a spinning planet [e.g. Mars] varies in proportion to its size and rate of axial spin, which affect the amount of centrifugal force generated by a planet in two ways; i) The decreased centrifugal force generated by smaller planets than the Earth, or those spinning more slowly than the Earth, increases the ‘net attractive force’ of a planet, and vice versa. ii) Hence, centrifugal force on a falling spacecraft affects the relationship between distance travelled and the ‘gravitational brake’ [which causes all bodies to fall at the same speed]. These two factors result in greater acceleration of the spacecraft beyond its designed limits [based on calculations made on the more quickly spinning Earth]. Neither of these adjustments are recognised in Newton’s equation for the force of gravity upon which present-day calculations are based. Hence spacecraft designed optimally will descend too fast and crash into smaller planets or those that spin more slowly than the Earth.

From this it can be seen that the ‘net attractive force’ on the surface of a planet or within a planet’s atmosphere is dependent, in part, on the size of the planet, its rate of axial spin and the resulting centrifugal force generated by the planet.

The net strength of the ‘attractive force’—within the Atmosphere of a spinning Planet



(c) Newton’s equation for the force of gravity between two bodies:

$$F = G \frac{m1 \times M2}{d^2}$$

F is the *ostensible* Gravitational Force between m1 and M2

G is the Gravitational Constant

m1 is a falling body

M2 is the Earth

d is the distance, in metres, between m1 and M2

Newton’s equation for the force of attraction acting on a body ((c), m1) falling to Earth (M2) recognizes only the Earth’s gravitational force pulling on the falling body (m1) [and the falling body’s gravitational force pulling on the Earth (M2)]. Newton failed to recognize, in his equation, that a falling body is also under the influence of ‘centrifugal force’ caused by the spinning of a planet on its axis (the algebraic sum of Ge and [tangential] Cr). As long as the force of Ge exceeds the effects of Cr then m1 will ‘fall’ to Earth. [Note: This enquiry does not consider the effect of a planet’s size, rotational velocity or associated generated centrifugal force in regard to the bonding of atoms that hold a planet together].

Moreover, because centrifugal force depends on the rate of planetary spin and the circumference of a planet, the ‘net attractive force’ [Ge - Gr] must vary accordingly. Thus, the ‘net attractive force’ on other planets in our solar system that spin at a different rate or are of a different size to the Earth must differ to that experienced on Earth. Mars, for example, spins 41 minutes slower than the Earth [each 24 hour period] and is only 53% of the circumference of the Earth at the equator; which explains why so many spacecraft have crash-landed on Mars and Venus.

Effect of an increase in F on the Gravitational Brake

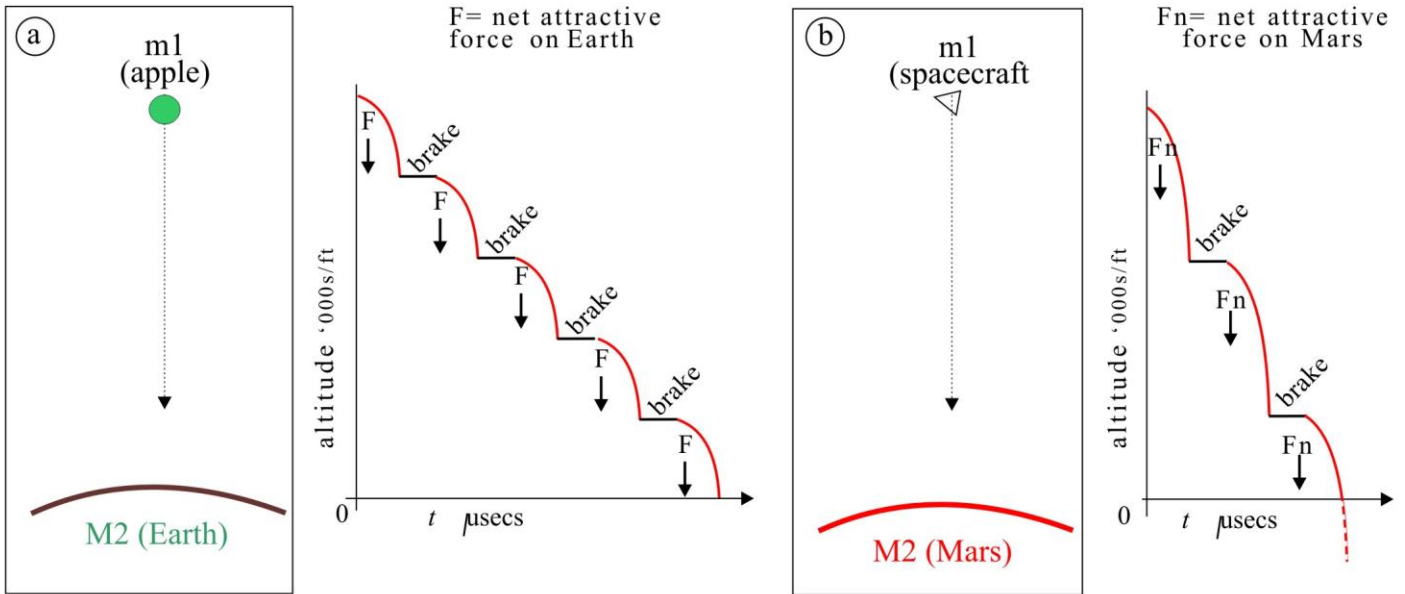


figure 25.

On a planet smaller than the Earth, or one spinning slower than the Earth, for example Mars, less centrifugal force is generated (compared to that on the Earth) and the resulting net strength of the 'attractive force' (F_n) on Mars increases. The increased F_n thus increases the distance by which m_1 approaches M_2 ['falls'] before the gravitational brake 'kicks-in' (figure 25b)). This 'delay' between cause and effect [between the rate of descent of a falling body and activation of the gravitational brake] is due to the *inertial time delay* between a *change of direction of magnetic field* from one electron-magnet in one atom and the resulting *change of direction* of a magnetically-coupled spinning electron-magnet in a neighbouring atom.

Figure 25a) illustrates how the gravitational brake operates for, say, 50% of the time on Earth, resulting in a fall rate of 32' per second squared. Figure 25b) shows that when F increases on Mars [due to a decrease in centrifugal force due to its smaller size and slower rate of axial spin] the gravitational brake operates at the same frequency but m_1 falls a greater distance in the same period of time; resulting in an increase in the rate of 'fall' between m_1 and M_2 and an increase of speed of m_1 . The increased speed to, say, 36' per second, when 'squared', results in increased acceleration between the moment of atmospheric entry and touch-down resulting in heavier impact on landing and damage to spacecraft. Mars landers should therefore be designed for the increased 'net attractive force' prevalent on Mars.

Conclusion: The 'net attractive force' on the surface of a spinning planet or within the atmosphere of a spinning planet—varies in proportion to its rate of size and axial spin which affect the amount of centrifugal force exerted on a 'falling' spacecraft in two ways; i) Centrifugal force affects the 'net attractive force' on a planet's surface and within a planet's atmosphere; the smaller the planet and the slower the axial spin result in a lesser amount of centrifugal force and a greater amount of 'net attractive force' and vice versa. ii) Hence, centrifugal force on a falling spacecraft affects the relationship between distance travelled and the 'gravitational brake' [which causes all bodies to fall at the same speed]. These two factors result in greater acceleration of the spacecraft beyond its designed limits [based on calculations made on the more quickly spinning Earth]. Neither of these adjustments are recognised in Newton's equation for the force of gravity upon which present-day calculations are based. Hence spacecraft designed 'optimally' will travel too fast and crash into planets that are smaller than the Earth or spin more slowly than the Earth.

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- figure 1b) [Supporting evidence: Researchers, at the Hahn-Meitner Institute, Berlin, announced that 'neutrons behave like compass needles' \(Science Daily, 31.3.2008\)](#)
- figure 5 [Supporting evidence: 'when electrons are bombarded by helically polarized radiation they align themselves—like compass needles—and follow the corkscrew spin of the waves' \[Nature, 2009; 458 \(7238\):610DOI:10.1038.07871 \(persistent spin helix\)\].](#)
- figure 11
and
figure 15 [ScienceDaily \(January 7, 2011\): 'the Orion nebula produces *circularly polarized light* \[helically-polarized electron-magnetic energy\] in the ultraviolet wavelengths, which is able to break the *covalent* bonds between the atoms of ice molecules'.](#)