

How Gravity Works—Why all bodies fall to Earth at the same speed

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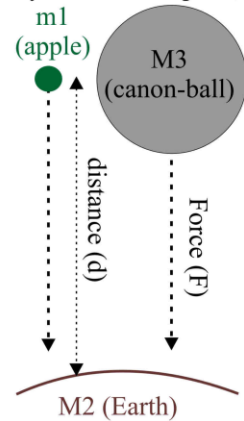
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Galileo's experiments suggest that all bodies fall to Earth under the influence of gravity at the same speed, irrespective of size or weight, but Isaac Newton's equations appear to contradict this:

$$\text{equation 1. } F = G \frac{m_1 \times M_2}{d^2}$$

G is the Gravitational Constant (see figure A4)
d is the distance, in metres, between m1 and M2

This recognises that the force [F] of gravity between m1 (an apple) and M2 (the Earth) *must* change if the size [mass] of m1 changes; for example if the apple is replaced with a canon-ball (M3) then F *must* increase, otherwise Newton's equation 1 is wrong. If the gravitational force between two bodies increases then the speed of the attracting bodies should increase. If Newton ever considered why two bodies 'fall' at the same speed he never commented on it—because he did not understand how gravity works. There is no equation to explain or accommodate it. No-one, until now, has been able to explain it. To understand why heavier bodies do *not* fall more quickly we firstly need to understand how gravity works:

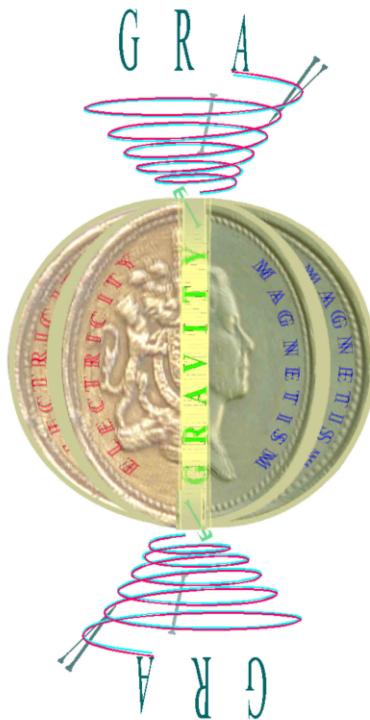


How Gravity Works—a Unified Field Theory

Summary: The pages that follow explain how the hydrogen atom [and helium atom] generate helically polarised 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, synchronises the spin of the electrons in both atoms. The neighbouring atom then, in turn, generates helically polarised 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 m1 and M2 represent the electron count of neighbouring atoms).

Why all bodies fall at the same acceleration and speed

Conclusion: As a falling atom [or m1] approaches the source of the gravity waves [the Earth, or M2], the relative frequency of the gravity waves passing through m1 increases, resulting in an increasing force of attraction [as predicted by Newton's 'equation 1']—but only up to a point, beyond which the increasing centrifugal force on the electrons prevents the electrons from following the synchronising spin of the gravity waves; then, the gravitational force, from M2 upon m1, will cease. Thus, centrifugal force creates negative feedback, resulting in an 'automatic brake' on any increase in the falling-speed of m1 towards M2—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 m1 and M3 falling towards M2 [Earth]. When released, both objects will accelerate. But M3, the heavier object (with more mass), will reach 32 feet per second *before* m1. So the 'gravitational brake' will be applied to M3 *before* m1. M3 thus becomes weightless, momentarily, allowing m1 to catch-up. Then m1 and M3 begin to accelerate again, together, from the same new position. The alternating magnetic waves from M2 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 explains why spinning discs, and objects caught in a tornado, levitate.

electricity gravity and magnetism—three sides of the same coin

figure 1.


How Hydrogen radiates Gravity Waves


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

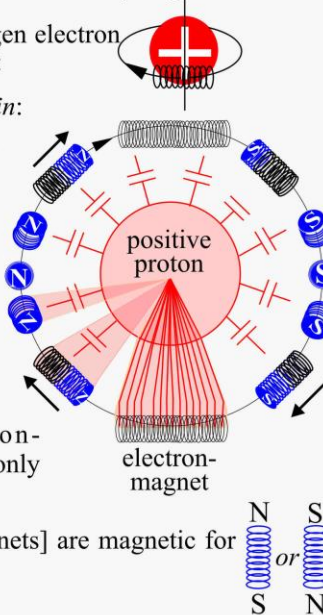
2. The coil-shaped hydrogen electron orbits the hydrogen proton:

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: 

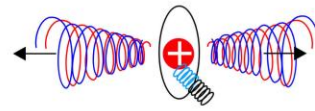
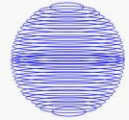
5. Electrons [electron-magnets] are magnetic for only half of the time: 



6. Hydrogen atoms point in different directions randomly:



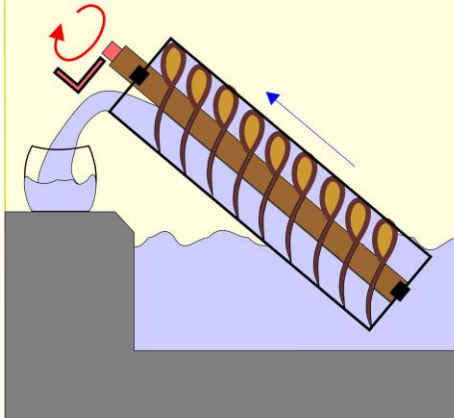
Note: The electron-magnet is shown *cylindrical* to facilitate explanation—it need not be—it could be round; *spherically-coil-shaped* (right).



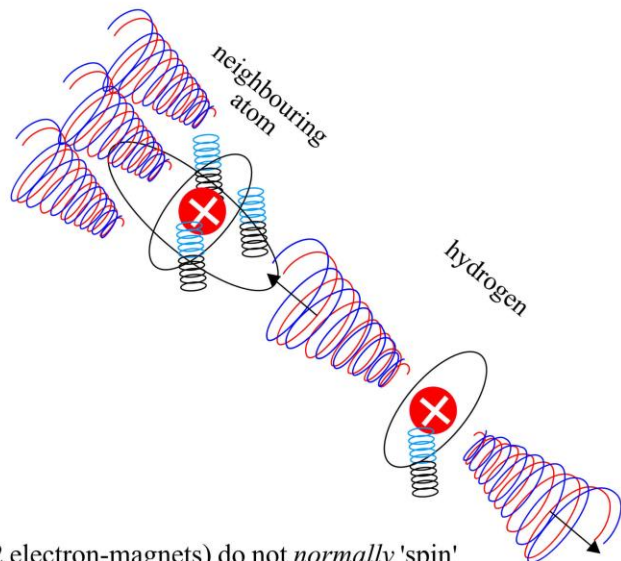
7. The spinning hydrogen electron-magnet, together with the proton, radiates corkscrew-style radio waves (electromagnetic waves) from polar regions:

The 'Archimedes Screw'

When the handle of the helical log is turned, water travels up the screw thread into the bucket.



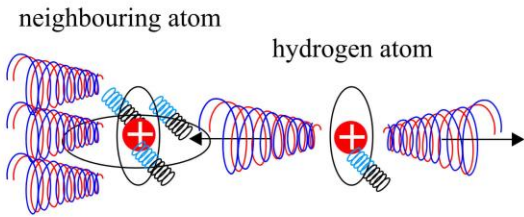
How Gravity Works



8. More complex atoms (with more than 2 electron-magnets) do not *normally* 'spin' or radiate gravity waves (because the electron shells are offset by at least 45° degrees—meaning that orbiting electrons bunch-together, causing complex atoms to tumble, not 'spin'). However, corkscrew-style radio waves from the hydrogen atom synchronise the spin of electron-magnets in neighbouring atoms. Hence, electron-magnets in neighbouring atoms follow the spin of the hydrogen electron-magnet. The neighbouring atom then radiates corkscrew-style radio waves of its own that, in turn, synchronise the spin of *more* neighbouring atoms in alignment. The corkscrew waves pull the atoms together; just as an Archimedes Screw (*left*) pulls water from a river up the helical screw-thread into a bucket. This explains why all atoms attract each other and why all objects fall to Earth.

figure 2.

How Gravity Works (synopsis)



Gravity waves, given-off by hydrogen atoms, synchronise the spin of electrons in neighbouring atoms. The neighbouring atoms then radiates gravity waves of their 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 (*below*) is not 0° to the orbital plane. There is no known way of measuring a high-speed alternating magnetic field using a magnetic compass.

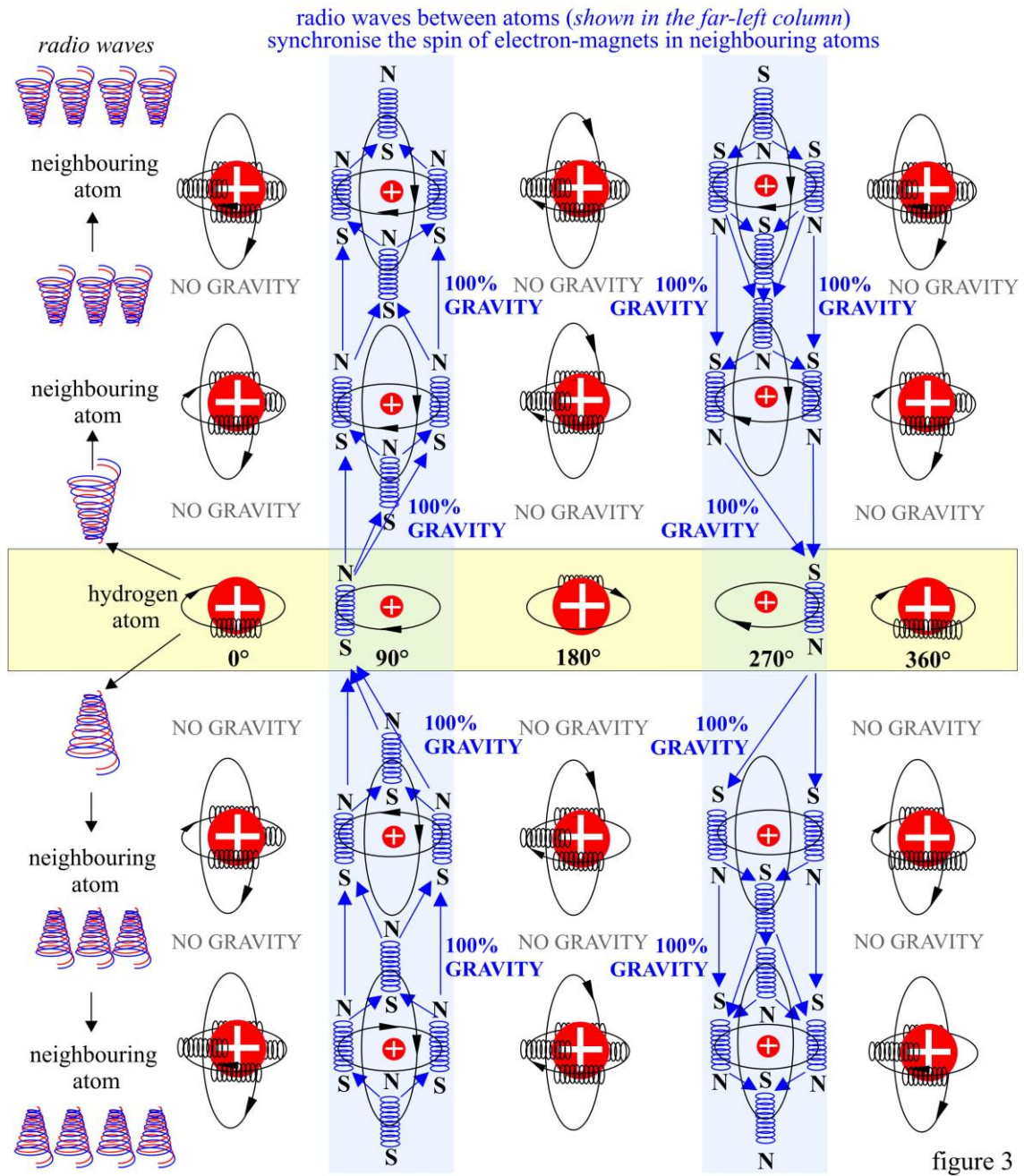


figure 3

How corkscrew-style electromagnetic radio-waves affect other atoms

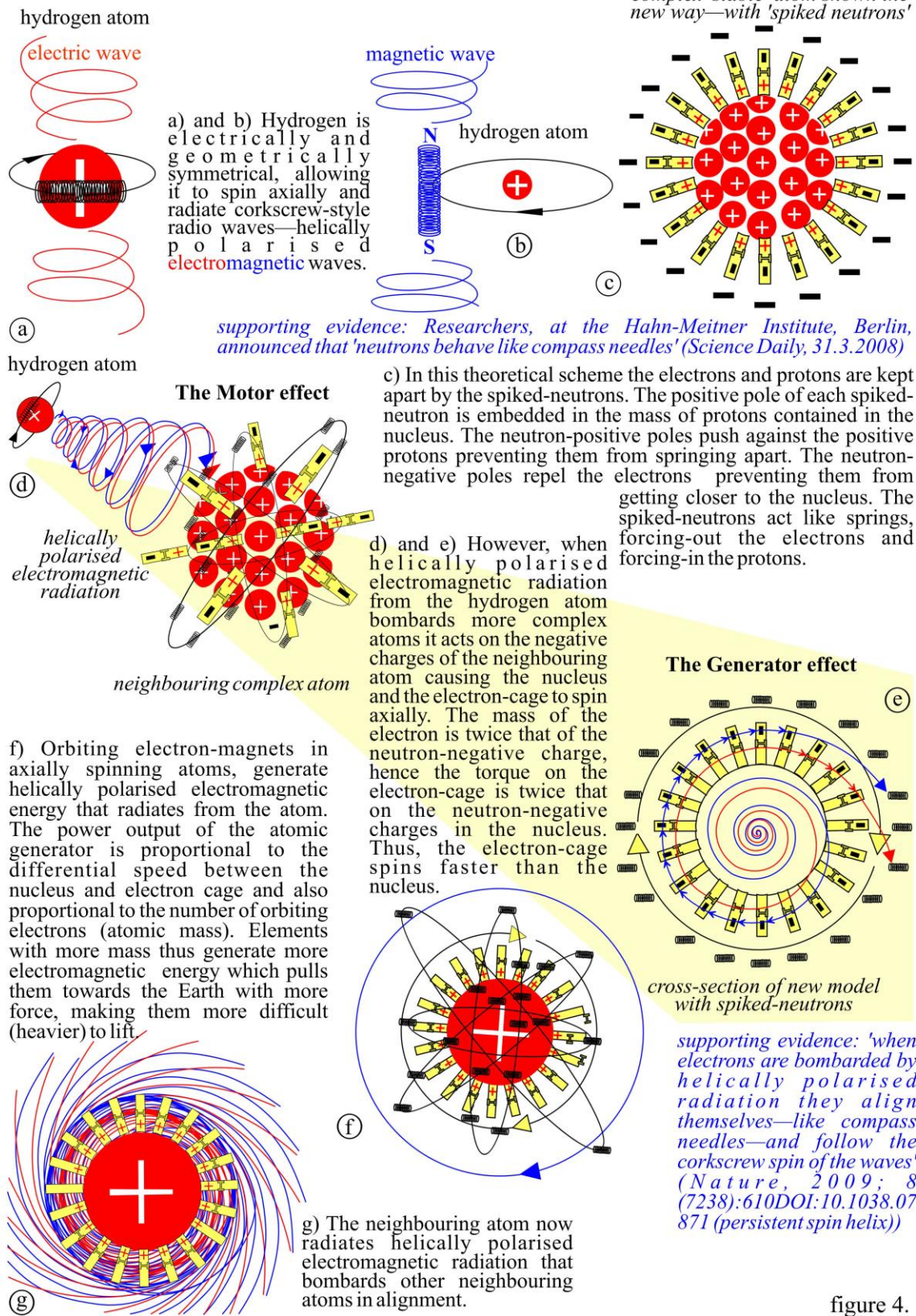
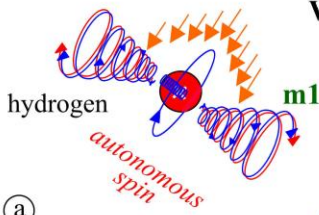


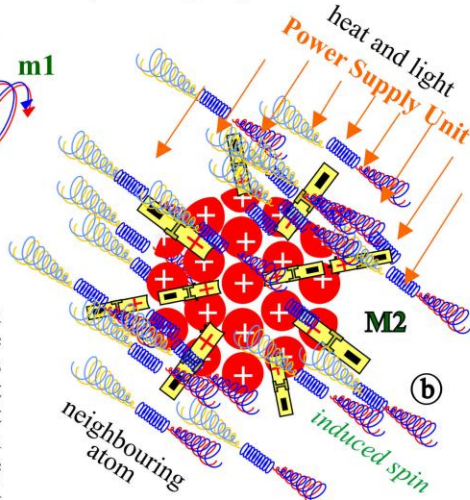
figure 4.

Why falling objects accelerate to Earth



The Gravitational Constant [G]

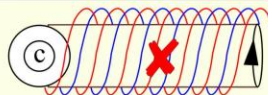
a) The energy to sustain oscillations in the hydrogen atom is obtained from ambient heat. Ambient heat sucked-in by the proton causes changes in the amount of electric field [with the expansion and contraction of the proton] and changes to the magnetic field, caused by the toppling orbiting electron-magnet.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



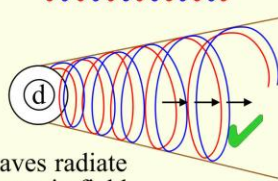
Derivation of Newton's equation

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, 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] by $m_1 \times M_2$. (c) – (e) explain why the result must be divided by the distance (between the two atoms) squared.

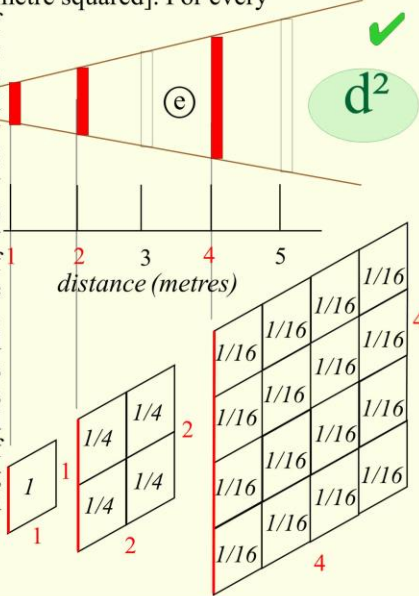
c) A theoretical atom radiating a theoretical gravity wave.



d) (c) adjusted to accommodate Newton's observation that the force decreases in proportion to the distance travelled (e).

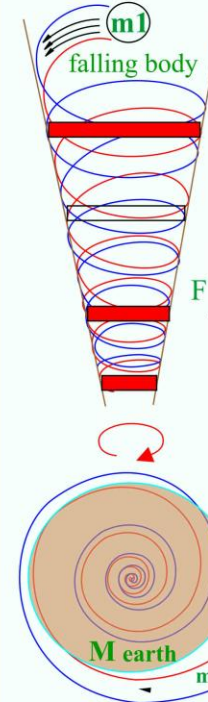


e) As theoretical gravity waves radiate from atoms they must decrease in field strength [per metre squared]. For every unit of distance travelled the radiated energy diverges geometrically and thus reduces by the square of the distance travelled (d^2). Italicised numbers inside boxes show the field strength of the radiating waves, in volts/ m^2 .



f) d^2

Why objects accelerate to Earth in proportion to d^2



f) The frequency of the helically polarised EM radiation from the Earth remains constant. However, as m_1 approaches M_2 the spiralling 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.

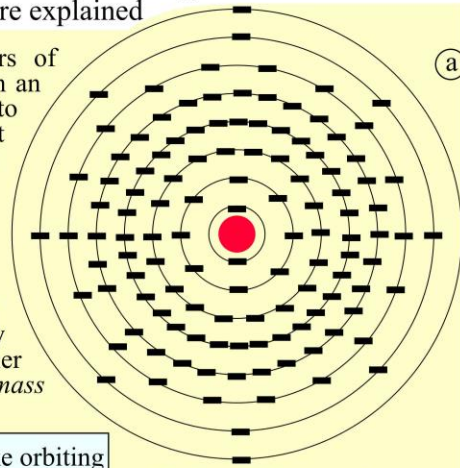
[m_1 is shown spiralling towards M_2 with the EM wave stationary but, in actuality, m_1 approaches M_2 in a straight line as the wave spirals across m_1]

Hence Isaac Newton's equation for the force of gravity (figure 7); 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).

figure 5.

**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

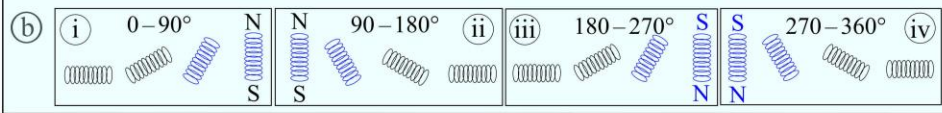
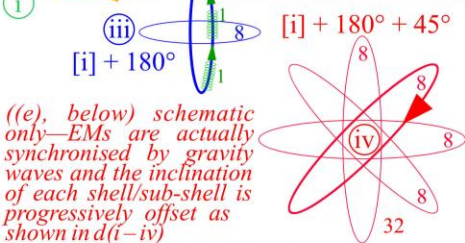
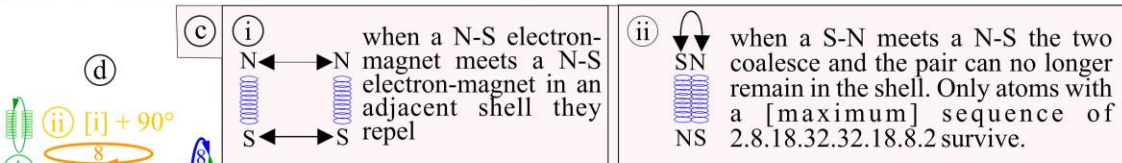
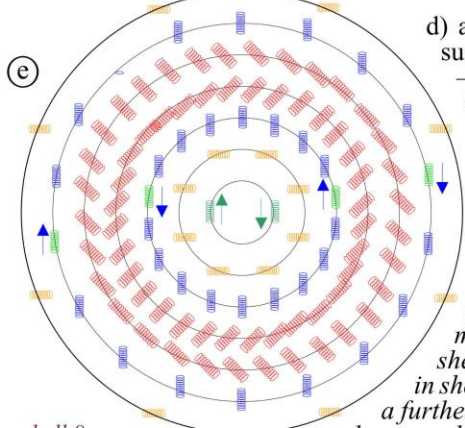


figure 6.



c(i – ii) when a northsouth [N-S] EM meets a N-S EM the two repel each other, and when a 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.

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

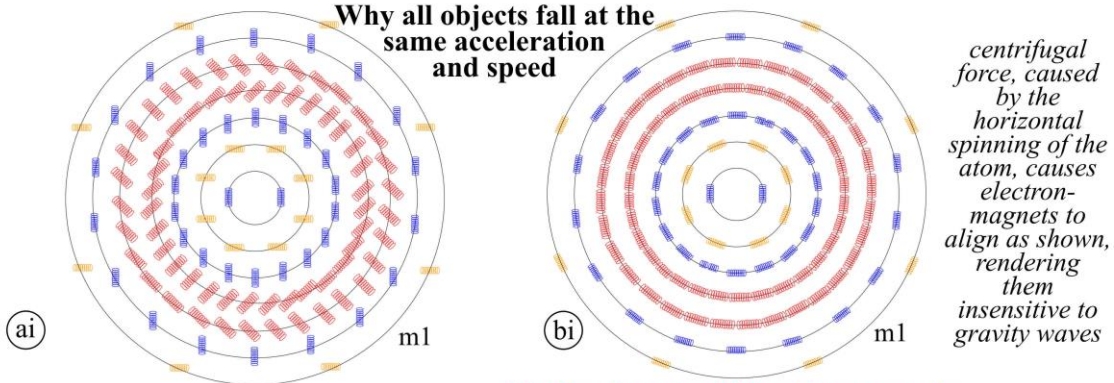


d) and e) As a general rule orbital shells [or sub-shells] cannot sustain more than 8 EMs because of considerations set down in b(i – iv) and, to avoid magnetic conflict *between* shells/subshells, the plane of successive shells/subshells must be progressively offset by at least 45°. However, shells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

shell 8 not shown

(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

Why all objects fall at the same acceleration and speed



(ai) complex atom showing electron-magnet orientation susceptible to gravity wave synchronisation

centrifugal force, caused by the horizontal spinning of the atom, causes electron-magnets to align as shown, rendering them insensitive to gravity waves

(bii) Direction of centrifugal force caused by a horizontally spinning atom falling vertically into a cone of gravity radiation.

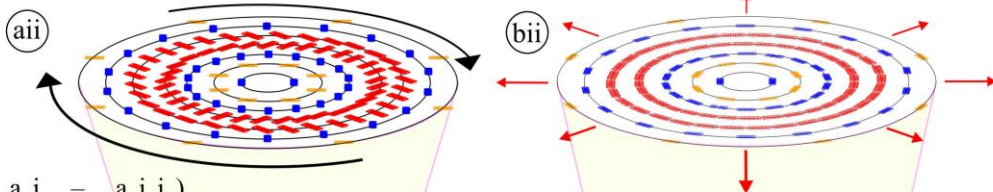
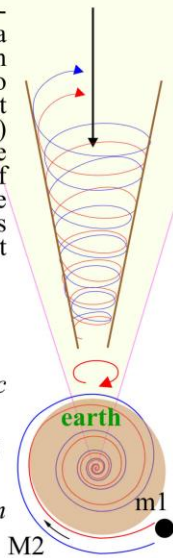


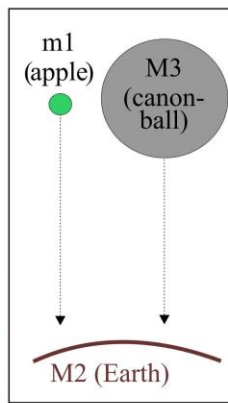
figure 7.

(ai) - (aii) Schematics of electron-magnets inside a complex atom prior to commencement of spin and, ((bi) - (bii)) after the vertical speed of the atom, inside the vortex, has reached 32 feet per second.

helically polarised electromagnetic gravity waves, from the Earth, cause atom m1 to spin in the direction shown



a) As a falling atom [or m1] approaches the source of the gravity waves [the Earth, or M2], the relative frequency of the gravity waves passing through m1 increases, resulting in an increasing force of attraction [as predicted by Newton's 'equation1']—but only up to a point, beyond which (b) the increasing centrifugal force on the electrons prevents the electrons from following the synchronising spin of the gravity waves; then, the gravitational force, from M2 upon m1, will cease. Thus, centrifugal force creates negative feedback, resulting in an 'automatic brake' on any increase in the falling-speed of m1 towards M2—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: c) Consider two objects m1 and M3 falling towards M2 [Earth]. When released, both objects will accelerate. But M3, the heavier object (with more mass), will reach 32 feet per second before m1. So the 'gravitational brake' will be applied to M3 before m1. M3 thus becomes weightless, momentarily, allowing m1 to catch-up. Then m1 and M3 begin to accelerate again, together, from the same new position. The alternating magnetic waves from M2 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.



(c)

Newton's equation fails to explain why, when an apple is exchanged for a canon-ball [i.e. m1 increases] the consequential increase in F does not affect acceleration, or speed, beyond 32'/sec², as observed by Galileo: His equation fails to recognise the constraint imposed by the 'automatic gravitational brake'—because he did not understand how gravity works. Moreover, this mechanism explains why, and how, spinning discs, and objects caught in a tornado levitate, and why 'flying saucers' are reported to spin.

$$F = Gm1M2/d^2$$

G is Newton's gravitational Constant
6.672 x 10¹¹ N m² kg²

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