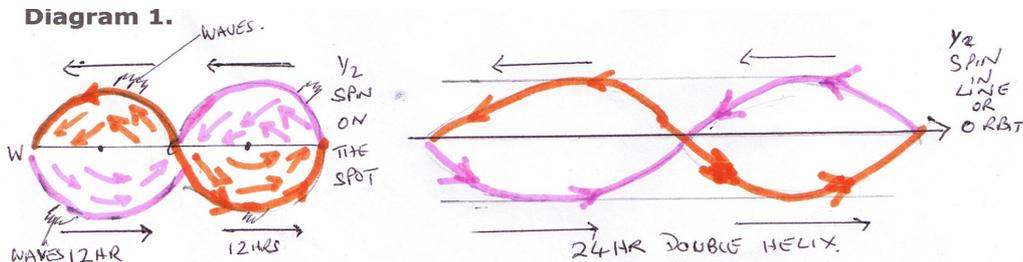


Discovered: The Double Helix of Physics

A Discovery comparable, when judged by ongoing consequences, to the sixty year old discovery by Francis Crick and James Watson of The Double Helix of Genetic DNA
Adams. Hastings. UK. 2014

Example: Hastings Twins: every 12 hours in orbit as $\frac{1}{2}$ the CONTENTS of Earth (including billions of human beings, including any associated waves, air, electromagnetic, gravity, geo stationary satellites, and the contents of **Hastings, England**) start to spin West to East $\frac{1}{2}$ of the contents of Earth including **Hastings, New Zealand** MUST start to spin in the OPPOSITE direction East to West.

After 12 hours the $\frac{1}{2}$ spin contents MUST reverse in order to return to a position in space, tens of thousands of kilometres further away from the start in orbit, where East is again East and West is again West. One 24 hour period gains one complete 'periodic cycle' of Earth in the Solar System.



If any rotating or spinning object or system or associated waves, what ever its scale size from quantum particles to galaxies, what ever its shape, moves in line or orbit its CONTENTS (because of the two opposite $\frac{1}{2}$ spins) must move in two lines of opposing helixes which together give the cause of THE DOUBLE HELIX OF PHYSICS.

It may take the period of a fraction of a second and a fraction of a millimetre for an electron/wave to complete its cycle of two opposite $\frac{1}{2}$ spins (frequency measured in Hertz), similarly photon/waves of light (also measured in Hertz) and perhaps a 100,000 years period and trillions of kilometres for each of the billions of spinning galaxies now observed to complete their, less frequent, cycle of two opposite $\frac{1}{2}$ spins – but the GUIDING PRINCIPLE is the same.

Note. The known to be INCOMPLETE 'theory of particle physics' has Pauli's Principle of $\frac{1}{2}$ spin 1925 applicable to 'fermion particles' such as quarks, electrons, neutrinos inside atoms but not light photons. But light photons do move along paths of 'spiral helixes' inside the 'spiral helixes' of light beams which contradicts at this part of the theory.

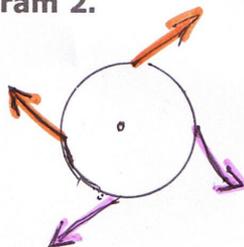
Houston: we have a problem.

WE can look at everyday scale sizes - moving and spinning children's tops and spinning ballet dancers as they cross a stage all with opposite $\frac{1}{2}$ spins & inside/internal Double Helix contents - sub atomic, atoms & molecules.

On larger scale sizes there are swirling hurricanes, and typhoons moving in Earth's air space, whirlpools in Earth's sea and ocean space, swirling gaseous nebula, millions of spiral galaxies astronomers observe in Universal space.

All have the property of movement in a line (L for linear momentum of mass \times velocity²) and **OPPOSITE $\frac{1}{2}$ SPINS** which means they must create Double Helixes of Physics for their internal contents.

Diagram 2.



Opposite arms
of spiral galaxies
of typhoons
of air waves
of spinning tops.

Every moving wheel whether of a smooth or irregular unicycle, bicycle, tricycle, roulette table or a perfectly engineered or irregular globe, clockwise or anti-clockwise, horizontal or vertical, or tilted (Earth 23 degrees which effects climates and weather patterns), must have a minimum of **TWO** opposite $\frac{1}{2}$ spins. An object with **ONE** or **NO** opposite $\frac{1}{2}$ spin is a physical impossibility.

Quasars and pulsars with higher energy $\frac{1}{2}$ spin faster than our Sun, more energetic photons at the ultra violet end of the light spectrum spin faster (giving a higher frequency measured in Hertz) than infra red. Radio waves (also frequency measured in Hertz) with far less energy content

than infra red may have a frequency/periodic cycle stretched out to the length of a building.

THE PRINCIPLE OF OPPOSITE 1/2 SPINS/DOUBLE HELIX OF PHYSICS helps us to understand why the Helix path of Earth, interacting (tidal gravity) with the Sun and Moon's Helical paths, wobbles on its tilted axis (which wobble is known to affect changes in Earth climates).

THE PRINCIPLE OF OPPOSITE 1/2 SPINS helps to tell us why the trajectories of spinning irregular shapes such as plant seeds of Nature, aircraft, rocky asteroids, and us are chaotic. Why in at least one multi billion dollar industry (munitions and ammunition) we find 'rifling' and 'regular bullet and shell shapes' – targeted predictable accuracy. In contrast naturally shaped seeds need 'unpredictable inaccuracy' in order to disperse over a wider area.

Spintronics is a nascent multibillion dollar industry (Scientific American magazine 2002). Little progress to date since a guiding theory or principle is missing. How can there one if the existing master particle theory says ...no 1/2 spin.

Note 1: *Nothing can travel faster than the speed of a beam of light in a vacuum (Einstein) 1905-16. Every photon travelling along the PATHS OF THE DOUBLE HELIX that are inside a WHOLE beam of light travelling in a vacuum must travel faster than the whole beam because they must cover a greater distance in the same period of measured time.**

Note 2: QED: The Strange Theory of Light. Richard Feynman's Sum of Histories (which gained him a Nobel Laureate for physics) quote "where sometimes photons move faster than light but the whole balances out' to get the uniform speed of whole light beams".

The same must apply to electrons moving faster than the whole current. Atoms and forms of life on Earth, including patients in hospitals, bodies in mortuaries, must move faster than the whole Earth in the same period of time – 24 hours.

Note3: in 400 years our knowledge of Earth orbiting our Sun has changed: circles>ellipses>rosettes (Einstein)>helixes.

Note4: Crick and Watson's article on the DOUBLE HELIX OF DNA published Nature magazine 1953.

Crick and Watson's discovery didn't end genetics research: on the contrary it opened new "doors" previously closed.

**A View from outside a box may gain a new perspective.
The Double Helixes of Earth (and planets) becomes obvious and understandable when the spinning Earth can be visualised moving in a *larger box* – the entire Solar System.**

What if it became possible today, owing to the advancement of science and technology, to visualise the entire Solar System of Newton, Einstein moving in the *largest box* of all – the Universal box?

1905 Einstein predicted impossible, no can do. But today we can & have. Article 3 on the Great Attractor of Galaxies discovered modern astronomers, a later generation of Newton's Giants.

Science education: the Double Helix of Physics, the Principle of $\frac{1}{2}$ (or reverse spin) is so simple that a child of 12 can understand and find, *for themselves*, many RELEVANT examples in worlds of Nature and the works of Mankind.

For over a century scientists have been unable to understand the Nature of *joined up* spinning twins (example the famous EPR experiment involving Albert Einstein).

Example highly relevant to EPR – opposite arms of a typhoon or galaxy (diagram 2 above) twin must 'fly off' in opposite directions if the connections are severed.

Similarly a spinning Frisbee when severed into two parts: each part must 'fly off' in opposite directions.

If Hastings UK is moving in one direction $W \gg E$ then Hastings NZ must move in the opposite direction $E \gg W$ (diagram 1). If gravity failed then each would move off in opposite directions.

No magic, no miracles it happens because it must. The miracle would be if it didn't happen. Adams (UK) 2014.

