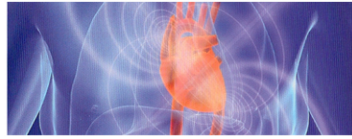
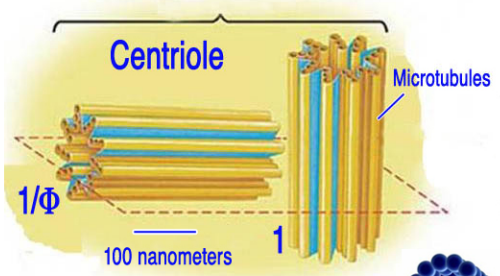


The Golden Fractal Cosmos

Expressions of the Golden Ratio Φ harmonizing the various scales of the uni-verse.

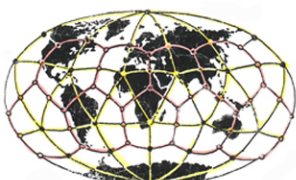


At moments of love & compassion, the heart displays Phi harmonic cascades.



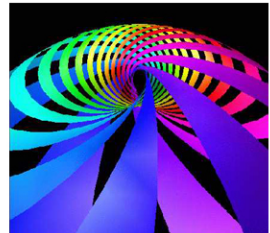
- * The centriole is a phi-structured organelle at the center of the centrosome.
- * The microtubules display Fibonacci numbers and Phi-recursive winding pathways.

Organismic scale ↑



The earth grid is based on an icosadodecahedron
Planetary scale

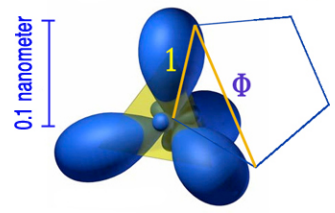
Quantum Scale



- * The very phenomenon of quantization is defined by the Phi (Φ) constant.
- * The Fine Structure constant (strength of the electro-magnetic radiation) is defined by: $\Phi^2 / 360 = 1 / 137.5$
- * Planck's length = 1.616×10^{-35} m
- * Planck's area = 2.612×10^{-70} m²

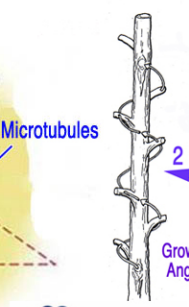
Atomic / molecular scale ↓

- * Phi defines cationic & anionic radii.
- * Water and atoms of life are sp³ hybrids & form bonds with tetrahedral geometry.



- * Molecular compounds form Phi-based Platonic volumes.

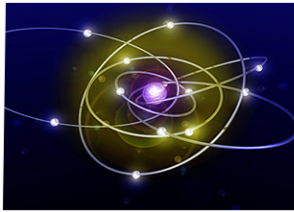
Buckminsterfullerenes are nano geodesic domes.



$360^\circ / \Phi^2 = 137.5^\circ$

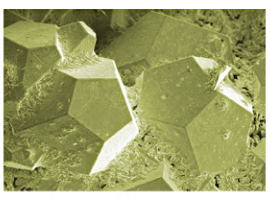
Garden scale ↑

Sub-atomic scale

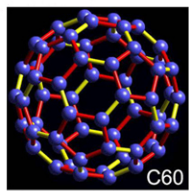


- * The Fractal-Cantorian space-time theory views elementary particles as functions of the golden mean.
- * Quark masses are defined by Φ and $1/\Phi$ as a "harmonic musical ladder".
- * As the most irrational number, Phi is the simplest unit allowing for complex nested wave structures.

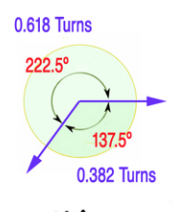
Nano scale ↓



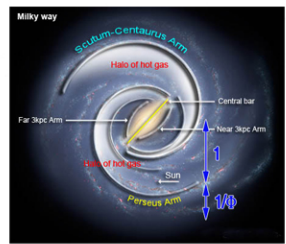
Quasicrystals have Phi-based penta-symmetry.



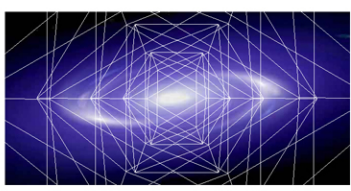
1 nanometer



Galactic scale

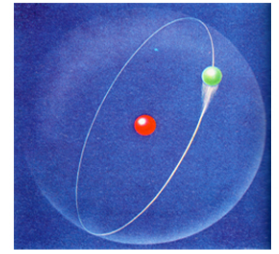


Sun to Galactic center = 2/3
Galactic scale



The WMAP data show a geometric topology.
Cosmological scale

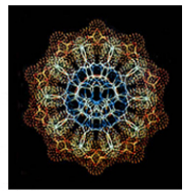
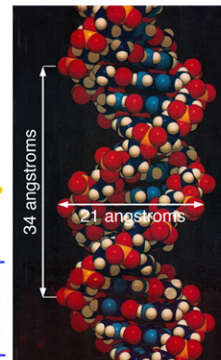
Hydrogen atom scale



- * Phi arises at the core of the hydrogen atom.
- * The ratio of the radius of hydrogen to the ground state Bohr radius is the golden ratio Phi.
- * The Bohr radius has two golden ratios pertaining to the electron and the proton.
 $r_{\text{bh}} = h / 2\pi m_e \alpha_{\text{EM}} = h360 / 2\pi m_p \Phi^2$

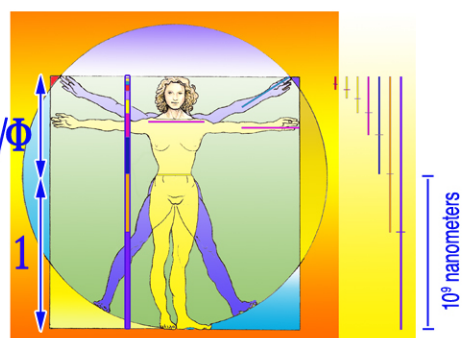
DNA scale ↓

Fibonacci inter-resonances in sequences of nucleotides form the DNA Phi Supra-Code. The structure of the DNA is based on Phi.



Top view of DNA: double pentagon

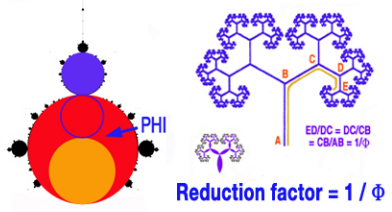
Molecule of life (DNA):
Height: 34 Angstroms
Width: 21 Angstroms



Homo sapiens (Da Vinci Vitruvian Human)

Human scale ↑

Golden Fractality

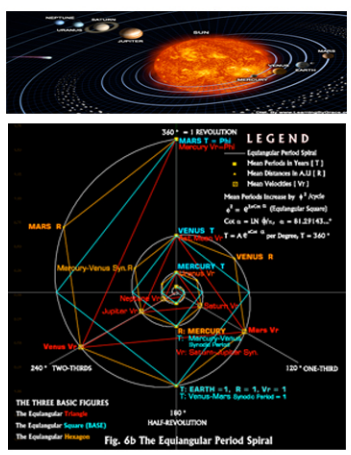


Reduction factor = 1 / Φ

Phi is the optimization of recursive, self-similar fractality unifying symmetries on all scales.



Phi is the primordial cosmic constant quantum-entangling oneness & multiplicity.



The solar system is a harmonic music instrument based on the Phi series.

Solar System scale