Inside elliptical orbit, starting from top: Kepler's second law of planetary motion: Newton's second law of motion; Kepler's third law, Newton's gravitational law
Einstein's General Relativity equation; Schroedinger's equation; Dirac equation; Atiyah-Singer Theorem; Yang-Mills Equations; Defining relation og Supersymmetry

The sun, planet and elliptical path: Kepler' first law of planetary motion (depicted at a 45° oblique view)
↓

Einstein's mass-energy equation →

$$E_0 = mc^2$$

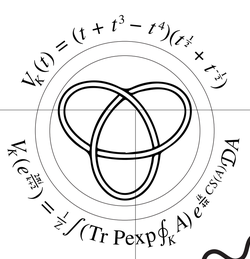
$$\frac{d\theta}{dt} \propto \frac{1}{r^2}$$

$$\nabla \times \mathbf{B} = \frac{1}{c}\frac{\partial \mathbf{E}}{\partial t} \qquad \nabla \times \mathbf{E} = -\frac{1}{c}\frac{\partial \mathbf{B}}{\partial t}$$

$$\nabla \cdot \mathbf{B} = 0 \qquad \nabla \cdot \mathbf{E} = 0$$

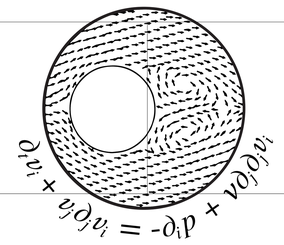
←James Clerk Maxwell's equations governing
←Electrodynamics

Witten's path-integral formulation for right trefoil knot using Chern-Simons action →



$$T^2 \propto a^3$$

$$\int_M d\omega = \int_{\partial M} \omega$$



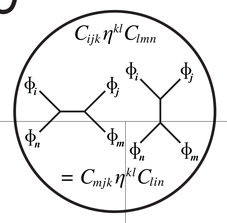
fluid dynamics:
Navier-Stokes equation
With flow around cylinder
←

$$\mathbf{F} = m\mathbf{a}$$

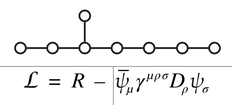
$$F = \frac{Gm_1m_2}{r^2}$$

Beneath Maxwell's Equations:
Stokes' Theorem

Associativity eqoation in Quantum Field Theory →



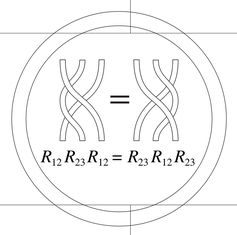
$$R_{\mu\nu} - \frac{1}{2}Rg_{\mu\nu} = 8\pi T_{\mu\nu}$$



←Supergravity Lagrangian

$$i\hbar\frac{\partial\psi}{\partial t} = -\frac{\hbar^2}{2m}\nabla^2\psi + V\psi$$

Yang-Baxter equation →



To the left of lower ellipse, inside photon ray:

The boundary of a boundary is zero.

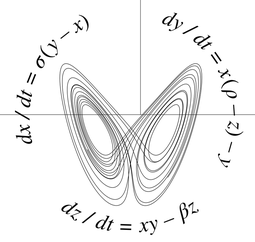
Heisenberg's indeterminacy relation

$$(i\not{D} - m)\psi = 0$$

Euler's formula for Zeta-function

$$\dim\ker \not{D}_E - \dim\operatorname{coker} \not{D}_E = \int_M \hat{A}(M)\cdot ch(E)$$

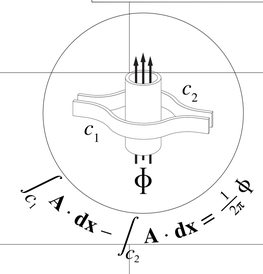
Lorenz Attractor:
Lorenz equations with orbit →



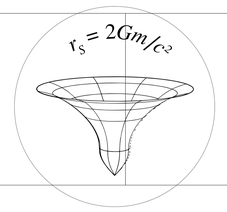
$$\partial\partial = 0$$

$$F_A = dA + A \wedge A$$
$$D_A^* F_A = 0$$

electromagnetism:
←Aharanov-Bohm effect

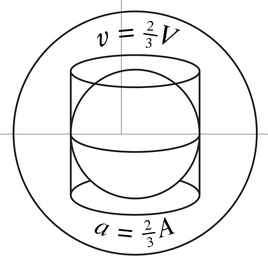


Schwarzschild Radius:
Event horizon for black hole →



$$\Delta x \Delta p \geq \frac{\hbar}{2}$$

$$\{Q, Q\} = P$$



Archimedes'
←Sphere in cylinder

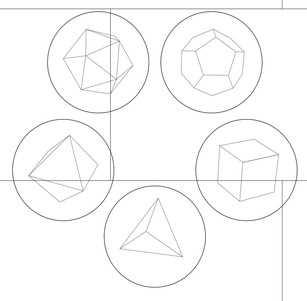
(carved on his gravestone)

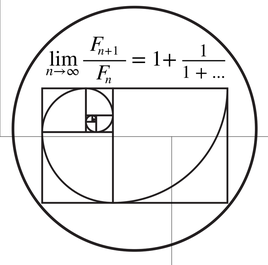
Feinman diagram →

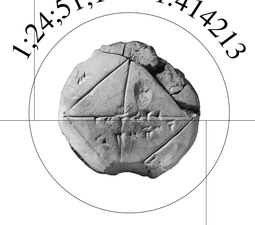
$$\sum_{n=1}^{\infty}\frac{1}{n^s} = \prod_p \frac{1}{1 - \frac{1}{p^s}}$$

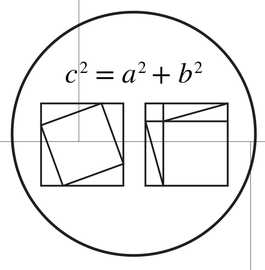
←Feinman diagram;
Compton scattering of a photon off an electron

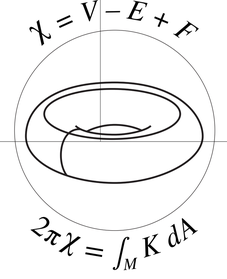
Platonic Solids:
The five regular polyhedra →











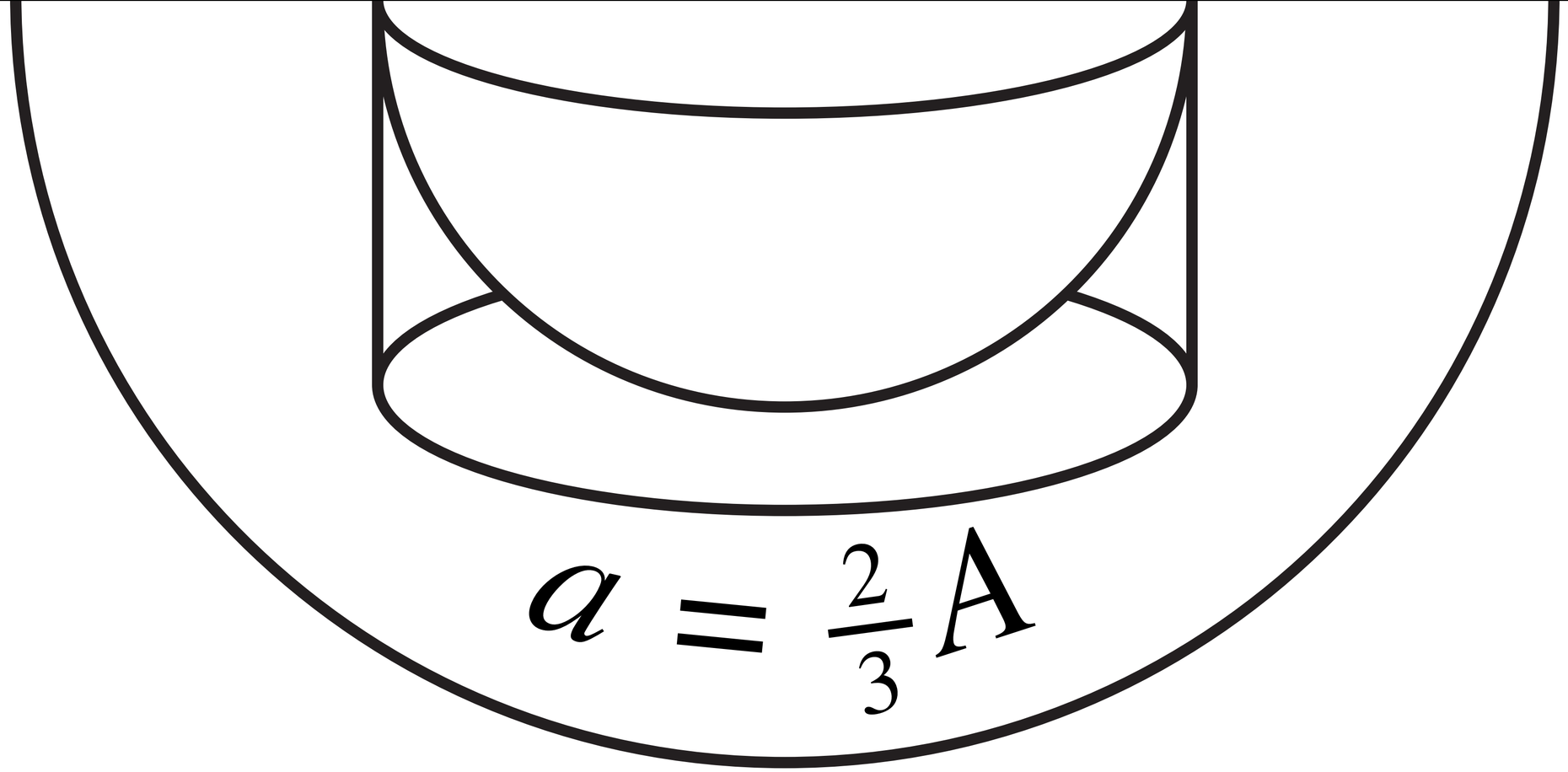
Cell decomposition of torus;
←Euler Characteristic;
Gauss-Bonnet formula

↑ Feinman diagram

↑ Golden Section diagram; Equiangular spiral; Ratio of consecutive Fibonacci numbers

↑ Babylonian computation of √2 Tablet YBC 7289

↑ Visual proof of the Pythagorean Thearem


$a = \frac{2}{3}A$