Dated 02/01/13 with **two new changes** and **corrections** where vector printout does not match postscript file.

I **new change: no subscript (calligraphic A) on integral.**
correction: more space between Tr and Pexp

$V_K(t) = (t + t^3 - t^4)(\sqrt{t} + \sqrt{t}^{-1})$

$V_K(e^{2\pi i/(k+2)}) = \frac{1}{Z} \int \left(\text{Tr Pexp} \oint_K A\right) e^{(ik/4\pi)CS(A)} \mathcal{D}A$

II **correction: last subscript is n, not m**

$C_{ijk}\eta^{kl}C_{lmn} = C_{mjk}\eta^{kl}C_{lin}$

III

$R_{12}R_{23}R_{12} = R_{23}R_{12}R_{23}$

IV

Equations for Lorenz attractor:

$$\frac{dx}{dt} = \sigma(y - x)$$

$$\frac{dy}{dt} = x(\rho - z) - y$$

$$\frac{dz}{dt} = xy - \beta z$$

V **correction: show difference between v and ν greek nu (v's have subscripts)**
Note: we need to work on graphic

$\partial_t v_i + v_j \partial_j v_i$

$= -\partial_i p + \nu \partial_j \partial_j v_i$

VI **new change: bold dx instead of d "ell."**
Note: we need to work on the graphic.

$\int_{C_1} \mathbf{A} \cdot \mathbf{dx} - \int_{C_2} \mathbf{A} \cdot \mathbf{dx} = \frac{1}{2\pi}\Phi$

VII **correction: center letter in second term is γ (Greek gamma) and not r.**
correction: last σ is a SUBscript.
correction: please find better calligraphic L, more like Palmer.

Supergravity:

$$\mathcal{L} = R - \bar{\psi}_\mu \gamma^{\mu\rho\sigma} D_\rho \psi_\sigma$$

VIII

$r_S = 2Gm/c^2$

IX

$\chi = V - E + F$

$2\pi\chi = \int_M K \; dA$

X. *Pythagoras:*

$$c^2 = a^2 + b^2$$

XI. *Babylonian Tablet*

XII. *Golden mean = partial fraction expansion:*

$$\lim_{n\to\infty} \frac{F_{n+1}}{F_n} = 1 + \frac{1}{1 + \dots}$$

XIII. *Archimedes:*

$$v = \frac{2}{3} V$$

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