$$m\frac{d^2X(t)}{dt^2} = F(X(t))$$

$$\frac{d}{dt}\frac{\partial L(X(t),\dot X(t))}{\partial \dot X^i(t)} - \frac{\partial L(X(t),\dot X(t))}{\partial X^i} = 0.$$

$$\frac{dZ(t)}{dt} = J(dH(Z(t)))$$

$$p^2 = m^2c^2$$

$$dF = 0, \quad \delta F = j$$

$$i\hbar\frac{\partial\psi(t,x)}{\partial t} = (-\Delta + V)\psi(t,x)$$

$$\varphi(f) = \hat f(\varphi)$$

$$\mathcal{D}'(\mathbb{R}^n)$$

$$T_\varphi(f) = P(\varphi f)$$

$$[M : N] = \dim_N L^2(M)$$

$$\mathrm{I}_n, \mathrm{I}_\infty, \mathrm{II}_1, \mathrm{II}_\infty, \mathrm{III}_\lambda (0 \le \lambda \le 1)$$

$$(\alpha\cdot(-i\nabla) + m\beta + V)\psi(t,x) = 0$$

$$(\Box + m^2 + V)\phi(t,x) = \lambda|\phi(t,x)|^2\phi(t,x)$$

$$[Q,P] = i\hbar$$

$$[H,T] = i\hbar$$

$$\Psi(t) = e^{-itH/\hbar}\Psi$$

$$A(t) = e^{itH/\hbar}Ae^{-itH/\hbar}$$

$$(\nabla_X h)Y = (\nabla_Y h)X$$

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$$\psi(z) = \mathrm{Re}\int_0^z \left(\frac{1}{2}(1-g^2),\ \frac{\sqrt{-1}}{2}(1+g^2),\ g\right)\omega$$

$$\int_D d\omega = \int_{\partial D}\iota^*\omega$$