

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

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

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

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

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

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

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

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

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

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

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

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

$$[\mathbf{I}_n,\mathbf{I}_{\infty},\mathbf{II}_1,\mathbf{II}_{\infty},\mathbf{III}_{\lambda}(0\leq\lambda\leq1)$$

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

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

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

$$\begin{aligned} 1+\tfrac{1}{2^2}+\tfrac{1}{3^2}+\tfrac{1}{4^2}+\tfrac{1}{5^2}+\cdots &= \tfrac{\pi^2}{6} \\ j(\tau) &= \tfrac{1}{q} + 744 + 196884 q + \cdots \end{aligned}$$

$$\chi(\mathcal{O}_X)=\tfrac{K_X^2+\chi(X)}{12}$$

$$\int_G \chi(g)^kd\zeta_p=(1-p^{k-1})\zeta(1-k)$$

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

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