Example

Niphitphon (Saint) Sachdev

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1 Schrödinger Equation

$$i\hbar \frac{\partial}{\partial t}\psi = \hat{H}\,\psi$$

2 Maxwell's Equation

$$\nabla \cdot \mathbf{B} = 0$$
$$\nabla \times \mathbf{E} = -\frac{\partial \mathbf{B}}{\partial t}$$
$$\nabla \cdot \mathbf{E} = \frac{\rho}{\varepsilon_0}$$
$$\nabla \times \mathbf{B} = \mu_0 \mathbf{J} + \mu_0 \varepsilon_0 \frac{\partial \mathbf{E}}{\partial t}$$

3 Euler-Lagrange Equation

$$\frac{d}{dt}\left(\frac{\partial}{\partial \dot{q}} L\right) - \frac{\partial}{\partial q} L = 0$$