

# Gravitational Waves Are All You Need

A Causal Reversal of Gravity and Matter

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April 28, 2025

## Schrodinger's Equation →

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$$i\hbar \frac{\partial}{\partial t} \Psi(\mathbf{r}, t) = \hat{H} \Psi(\mathbf{r}, t)$$

$$\hat{H} \psi(\mathbf{r}) = E \psi(\mathbf{r})$$

$$P(\mathbf{r}, t) = |\Psi(\mathbf{r}, t)|^2 = \Psi^*(\mathbf{r}, t) \Psi(\mathbf{r}, t)$$

$$\langle \hat{A} \rangle = \int \Psi^*(\mathbf{r}, t) \hat{A} \Psi(\mathbf{r}, t) dV$$

$$\hat{A} \psi_a = a \psi_a$$

$$\mathcal{L}_{\text{SM}} = \mathcal{L}_{\text{Gauge}} + \mathcal{L}_{\text{Fermion}} + \mathcal{L}_{\text{Higgs}} + \mathcal{L}_{\text{Yukawa}}$$

$$\mathcal{L}_{\text{Gauge}} = -\frac{1}{4} G_{\mu\nu}^a G^{a\mu\nu} - \frac{1}{4} W_{\mu\nu}^a W^{a\mu\nu} - \frac{1}{4} B_{\mu\nu} B^{\mu\nu}$$

$$\mathcal{L}_{\text{Fermion}} = \sum_i (|(q)_{Li} i\gamma^\mu D_\mu q_{Li} + |(u)_{Ri} i\gamma^\mu D_\mu u_{Ri} + |(d)_{Ri} i\gamma^\mu D_\mu d_{Ri} + |(l)_{Li} i\gamma^\mu D_\mu l_{Li} + |(e)_{Ri} i\gamma^\mu D_\mu e_{Ri})$$

$$\mathcal{L}_{\text{Higgs}} = (D_\mu \varphi)^\dagger (D^\mu \varphi) - V(\varphi)$$

$$\mathcal{L}_{\text{Yukawa}} = - \sum_{i,j} (Y_{ij}^u |(q)_{Li} \tilde{\varphi} u_{Rj} + Y_{ij}^d |(q)_{Li} \varphi d_{Rj} + Y_{ij}^e |(l)_{Li} \varphi e_{Rj}) + \text{h.c.}$$