

# SFIT Key Equations & Derivations Cheat Sheet

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**Non-Reciprocal Metric Tensor**  $g_{\mu\nu}^{\text{SFIT}} = \eta_{\mu\nu} + h_{0z}^{\text{SFIT}}(t)$   $h_{0z}^{\text{SFIT}}(t) = \alpha \frac{z}{R_e} \cos(\Omega_s t)$

**Refined Coupling Kernel**  $K = 1.060 \times (1 + \delta_{\text{flux}} + \delta_{\text{env}})$

**TDSE Perturbation**  $V_s(z, t) = m_n g z \left( 1 + 1.060 \cdot \frac{z}{R_e} \cos(2\pi \cdot 0.0012 t) \right)$

**Wigner Skew Term**  $\alpha \cdot v_g \cdot \partial_z |\psi|^2$

**Phase Jump**  $\Delta\phi \approx 0.0506 \text{ rad}$

**Statistical Tension**  $\Sigma^2 = \sum_{k=1}^{34} \frac{(A_{\text{obs}} - A_{\text{SFIT}})^2}{\sigma_k^2} \approx 14.28\sigma$

**Information Mass**  $M_{\text{inf}} = \frac{\hbar \Omega_s}{c^2} \approx 8.8 \times 10^{-51} \text{ kg}$