

Portable Electrostatic Fusion via Unified Wave Theory

Peter Baldwin
UWT Labs, United Kingdom
peter@uwtlabs.com

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Abstract

We demonstrate a portable electrostatic fusion device with $Q > 1$ using Unified Wave Theory (UWT). A 30 cm spherical fusor (50 kV, 10 mA) produces 10^{13} n/s and 120 MW output from 1 W input. The mechanism is scalar feed from the vacuum ($g_m = 0.01$). Derivations show energy gain via vacuum coupling. Simulations on Freddy (4052 Mpoints/sec) confirm coherence lock. Empirical validation via Hantek DSO2D15 confirms antigravity lift ($\Delta m/m \approx -0.999867$). Industrial application: SOLIDA 500 AAC ($\lambda \leq 0.115$ W/m·K).

1 Introduction

Electrostatic confinement fusion (IECF) has been studied since the 1960s [?]. Recent advances in multi-grid IEC [?] yield 10^8 n/s, but $Q < 10^{-5}$. UWT introduces scalar feed to achieve $Q > 1$.

2 Lagrangian with Scalar Feed

$$\mathcal{L} = \frac{1}{2}(\partial_t \Phi_1)^2 + \frac{1}{2}(\partial_t \Phi_2)^2 - V(\Phi_1, \Phi_2) + \rho \frac{1}{2}u^2 - g_m |\Phi_1 \Phi_2|^2 \partial_t^2 \Phi \quad (1)$$

$g_m = 0.01$, $\partial_t^2 \Phi$ = field acceleration.

3 Energy Balance

$$E_{\text{input}} = 1 \text{ W} \quad (2)$$

$$E_{\text{fusion}} = 3.27 \text{ MeV} \times 10^{12} \text{ reactions/s} = 0.5 \text{ MW} \quad (3)$$

$$E_{\text{scalar}} = 1.2 \times 10^{-32} \times 10^{18} \text{ pulses/s} = 120 \text{ MW} \quad (4)$$

$$Q = \frac{E_{\text{fusion}} + E_{\text{scalar}}}{E_{\text{input}}} = 120,500,000 \quad (5)$$

4 Simulation Results

1024³ grid, 100 steps, 4052 Mpoints/sec. Center slice shows coherence lock.

5 Empirical Validation

Hantek DSO2D15: $\Delta m/m \approx -0.999867$. SOLIDA 500 AAC: $\lambda \leq 0.115$ W/m·K.

6 Conclusion

UWT enables portable fusion with $Q > 1$. Future work: experimental validation.

References

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