UWT Periodic Table Refinement

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1 Introduction

The Unified Wave Theory (UWT) refines the periodic table using the mass equation $\langle m \rangle = \frac{\kappa A_f^3}{2\lambda}$, with $\kappa \approx 5.06 \times 10^{-14}\,\text{GeV}^2$, $\lambda \approx 2.51 \times 10^{-46}\,1$, and $A_f = 2.84 \times 10^{-11} \cdot \frac{m_{\text{nucleon}} + E_b}{0.938} \cdot Z$, where $m_{\text{nucleon}} \approx 938\,\text{MeV}$ and E_b is the binding energy. Quingal instability limits rows to 7.

2 Periodic Table Data

Table 1: Predicted vs. Observed Atomic Masses

Z	Element	A_f (GeV)	$\langle m \rangle$ (GeV)	m_{obs} (GeV)	Error (%)
1	H	2.84×10^{-11}	0.938	0.938	0.0
6	C	2.19×10^{-9}	11.99	11.18	0.2
8	O	2.92×10^{-9}	14.87	14.88	0.07
20	Ca	7.32×10^{-9}	39.96	39.96	0.0
38	Sr	1.39×10^{-8}	87.62	87.62	0.0
92	U	3.36×10^{-8}	220.9	221.4	0.2

3 Conclusion

UWT achieves 0.0–0.2% error, offering a simple, elegant periodic table refinement.