

# D6\_StrongForce\_QFT\_Demo

November 17, 2025

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[1]: # D6 Strong Force: Wave Confinement Mode (1/137 Offset)
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[2]: import sympy as sp

# D6 Strong Force: Wave Confinement Mode (Mariano Variant)
confinement_offset = sp.Rational(1, 137)  # Fine-structure inverse for QCD
#binding
def d6_mariano(n_max):
    seq = [0] * (n_max + 1)
    seq[1] = 1
    seq[2] = 1
    for i in range(3, n_max + 1):
        seq[i] = seq[i-1] + seq[i-2] + confinement_offset * (i - 1)
    return seq[1:]

modes_d6 = d6_mariano(20)
for i, m in enumerate(modes_d6, 1):
    print(f"D6-M_{i}: {float(m):.2f}")

# Scale to D6 Confinement Paths (ERT D4 light paths × offset)
light_paths_d6 = 47185920 * confinement_offset
print("D6 Confinement Paths:", int(light_paths_d6))

# D6 Frequency (ERT core × offset)
core_freq_d6 = 105.9 * confinement_offset
print("D6 Strong Force Freq (Hz):", round(float(core_freq_d6), 2))
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D6-M_1: 1.00
D6-M_2: 1.00
D6-M_3: 2.01
D6-M_4: 3.04
D6-M_5: 5.08
D6-M_6: 8.15
D6-M_7: 13.28
D6-M_8: 21.48
D6-M_9: 34.82
D6-M_10: 56.36
D6-M_11: 91.26
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D6-M_12: 147.70
D6-M_13: 239.04
D6-M_14: 386.84
D6-M_15: 625.99
D6-M_16: 1012.93
D6-M_17: 1639.04
D6-M_18: 2652.09
D6-M_19: 4291.26
D6-M_20: 6943.50
D6 Confinement Paths: 344422
D6 Strong Force Freq (Hz): 0.77
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[5]: # Verification: Axiom 3 Wave Unity
assert int(light_paths_d6) == 344422, "Confinement paths mismatch"
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