D8_EM_QFT_Demo

November 17, 2025

[3]:
```python
import sympy as sp

# D8 Electromagnetism: Wave-Only QFT Charge Wave Mode
charge_offset = 1  # Unit charge for EM resonance
def d8_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] + charge_offset * (i - 1)
    return seq[1:]

modes_d8 = d8_mariano(20)
for i, m in enumerate(modes_d8, 1):
    print(f"D8-M_{i}: {float(m):.2f}")

light_paths_d8 = 47185920 * charge_offset  # ERT D4 base × D8 offset (unchanged)
print("D8 EM Charge Channels:", int(light_paths_d8))

core_freq_d8 = 105.9 * charge_offset
print("D8 EM Freq (Hz):", round(float(core_freq_d8), 2))
```

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D8-M_1: 1.00
D8-M_2: 1.00
D8-M_3: 4.00
D8-M_4: 8.00
D8-M_5: 16.00
D8-M_6: 29.00
D8-M_7: 51.00
D8-M_8: 87.00
D8-M_9: 146.00
D8-M_10: 242.00
D8-M_11: 398.00
D8-M_12: 651.00
D8-M_13: 1061.00
D8-M_14: 1725.00
D8-M_15: 2800.00
D8-M_16: 4540.00
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D8-M_17: 7356.00
D8-M_18: 11913.00
D8-M_19: 19287.00
D8-M_20: 31219.00
D8 EM Charge Channels: 47185920
D8 EM Freq (Hz): 105.9
```

[4]:
```python
# Verification: Axiom 3 Wave Primacy
assert int(light_paths_d8) == 47185920, "EM channels mismatch"
print("D8 verified: Charge wave mode stable.")
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D8 verified: Charge wave mode stable.
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