ETI_Mariano_Extension_Demo

November 13, 2025

[1]:
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import sympy as sp

# ETI Extension: 5D Technological Amplification
phi = (1 + sp.sqrt(5)) / 2  # Golden ratio offset
def eti_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] + phi * (i - 1)
    return seq[1:]

modes_eti = eti_mariano(20)
for i, m in enumerate(modes_eti, 1):
    print(f"ETI-M_{i}: {float(m):.2f}")

light_paths = 47185920  # ERT base
eti10 = modes_eti[9]  # ETI-M_10  357.57
tech_channels = light_paths * phi * eti10
print("5D Tech Channels (ETI-M10 scaled):", int(tech_channels))  #␣
 ↪27,300,085,248

core_freq = 105.9
tech_freq = core_freq * phi
print("5D Tech Frequency (Hz):", round(float(tech_freq), 2))  # 171.35 Hz
```

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ETI-M_1: 1.00
ETI-M_2: 1.00
ETI-M_3: 5.24
ETI-M_4: 11.09
ETI-M_5: 22.80
ETI-M_6: 41.98
ETI-M_7: 74.49
ETI-M_8: 127.79
ETI-M_9: 215.22
ETI-M_10: 357.57
ETI-M_11: 588.97
ETI-M_12: 964.34
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ETI-M_13: 1572.73
ETI-M_14: 2558.11
ETI-M_15: 4153.49
ETI-M_16: 6735.87
ETI-M_17: 10915.26
ETI-M_18: 17678.64
ETI-M_19: 28623.02
ETI-M_20: 46332.40
5D Tech Channels (ETI-M10 scaled): 27300085248
5D Tech Frequency (Hz): 171.35
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