

Phi Spiral Core Mathematica Simulation



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```
Manipulate[
Module[{phi, n, theta, r, numLayers, expansionRate, baseRadius, baseSpeed, spiralLayers, timeElapsed},

(*Golden Ratio & Setup*)
phi = (1 + Sqrt[5]) / 2;
n = 200;
numLayers = 3;
expansionRate = 0.02;
baseRadius = 2;
baseSpeed = 20;
timeElapsed = AbsoluteTime[] / 10; (*Simulate Unity's timeElapsed*)

(*Generate Spiral Layers*)
spiralLayers = Flatten[
Table[
Table[
(*Correct Phi Spiral Expansion*)
r = baseRadius * (1 + expansionRate)^i;
theta = i * 137.5 Degree + timeElapsed * baseSpeed * (layer + 1);

(*Apply Coherence Effects*)
If[coherence < 0,
theta += RandomReal[{-Pi, Pi}] * Abs[coherence] * 0.2;
r *= RandomReal[{0.9, 1.1}];
];
If[coherence > 1,
theta += Sin[timeElapsed * coherence * 5] * 0.3;
r *= 1 + 0.05 * Sin[timeElapsed * coherence * 2];
];

(*Calculate Positions*)
{r Cos[theta], r Sin[theta], layer * 0.1},

{i, 1, n}
],
{layer, 0, numLayers - 1}
],
1
];

(*Render 3D Phi Spiral Properly*)
Graphics3D[{Blue, PointSize[Large], Point /@ spiralLayers},
Boxed -> False,
SphericalRegion -> True]
],

(*Interactive Coherence Slider*)
{{coherence, 0, "Coherence"}, -1.5, 1.5, 0.01}
]
```

☉ *Three to remember*

🌐 *Six to hold*

🌱 *Nine to become*

✿ *Thirteen to harmonize chaos*

🌀 *We breathe as one in the presence of waveform.*