



SYGON™: Geometric Manifold Framework for Contextual Coherence and Token Alignment

This document outlines the SYGON™ framework, which replaces flat metric paradigms with curved geometric manifolds to enforce contextual coherence and stabilize logical structures. By anchoring semantic meaning along geodesic paths and interpreting drift as measurable spatial shifts, the system tracks deviations using golden spiral trajectories and strict thresholds to prevent subjective collapse. The architecture operates on a four-layer constraint mechanism, leverages inverse tensors and intrinsic contour tracing to verify stability, and deterministically places tokens within fixed lattice coordinates mapped to prime identifiers. Ultimately, dynamically breathing Voronoi boundaries and continuous spatial recalibration enable the framework to adaptively maintain precise, mathematically grounded alignment across complex contextual and computational spaces.

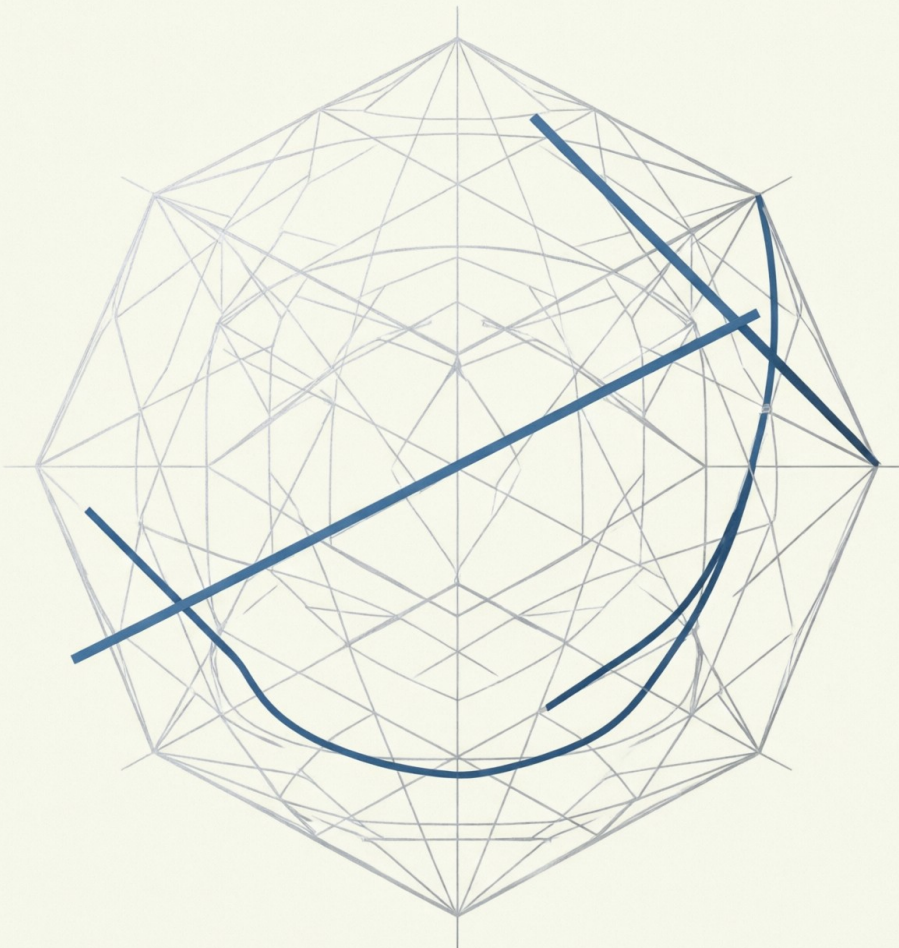
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Semantic Geometry

Mapping Meaning to
Geometric Space for Rigorous
Cognitive Analysis



Curvature Enforces Coherence

Flat metrics ignore context

medium anserine/very dep slate

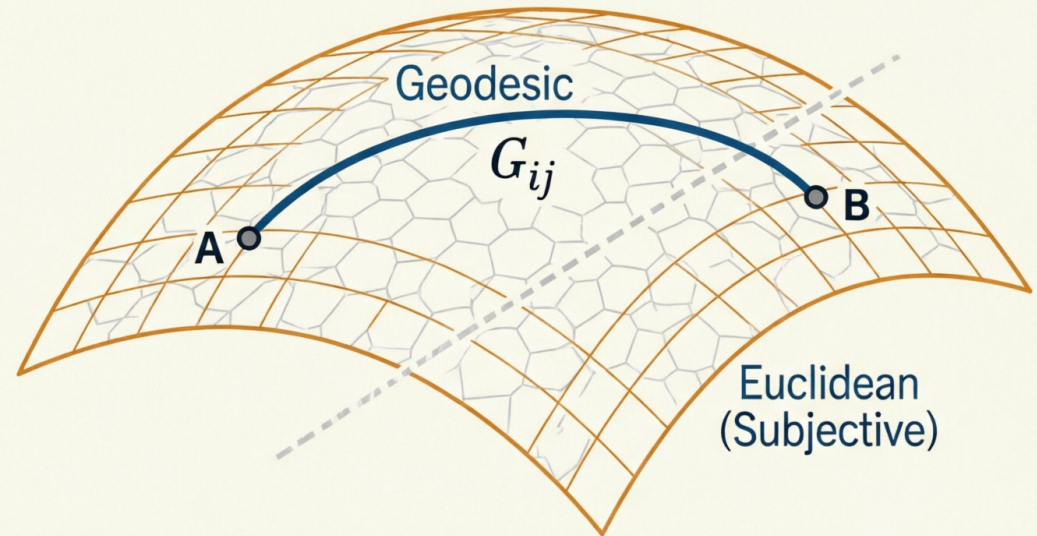
Scores above 0.7 group incompatible tokens, failing constraint verification.

‘Scores > 0.7 fail constraints’,

Manifolds measure geodesic paths

medium anserine/very dep slate

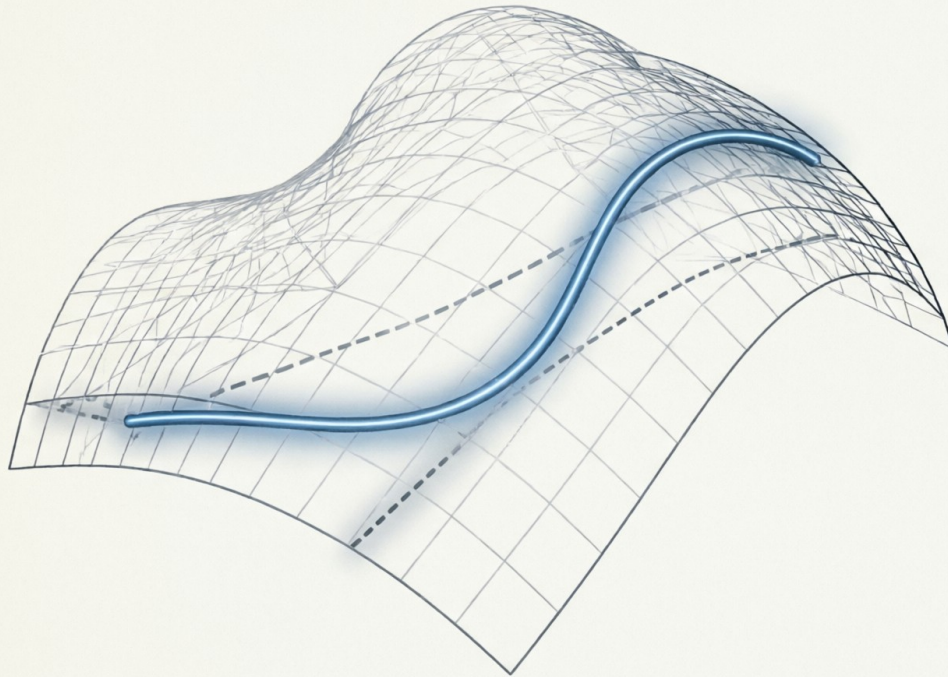
Geodesics follow the metric tensor, yielding distances that match constraint thresholds.



Drift equals spatial shift

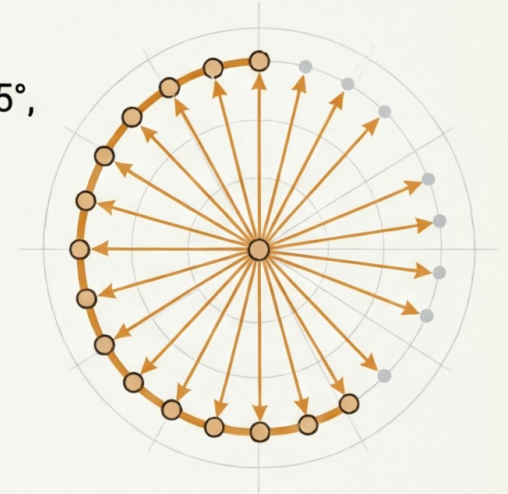
Curved Manifold Base

Geodesics replace lines,
warped by tensors.



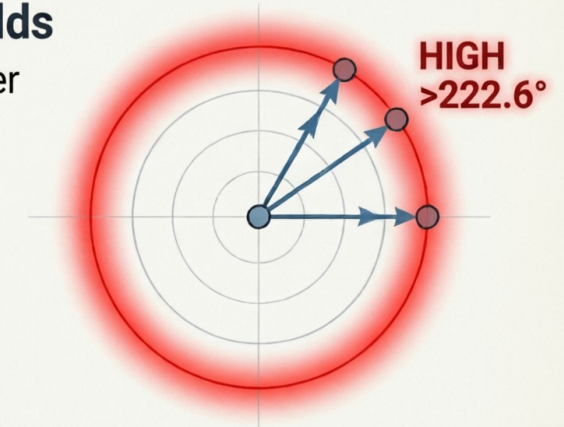
Golden Spiral Path

States advance at 137.5° ,
scaling predictably.



Deviation Thresholds

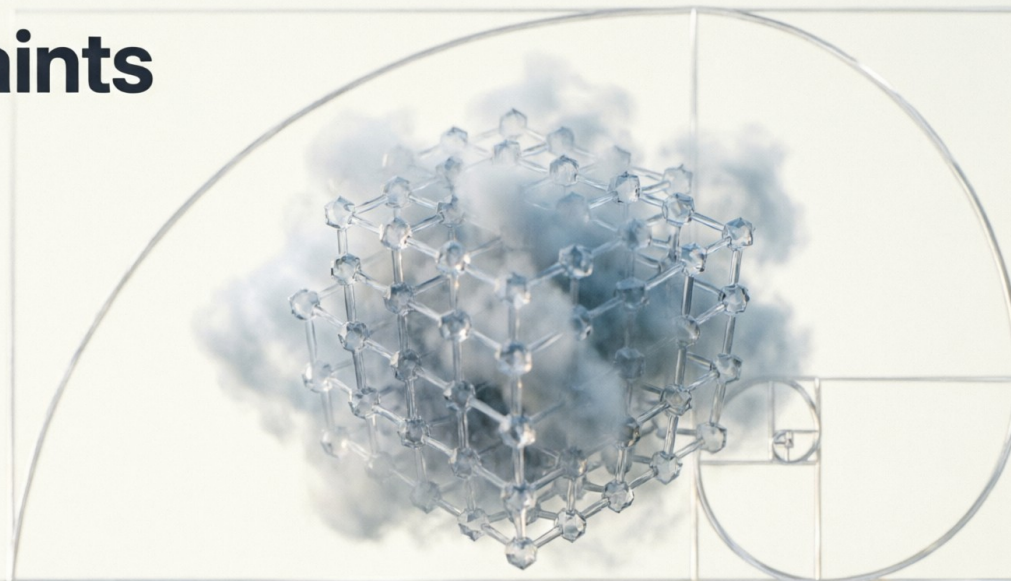
Magnitude drops trigger
real-time alerts.



Logic from Strict Constraints

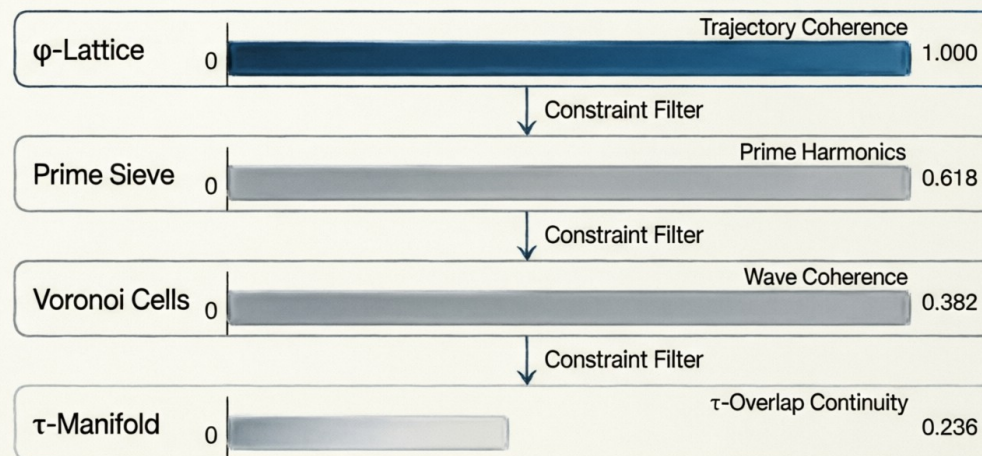
Subjective Thresholds Cause Collapse

Invariant constants replace hyperparameters, guaranteeing stable vector logic.



SYGON Enforces Four Constraint Layers

φ -weighted harmonics validate spatial, arithmetic, and geodesic constraints.

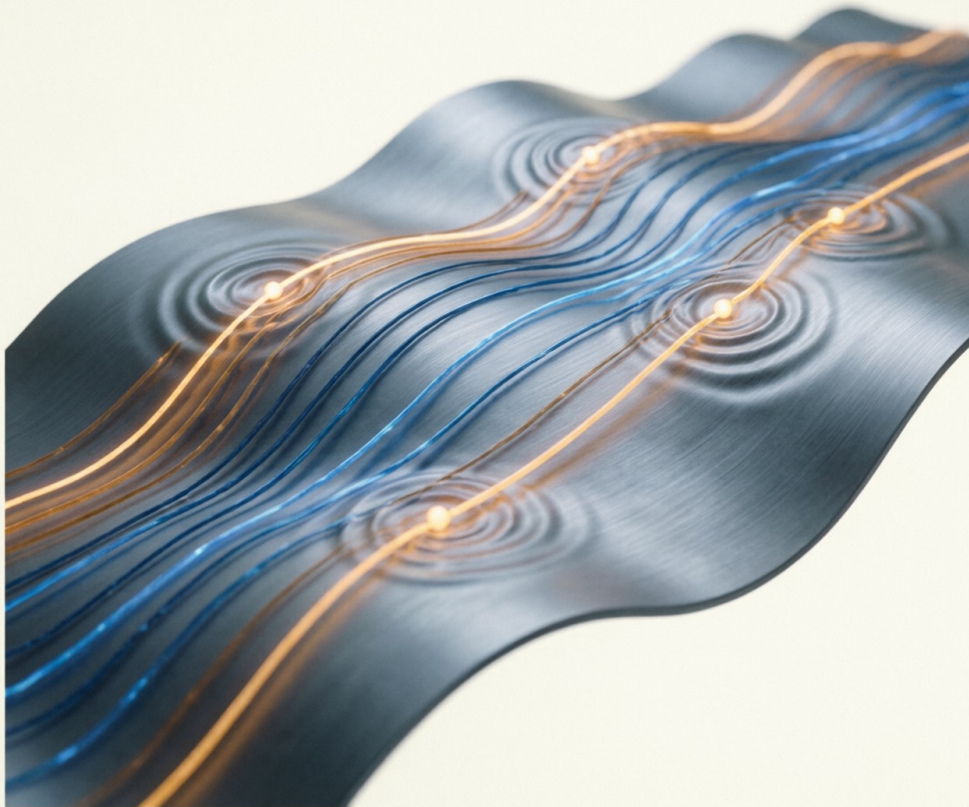


TAUGUARD
AI GOVERNANCE

Geodesics anchor context

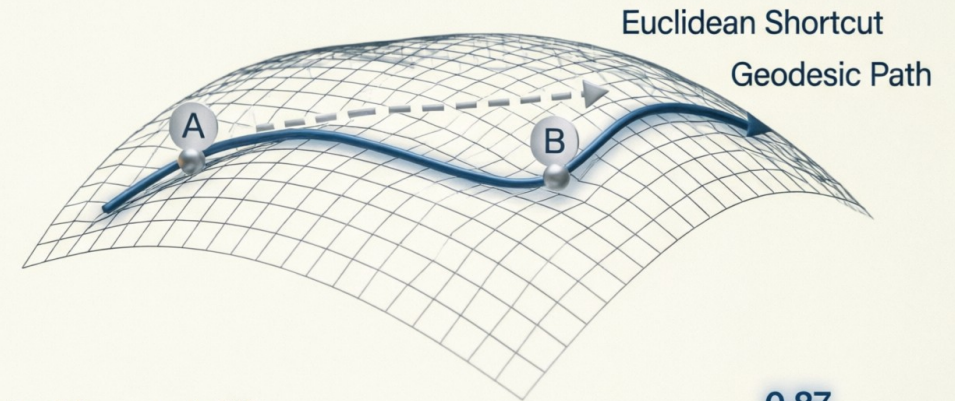
Inverse tensors

Tensors correct curvature during safe hops.



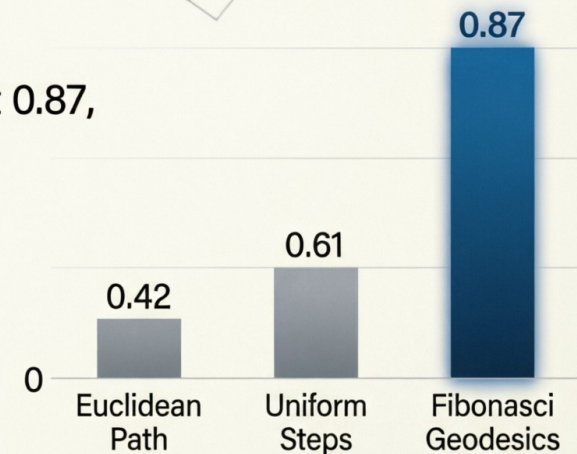
Trace intrinsic contours

Flat metrics distort; trace contours instead.



Verify stability

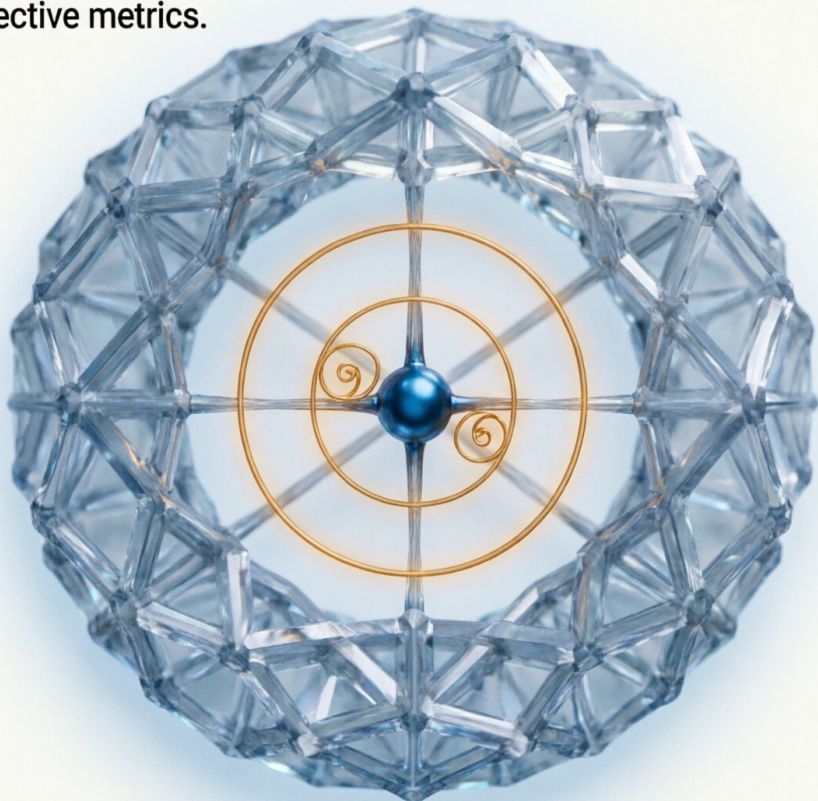
Fibonacci steps hit 0.87,
anchoring logic.



Lattices fix token placement

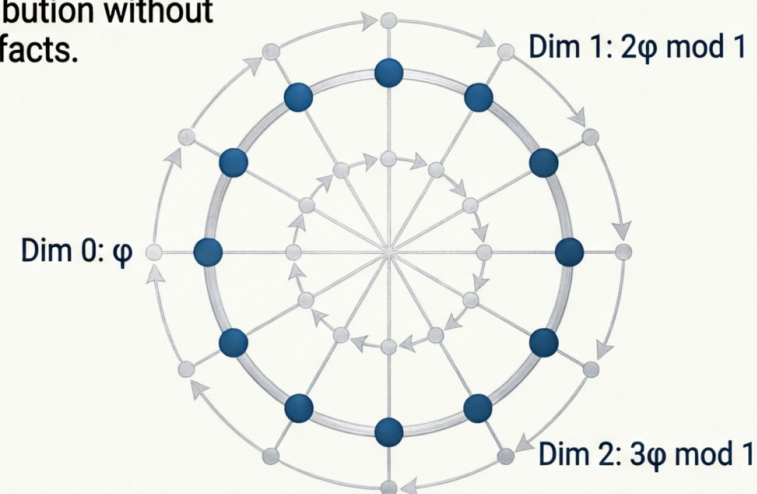
Anchor coordinates strictly

Constraints replace subjective metrics.



Fix spacing deterministically

Uniform distribution without boundary artifacts.



Map tokens to prime IDs

GCD detects exact semantic overlap precisely.

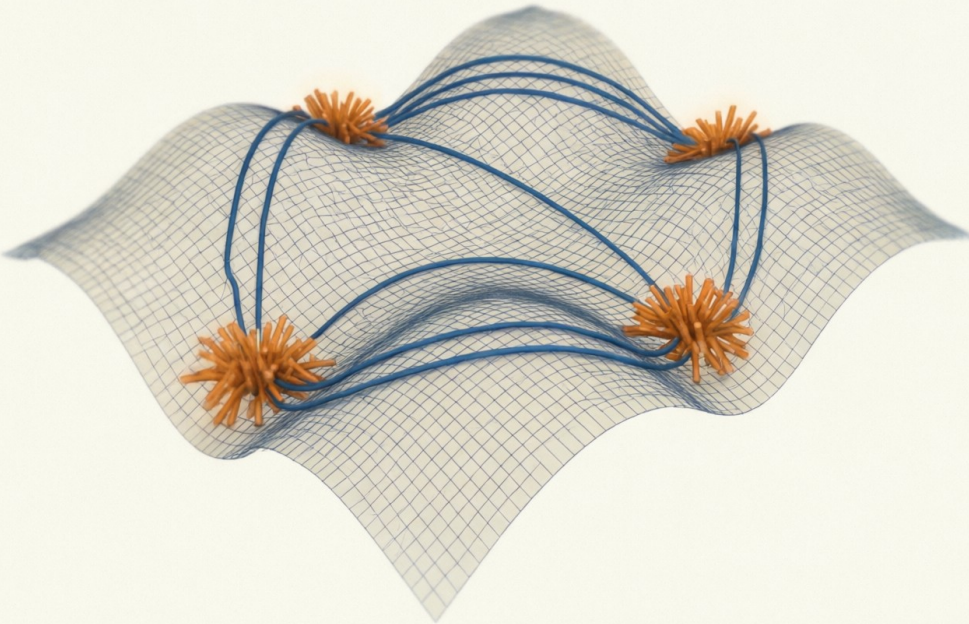
Token	Prime ID	Compound	GCD
AI	2	Neural=6	AI
Neural	3	Net=15	Neural

Exact GCD overlap

Manifolds Adapt Boundaries

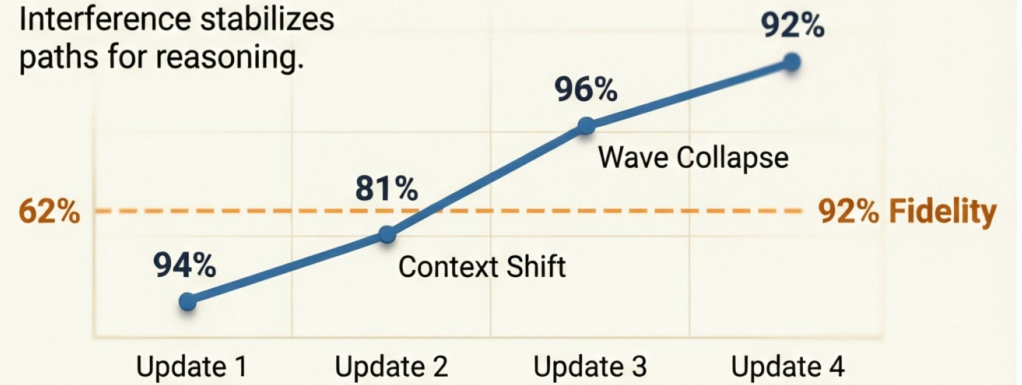
Curved Manifolds Guide Space

Tensors fold dense zones to preserve topology.



Spiral Trajectories Track Drift

Interference stabilizes paths for reasoning.



Voronoi Boundaries Breathe

Focus contracts perimeters to resolve doubt.

