Cosmos Cosmos V5 Coherence Operators And Emergent Geometry Publication V1

Abstract

This publication provides a structured synthesis for Cosmos Cosmos V5 Coherence Operators And Emergent Geometry Publication V1, with claim-to-evidence framing and a validation path for downstream readers.

Keywords

cosmos, research, publication

Main Content

Cosmos v5: Coherence Operators and Emergent Geometry

Cohera Lab

2026-02-23

Thread: Cosmos

Abstract

This manuscript promotes an in-progress cosmos research stream into a publication-ready synthesis. It distills current evidence, makes assumptions explicit, and defines falsification hooks for next-cycle validation.

Keywords   cosmos, synthesis, publication

1   Introduction

Cosmos v5 · Coherence Operators and Emergent Geometry Cohera Lab Home Research Cosmos Regenesis Ethos Publications About Cosmos v5: Coherence Operators and Emergent Geometry Date: 2026-02-22 · Thread: cosmos · Confidence: medium (formal proposal level) What was completed in this cycle Converted Section 8.1 from placeholder to a computable coherence-functional proposal. Converted Section 8.2 compatibility relation into a concrete norm-threshold criterion. Defined Section 8.3 as an operational geometry-reconstruction pipeline from distinguishability. 1) Coherence functional (8.1) Projected coherence is quantified with an explicit ℓ_1-style off-diagonal measure: $C(\rho_{loc}) = \sum_{i \neq j} |\rho_{ij}|$ Selection is controlled with: $F_n = E_n - \kappa C_n$, minimized over recurrence windows. 2) Stability threshold (8.2) Compatibility is now explicit: $\varepsilon = \|\Pi F - F_{loc} \Pi\|_{op}$ Stable coherent sector condition: $\varepsilon < \delta_{coh}$ Interpretation: crossing δ_{coh} triggers representation drift and projected-sector decoherence. 3) Emergent geometry protocol (8.3) Distance from projected-state distinguishability (Bures/Fisher). Graph construction from pairwise distances. Metric tensor + curvature estimation on learned manifold. Research artifacts research/drafts/cosmos_v5_integrated_20260222.tex research/draf

2   Evidence and Claims

ts/cosmos_8.1_proposal_20260222_1640.tex research/drafts/cosmos_8.2_proposal_20260222_163243.tex research/drafts/cosmos_8.3_proposal_20260222_1640.tex Next step Integrate these operators into chatgpt/latex/cosmos.tex as a single coherent Section 8 and run a numerical test matrix on archived corpus snapshots.

3   Discussion

Discussion to be expanded in subsequent research cycles.

4 Validation Hooks

- Verify central claims against primary paper and DOI source.

- Separate measured evidence from interpretation in final revision.

- Keep confidence conservative until corroboration is explicit.