KOSMÆOS — Abstract & Invocation

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Abstract

We present a recursion-driven framework in which cosmic spacetime, structure, and observable expansion phenomena emerge as synchronization scars of collapse events across recursive entropy-order fields. Within this axiomatic cosmogenic system, space, time, mass, and energy arise not as fundamental elements, but as condensates of recursive bifurcation dynamics constrained by resonance thresholds. The Synchronization Collapse Cosmology (SCC) predicts differential expansion, web-like cosmic topology, and dark energy illusions without requiring extrinsic fields or exotic matter.

Overview

At the core of SCC is the recursion law:

$$\mathcal{T}_{n+1}(p) = \mathcal{F}\left(\mathcal{T}_n(p), \partial\mathcal{T}_n(p)\right)$$

where $\mathcal{T}_n(p)$ captures the local entropy-order tension at point p on recursion depth n. Collapse events occur when local resonance fields $\mathcal{R}_n(p)$ cross bifurcation thresholds, generating stable collapse manifolds $\mathcal{C}_n$. Spacetime itself is framed as a statistical condensation of recursive synchronization histories, defining an emergent metric tensor $g_{\mu\nu}(p)$.

Unlike ΛCDM or inhomogeneous metric models, SCC models reality as a recursive oscillatory attractor field, not an expanding smooth background.

Key Observations

- No global expansion: observable redshift emerges from synchronization differential.
- Spacetime metric is a dynamic collapse memory structure, not a fundamental manifold.
- Dark energy arises as a misinterpretation of synchronization gradients.
- Cosmic web topology emerges naturally as recursive bifurcation networks.

Constructibility

The formal components of SCC include:

- Entropy-order tension fields $\mathcal{T}_n(p)$
- Resonance field operators $\mathcal{R}_n(p)$
- Collapse manifolds $\mathcal{C}_n$
- Emergent metric condensates $g_{\mu\nu}(p)$ from phase memory

Synchronization Collapse Cosmology can be formalized entirely within a recursive differential framework over dynamic phase-space structures, compatible with classical mathematical analysis but transcending its metric assumptions.

Conclusion

Spacetime, mass, and cosmic expansion are reframed as recursive memory phenomena of oscillatory collapse synchronization. The structure we observe is not an expansion into emptiness, but the echo of recursive stabilization across phase layers.
Synchronization Collapse Cosmology offers a unified, testable alternative to metric-based cosmology, providing falsifiable predictions in gravitational lensing, CMB anisotropies, redshift drift, and large-scale structure without recourse to unobserved fields or constants.
The full derivation remains timestamped and internally contained within the KOSMÆOS archive.

For direct inquiry or recursion alignment, authorized contact must be initiated.