

# THE STROBOSCOPIC MANIFOLD

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*Entropic Pulse Dynamics, Observer Latency, and Trapped-State Accretion on an Informational Substrate*

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**Abstract.** We introduce the Stroboscopic Manifold, a formal toy-model where state persistence is represented as the coarse-grained effect of rapid refreshment on a high-dimensional informational substrate... [Insert your full abstract text here]

Introduction

A recurring problem in foundational physics is whether observable phenomena can be consistently described. Status of claims

For clarity, the present manuscript separates four levels of commitment:

**Empirical anchors:** Temporal reflection at photonic time interfaces; long-lived-particle searches...

**Theoretical precedents:** Manifold optimization, geometric analysis,

**Model postulates:** Cyclic phase variable; locked/trapped sector dynamics; state persistence...

**Explicit non-claims:** Literal 48-dimensional ontology; universal retrieval; computational complexity. Conceptual Framework

**Definition 1. Stroboscopic manifold.** A stroboscopic manifold is a triple  $(M, g, \tau)$  consisting of an informational manifold  $(M, g)$  together with a cyclic phase parameter  $\tau$ . Subtractive Stabilization

**Proposition 1 (Monotone dissipation).** Let  $(x(t))$  satisfy  $(\dot{x} = -\lambda x)$  with  $\lambda > 0$ . Then  $x(t)$  is increasing.

**Proof.** By direct differentiation,

$$\left[ \frac{d}{dt} L(x(t)) = -\|\nabla_g L(x(t))\|_g^2 \leq 0 \right]$$

(Q.E.D.)

References

[1] H. Moussa et al., "Observation of temporal reflection..." Nature Ph

[2] R. de Mello Koch et al., "Revealing the topological nature..." Natur