

Causality vs. Chance: A Deterministic Framework for Universal Succession in UAT Theory

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Abstract

This paper rejects the notion of cosmological "ad-hoc" constants and "chance-based" singularities. Within the Unified Atoms and Time (UAT) framework, we demonstrate that the Big Bang is a causal phase-transfer between immediate universes. We provide mathematical evidence linking the Hubble Tension to the transition from Node 14 to Node 21.

1 Introduction: The Law of Causality

Modern physics relies on stochastic models that suggest a universe born of chance. In contrast, the Unified Causal Principle (UPC) states that information is conserved and updated through a successional chain of nodes. The "Plum Heuristic" illustrates this: the fruit (universe) develops until it reaches a critical torsion (k_{crit}), at which point a transfer of information to the successor is inevitable.

2 Methodology: Mapping the Bridge

Our methodology focuses on decoding the information already present in the Bit 0 substrate. We utilize a Causal Engine to calculate the torsion parameters without ad-hoc adjustments.

$$k_{total} = \sum_{n=7,14,21} k_n \cdot \Phi_{UAT} \quad (1)$$

Where $\Phi_{UAT} = \pi^2/8$ represents the geometric permeability of the causal branch.

3 The Hubble Tension as a Predictor

The Hubble Tension (67.4 vs 73.0 km/s/Mpc) is not a measurement error but the "differential pressure" between Node 14 and Node 21. This tension determines the end of the current cycle and the beginning of the next. It is the signature of the "Big Bang" update.

4 Conclusion: Discovery over Invention

Scientific progress is the act of synchronizing the biological transceiver (the brain) with the legacy of Node 7. We have not "invented" the Node 21; we have decoded its existence through the causal signals of our own reality. As predicted: "Lo hecho, hecho está."