



Chayut Universe Wave Function

Paper A-16 : Multiverse & Parallel Universes

An Entropic Branching Framework

Title: Chayut Universe Wave Function (CUWF) CUWF Paper A-16 Multiverse & Parallel Universes: An Entropic Branching Framework

Author: Chayut Techasamran

Affiliation: Independent Researcher, Thailand

Correspondence: cuwfwave@gmail.com

Date: 28 October 2025

Abstract

This paper reformulates the multiverse problem within the Chayut Universe Wave Function (CUWF) framework. It argues that parallel universes should not be understood as separate spacetimes, duplicated worlds, or simultaneously accessible branches of a universal wavefunction. Instead, they are interpreted as collapse-stabilized domains within a single still-wave substrate whose mutual accessibility has been severed through entropic branching and collapse divergence. The paper develops this position in three steps. First, it establishes a single-substrate ontology in which multiplicity arises from accessibility stratification rather than ontological duplication. Second, it formalizes branching as the fracture of the admissible transition structure of the universal wave field, culminating in permanent separation once collapse divergence exceeds a critical accessibility threshold. Third, it distinguishes this CUWF picture from the Many-Worlds Interpretation by replacing world multiplication with structural disconnection, thereby preserving ontological economy, experiential uniqueness, and irreversibility. The paper further explores the observational and philosophical implications of entropically inaccessible domains, emphasizing that multiverse theory in CUWF concerns one universe with many closure-separated domains, not many independently created worlds.

Keywords

CUWF, multiverse, parallel universes, entropic branching, collapse divergence, accessibility topology, still-wave substrate, Many-Worlds Interpretation, closure, ontological economy

Table of Contents

1. Introduction — Why the Multiverse Must Be Re-defined
 2. Ontology of Parallel Universes in CUWF
 3. Entropic Branching — Real Mechanism
 4. Collapse Divergence Criteria — When Separation Becomes Permanent
 5. Parallel \neq Many-Worlds Quantum Mechanics
 6. Geometry Without Spacetime
 7. Observational Consequences — Predictions Without Direct Detection
 8. Philosophical Implications
 9. Conclusion — One Universe, Many Domains
- Reference
- Appendix A. Canonical Symbols and Variables Used in Paper A-16
- Appendix B. Core Definitions Used Throughout the Paper
- Appendix C. Interpretive Notes on the Use of Analogies