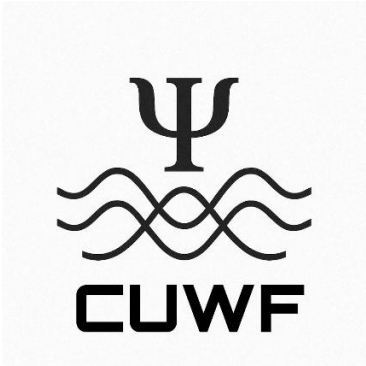

Chayut Universe Wave Function

Paper A-2 : Interpretive Expansion of the CUWF Theory

The Entropic and Probabilistic Foundations of the Universe

Title: Chayut Universe Wave Function (CUWF) Paper A-2 Interpretive Expansion of the CUWF Theory: The Entropic and Probabilistic Foundations of the Universe

Author: Chayut Techasamran

Affiliation: Independent Researcher, Thailand

Correspondence: cuwfwave@gmail.com

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Abstract

The Chayut Universe Wave Function (CUWF), introduced in Paper A, describes reality as a dynamic interplay of stillness and disturbance: a continuous process in which waves of existence emerge, interact, and collapse within a unified entropic field. Paper A-2 extends this foundation by focusing on the mechanistic structure of that field and by proposing that entropy (S) and probability (P) operate together as the dual engine of all phenomena, guiding the transition from still wave to manifested reality.

At the center of this interpretation are two universal entropic constants: S_t, the Entropic Threshold at which stillness first breaks symmetry, and S_e, the Entropic Equilibrium at which the universe attains dynamic stability. The equilibrium point, numerically associated with 1/alpha approx. 137.035999, is interpreted here as the balance point between wave coherence and collapse - the breathing midpoint of the cosmos.

This paper further introduces the entropic gradient grad S as the generative slope from which emergent quantities such as time (t) and light speed (c) may be reinterpreted. Within this framework, the four fundamental forces - strong, weak, electromagnetic, and gravitational - are no longer treated as fundamentally separate interactions, but as phase manifestations of one entropic mechanism operating through grad S.

Through this extended interpretation, Paper A-2 develops a coherent bridge between the quantum, relativistic, and cosmological domains under a single entropic architecture, suggesting that the universe is best understood as a self-regulating wave system oscillating between stillness and complexity, between the silence before creation and the equilibrium of being.

Preface

When Paper A was first written, its purpose was to establish a theoretical foundation - to show that the universe might not be built upon matter, energy, or even spacetime, but upon a continuous wave function whose stillness and disturbance give birth to everything. That paper outlined the conceptual skeleton of the Chayut Universe Wave Function (CUWF): the idea that all existence unfolds through resonance, entanglement, and the self-referential collapse of waves.

Yet once that foundation had been set, a deeper question remained: how does the universe actually perform this process? What is the physical and entropic mechanism that turns pure stillness into motion, that allows symmetry to break, structures to form, and stability to return again?

Paper A-2 was born from that question. It does not replace the original CUWF framework; rather, it deepens it by making explicit the entropic mechanism of its motion. Its central aim is to explain how entropy and probability function as the hidden engine of the universe, how time (t) and light speed (c)

may emerge as gradients of entropy, and why stability appears at 1/alpha approx. 137.035999 - the fine-structure constant that seems to whisper the universe's own equilibrium.

This work also explores how the four fundamental forces - strong, weak, electromagnetic, and gravitational - may be reinterpreted as phase manifestations of one entropic field represented by the gradient grad S. What have traditionally been treated as separate forces may therefore be understood as coordinated modes of entropy's flow - different breaths of the same cosmic rhythm.

Ultimately, this paper continues the CUWF journey not by adding complication, but by uncovering simplicity: that the universe moves neither by chance nor by external command, but by the internal rhythm of its own entropic balance. Every oscillation, every collapse, and every emergence belongs to the same cosmic inhalation and exhalation of order and uncertainty.

Keywords:

Chayut Universe Wave Function (CUWF), Still Wave, entropy, probability, entropic gradient, Entropic Threshold (S_t), Entropic Equilibrium (S_e), fine-structure constant, 137.035999, quantum collapse, wave coherence, emergent time, emergent spacetime, special collapse states, time crystal, consciousness

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