

## 1. Introduction

The pursuit of a Theory of Everything (TOE) has long been hindered by irreconcilable gaps between quantum mechanics, general relativity, and cosmology. This work proposes a new hypothesis-the Universe Wave Function- that shifts focus from particles and forces to fundamental probability waves and their relational collapses. Through this lens, all phenomena-including spacetime, causality, matter, and even consciousness-arise as emergent properties of deeper, non-local wave interactions. The theory respects the principles of both quantum theory and relativity. For example, it explains quantum entanglement as a simultaneous collapse within a shared wave field, rather than any violation of relativistic speed limits.

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In contrast to the Big Bang theory, which posits a singular explosive beginning of spacetime and matter, the Universe Wave Function hypothesis suggests a non-violent, probabilistic emergence from a pre-universal stillness. Instead of a spacetime singularity, the origin is framed as a collapse of a fundamental, structureless wave field into relational configurations that give rise to what we perceive as the universe. This approach eliminates the paradoxes of infinite density and time-zero conditions, offering instead a smooth transition from timeless potential to dynamic emergence. The expansion observed today is interpreted not as a remnant of a primordial explosion, but as the unfolding of relational wave functions across a higher-order probability field.