Title: The Schrödinger's Cat Paradox and Viscous Time Theory: A New Interpretation

Abstract The Schrödinger's Cat paradox has long been a fundamental thought experiment in quantum mechanics, illustrating the counterintuitive nature of superposition and measurement. Traditional interpretations, such as the Copenhagen and Many-Worlds views, struggle to reconcile the paradox with a unified conceptual framework. In this paper, we propose a novel resolution based on the **Viscous Time Theory (VTT)**, arguing that quantum superposition is a consequence of **informational inertia** within the VT substrate. This approach clarifies the role of observation, collapses classical ambiguities, and integrates the concept of **Informational Number Primes** as fundamental triggers for state precipitation into reality.

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1. Introduction Quantum mechanics has revealed the peculiar nature of reality at the smallest scales. Schrödinger's Cat paradox demonstrates a state of quantum superposition where a system (the cat) exists in both alive and dead states until measured. This paradox challenges our classical notions of reality, prompting interpretations such as:

- The Copenhagen Interpretation: Superposition collapses upon observation.
- The Many-Worlds Interpretation: Both states persist in separate, branching realities.
- Objective Collapse Theories: Quantum states collapse due to unknown physical processes.

While these interpretations provide mathematical consistency, they do not address **why** superposition occurs and **how** it resolves.

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2. Viscous Time and Informational Inertia Viscous Time Theory (VTT) introduces the concept that **time is not a fixed linear dimension but an informationally structured medium**. Information does not move instantaneously but flows within the VT substrate, influenced by:

- **Informational viscosity**, which resists abrupt changes in state.
- **Mass-critical information thresholds**, which determine when quantum information stabilizes into the real world.
- **Non-local entanglement in VT**, connecting distant quantum systems through shared informational structures.

In the case of Schrödinger's Cat, the superposition exists because the **informational state of the cat is suspended in VT until an interaction (observation) reaches the mass-critical threshold**, causing state precipitation.

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3. The Role of the Observer and Informational Collapse Traditional quantum mechanics posits that observation forces wavefunction collapse. VTT reframes this:

- The observer's measurement **does not collapse** the state but instead **connects** the system to an external informational node, reinforcing its probability distribution.
- When enough **informational weight** accumulates in VT, the system can no longer sustain superposition, leading to **precipitation into a singular state**.
- This aligns with the **Informational Number Prime Hypothesis**, where only indivisible, fundamental informational units act as stable triggers of physical state change.

Thus, reality is not a binary shift from superposition to classical states but a **gradual condensation of information through VT dynamics**.

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4. The Schrödinger's Cat Paradox Resolved

🔹 **Key Insights from VTT:**

1. **Superposition is an artifact of informational inertia** within VT, not a physical ambiguity.
2. **Observation is an informational event**, increasing the mass of available information rather than forcing collapse.
3. **State precipitation occurs when informational mass surpasses a critical threshold**, defining reality in a non-random, deterministic manner.
4. **Entanglement is a VT-mediated process**, where multiple quantum systems share a common informational framework that evolves based on observer interaction.

🔹 **Implications for Quantum Mechanics:**

- This resolves the paradox without requiring multiple universes.
- It suggests that **quantum uncertainty is an emergent phenomenon** rather than a fundamental property of reality.
- It aligns with findings in quantum biology and consciousness research, where informational coherence appears critical to decision-making processes at both physical and cognitive levels.

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5. Conclusion and Future Research By integrating the concept of **Viscous Time**, **Informational Inertia**, and **Informational Number Primes**, we propose a revolutionary interpretation of Schrödinger's Cat that removes paradoxical ambiguity while maintaining quantum consistency.

Future research should explore:

- The mathematical formalization of **Informational Mass Thresholds**.
- Experimental designs to measure **VT substrate interaction with quantum coherence**.
- Applications in **quantum computing, neurology, and information processing**.

🌊 *THÁLASSA, THÁLASSA!* 🚀 *We are reshaping reality itself.*

By Raoul Bianchetti