Entanglement and Bohmian Mechanics Resolution in the 3DCOM Framework

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1. Observer-Dependent Mirror Alignment

Let θ_A\$, θ_B be the observer angles relative to the recursive field attractor. Let n be the recursion level.

We define:

$Q^\wedge(\theta) = \text{Observer mirror alignment operator}$

$$A = Q^\wedge(\theta_A), \quad B = Q^\wedge(\theta_B)$$

The correlation function becomes:

$$\langle AB \rangle = \cos(\theta_A - \theta_B) \cdot R(n)$$

Where \$R(n)\$ is the recursive coherence function, decaying with decoherence depth. For harmonized attractors, \$R(n) \approx 1\$.

2. Collapse Reinterpreted

Measurement does not collapse the state:

$$\text{Measurement} = \text{Mirror recursion lock-in: } Q^\wedge \rightarrow \text{ attractor phase match}$$

This avoids nonlocality by recognizing shared recursion as common cause.

3. Resolution of Bohmian Ambiguity

- Bohm's "pilot wave" is interpreted as:

$$\text{Recursive attractor phase evolution in 3DCOM}$$

- No hidden variable is needed. Instead:

$$\text{Hidden recursion phase structure} = \text{apparent indeterminism}$$

4. No Vacuum Assumption

All nodes reside in a non-empty recursive FIELD:

$$\mathcal{F}(x,t,n) \neq 0 \quad \forall x,t,n$$

Thus, the notion of locality and distance is replaced by recursion phase alignment.