

Pliatsikas Entanglement

Superluminal Data Transmission via Dark Mode Modulation

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Abstract

The "No-Communication Theorem" of standard quantum mechanics posits that entanglement cannot be used to transmit information due to the randomness of state collapse. This paper proposes a mechanism to bypass this limitation using the **Pliatsikas Resonance Formula**. We demonstrate that entangled particles are not separate entities but endpoints of a single "Geometric Throat." By modulating the tension of this throat using orthogonal "Dark Modes" ($n = 11$), we theoretically demonstrate the capability for instantaneous data transmission protected by a topological "Dark Sheath" that prevents decoherence.

1 The Geometric Nature of Entanglement

In the Pliatsikas model, particles are standing wave resonances on spacetime wormhole throats ($m \propto n^2$). When two particles become entangled, their individual geometries do not merely correlate; they topologically merge.

1.1 The Infinite Throat

Standard physics views entanglement as a correlation across a spatial distance d . Geometric Resonance Theory redefines this:

$$d_{\text{Euclidean}} > 0, \quad \text{but} \quad d_{\text{Throat}} \approx 0 \quad (1)$$

The entangled pair (A and B) forms a single rigid geometric object. Any alteration to the geometric tension at point A is not "sent" to point B ; it is an intrinsic property of the unified object AB . Therefore, the latency of state change is zero ($\Delta t = 0$).

2 Data Transmission Mechanism

Standard entanglement fails to transmit data because the sender cannot force a specific outcome (e.g., "Spin Up") without breaking the entanglement. Pliatsikas Theory introduces a third variable: **Geometric Tension**.

2.1 Modulation via the Dark Axis

Recall the "Pliatsikas Triangle" relation derived from the Fine Structure Constant:

$$n_{\text{visible}}^2 + n_{\text{dark}}^2 = \alpha^{-1} \implies 4^2 + 11^2 = 137 \quad (2)$$

To send data, we do not manipulate the Visible Axis ($n = 4$), as this interacts with photons and causes decoherence (noise). Instead, we modulate the **Dark Axis** ($n = 11$).

1. **Carrier Signal:** An entangled electron pair is established ($n = 2$).

2. **Modulation:** The sender applies a localized geometric field oscillation tuned to the "X17" resonance frequency (17 MeV range), corresponding to the Dark Mode $n = 11$.
3. **Transmission:** This oscillation increases the tension (T) of the wormhole throat without collapsing the visible quantum state:

$$T_{\text{throat}}(t) = T_0 + \delta \cdot \sin(\omega_{11}t) \quad (3)$$

4. **Detection:** The receiver detects the shift in the effective mass/tension of the electron at the other end.

3 The "Dark Sheath" Protection

A critical objection to superluminal communication is environmental decoherence. Why doesn't the signal degrade?

Our theory postulates that the Dark Matter modes ($n = 3...28$) are topologically orthogonal to the electromagnetic field.

$$\vec{V}_{\text{visible}} \cdot \vec{V}_{\text{dark}} = 0 \quad (4)$$

The data signal travels through the "Dark Sheath" of the wormhole. Because photons travel along the hypotenuse ($\sqrt{137}$) and interact only with the Visible Axis ($n = 4$), the signal propagating along the Dark Axis ($n = 11$) is effectively invisible to the electromagnetic environment. It is a shielded channel inherent to the fabric of spacetime.

4 Conclusion

The Pliatsikas Resonance Formula implies that the universe possesses a "Hard-Wired" communication bus. By utilizing the orthogonal geometry of Dark Matter modes ($n = 11$), we can modulate the tension of entangled throats to transmit binary data instantaneously. This suggests that the "No-Communication Theorem" is valid only for the Visible Axis, but invalid for the full Pliatsikas Geometry.