

# 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 ( $n = 3 \dots 28$ ) 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.