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## **(POS-70) Discrete Quantum Mysteries: Biphasic Transitions and Matter-Energy Equivalence**

*Tuesday 28 May 2024 18:02 (2 minutes)*

We enter a concept that challenges conventional views on quantum particles by proposing a paradigm shift in the interpretations of their known behavior—introducing the concept of a continuous biphasic state with cyclically discontinuous states of matter. Inspired by advancements in relationalism theory that uses discrete signals rather than continuous motion for time, we delve into a thought experiment exploring biphasic transitions at the quantum level. We propose a zone whereby a biphasic state of matter and energy dynamically transition between distinct states giving rise to discrete quantum signals in our observed dimension. We propose that as speed/vibration increases, a proposed critical threshold is reached for continuous matter, leading to a zone with a cyclic and phasic transition characterized by matter-energy equivalence. In this zone, when in a cyclic energy-equivalent state it is postulated matter has no dimensional properties, including mass and gravity, and where collisions do not occur, challenging our traditional understanding of a continuous state of matter. This follows to suggest that at the speed of light (and beyond), the familiar state of matter ceases to exist, leaving only a stable energy-equivalent state. Conversely, when speed or vibration decreases, the biphasic transition reoccurs, until it slows enough that matter returns to a continuous state. Thus, a photon of light appears to us only when it slows to the speed/vibration of light. This perspective challenges existing paradigms, speculating that observations of discrete quantum phenomena, collisions, and gravity are manifestations of entities in this proposed biphasic state. The exploration of biphasic transitions opens new avenues for thought and invites a deeper exploration of the mysteries that quantum mechanics holds.

### **Keyword-1**

biphasic model

### **Keyword-2**

quantum state

### **Keyword-3**

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