Resultive Model v2: Clarity Gradient Expansion and Cosmological Integration

1. Reframing c as a Perceptual Boundary

The speed of light (c) is no longer treated as a hard universal limit but as a perceptual boundary that defines the upper threshold of our current informational clarity envelope. While still constant within mid-scale observation (e.g., optical astronomy, particle physics), c becomes insufficient for describing behavior at quantum or superluminal scales.

2. Time as the Structural Constant

Where c breaks down across thresholds, time remains invariant. Time is reframed as the substrate across all dimensional scales-providing consistency from the quantum realm to beyond the light cone. The Resultive Model anchors all phase-state resolution and clarity dynamics to this constant.

3. Clarity Gradient Formalism

The model introduces:

Clarity = 1 - f(Distortion)

Where distortion f varies depending on scale:

- Cosmic scale: f = 0.5 * GM/rc^2
- Quantum scale: f = lambda / lambda_target

At GM/rc^2 = 0.5, the clarity gradient reaches a perceptual limit of 0.5, marking the crossover point where informational coherence becomes unresolvable.

4. Energy Field Contribution: E_field(t)

An extended energy relationship is proposed:

E_total = mc^2 + E_field(t)

Where E_field(t) captures the dynamic, often unperceived energy contribution from field resonance-especially near massive bodies. For example, modeling black hole 3C 273 with a 108-day magnetic field oscillation period shows periodic energy variation that correlates with jet emission intensity.

E_field(t) is derived using:

E_field(t) = (B(t)^2 / 2u_0) * V

B(t) proportional to (GM * M_core / rc^2) * (1 + alpha * sin(2pit / T))

V proportional to r^3

E_field_perceived(t) = E_field(t) * (1 - f)

Where f = 0.5 at GM/rc^2 = 0.5.

5. Cosmological Validation: Hubble Tension Analysis

The Resultive clarity gradient model is applied to the Hubble tension:

- Early Universe (CMB): Perception clarity dampened by both cosmic and quantum distortion, predicting a much lower H0 than observed locally.
- Late Universe (SN data): Clarity distortion minimal, aligning closely with the locally measured H0.

Results:

- Predicted H0 for CMB regime: ~44.0 km/s/Mpc
- Predicted H0 for local supernovae: ~67.4 km/s/Mpc

This divergence directly supports the hypothesis that early-universe measurements are not wrong-but distorted by clarity gradient effects.

6. Framework Expansion

The Resultive Model v2 proposes:

- Perceptual Expansion Function (PEF) to describe scaling of clarity envelope
- Dimensional Anchor Hypothesis as a physical mechanism for cross-boundary energy transfer
- Field resonance as a universal propagation mechanism, supplanting classical signal models

This framework enables integration of gravitational, quantum, and cosmological behaviors under a single informational clarity principle.

Next Phase: Extend model into predictive simulations and experimental proposals (EHT, JWST, SKA) to test E_field(t) variability and H0 alignment across epochs.