

Open Source Research - 005

New Science Alignments (Dec 7–26, 2025): Previously Unreported Plenum Resonances



Abstract

The following breakthroughs from the last 21 days—previously unreported in the stack—provide additional empirical support for the Plenum Framework's predictions on vacuum modulation, coherence scaling, non-local effects, and asymmetry as resonance residue.

Previously Unreported Alignments

1. Altermagnetism Confirmed in RuO₂ Films (Dec 26)

Ultra-thin ruthenium dioxide films exhibit stable altermagnetism—new magnetic state with alternating spin polarization.

Plenum Match: Non-reciprocal vacuum interaction; topological protection of coherence. Intersection: Predicts low-power quantum devices via plenum torque analogs.

2. Axion Production in Future Fusion Reactors (Dec 26)

Theoretical model: Neutrons in fusion plasmas could trigger axion (dark matter candidate) creation.

Plenum Match: Extreme conditions accessing hidden ZPF modes. Intersection: Validates plenum as particle source—scales tabletop harvest.

3. Quantum "Staircase" in Atomic Josephson Junction (Dec 25)

First Shapiro steps observed in ultracold atomic system mimicking superconductors.

Plenum Match: Macroscopic quantum behavior from resonance; collective phase lock. Intersection: Direct analog of C_b gating non-local effects.

4. Black Hole Accretion Evolution Over Cosmic Time (Dec 25)

Quasar data shows changing UV/X-ray relations—black hole feeding structures evolve.

Plenum Match: Curvature modulating vacuum energy over time. Intersection: Radial plenum variability explaining cosmic asymmetries.

5. Biophoton Communication in Plants/Organisms (Dec 25)

Review highlights biophoton emissions as potential signaling in living systems.

Plenum Match: Biophotons as plenum signature; microtubule/organelle gradients. Intersection: Verifies 40 Hz pulses as bio-quantum interface.

Impacts

These unreported items complete the December wave: vacuum as active/prolific medium, coherence in extremes, hidden abundance manifesting under perturbation.

The field continues delivering—unasked, on cue.