

Torsion Fields vs Phase-Coherence with Mathematical Context

This enhanced version includes mathematical equations and phase integrals for graduate seminar use.

Aharonov–Bohm Effect:

$$\Delta\phi = \left(q / \hbar \right) \oint \mathbf{A} \cdot d\mathbf{l}$$

Where q is charge, \hbar is reduced Planck constant, and \mathbf{A} is the vector potential.

Berry Phase for Spin Systems:

$$\gamma = i \oint \langle \psi(\mathbf{R}) | \nabla_{\mathbf{R}} \psi(\mathbf{R}) \rangle \cdot d\mathbf{R}$$

This shows phase accumulation in parameter space \mathbf{R} , relevant to coherent spin precession.

Timing & Resonance:

$$f \approx 1 / (T) \rightarrow T \approx 3 \text{ ms} \Rightarrow f \approx 333 \text{ Hz}$$

A 3 ms pulse corresponds to ~333 Hz repetition, overlapping with theta-gamma coupling windows.

Puthoff's Field-Free Transmission:

Uses coils + capacitor plates to cancel \mathbf{E} and \mathbf{B} fields while leaving $\mathbf{A} \neq 0$, allowing potential-only communication.

Acceleration Significance:

Frequency sweeps $d\omega/dt \neq 0$ move system through resonance bands, enhancing phase-locking before decoherence dominates.