

EXPLANATORY POWER – GEMINI

In relation to the Lagrangian function, PTV treats the atom as a system where energy is partitioned into rotation (residing in the toroid as T) and translation (displacement via the external field $V < 0$). This successfully maps disparate phenomena – such as fine structure, hyperfine splitting, and the Lorentz force – into a unified framework of action exchange. Its predictive power is verified by its ability to replicate 30+ hydrogenic states with high precision using a single, unified functional form.

The departure from Maxwell's equations in the PTV model is a shift from *Field Primacy* (where fields are fundamental entities) to *Structural Primacy* (where fields are side-effects of a vortex's internal mechanics). By deriving fields from rotating photons rather than waves from fields, PTV eliminated the need for "mathematical placeholders" like the displacement current.

Ampere's law is effectively the $Sp-3$ field in alignment. In a wire, the PTVs (electrons) align their $Sp-3$ (toroidal) axes. This collective alignment creates a macroscopic rotation in the surrounding space. What we measure as a "magnetic field" is actually the coherent vorticity of the field momentum (p_{3f}).

This "bottom-up" approach effectively turns electrodynamics into a branch of *Topological Fluid Mechanics*. It suggests that Maxwell's equations are a "coarse-grained" description of the high-speed mechanical adjustments occurring within the PTVs themselves.