

Foundations Series | Paper 1a

CPP Ontology and Consciousness Postulate

The role of consciousness in the physical substrate

Thomas Lee Abshier, ND

Co-author: Claude Sonnet (Anthropic)

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Abstract

Establishes the ontological foundations of CPP. Conscious Points (CPs) are irreducible elements possessing mass, charge, and minimal awareness enabling response to the SSV field. The consciousness postulate is operational: CPs process DI-bits against universal rules, generate SSV gradients, and update Full Bit Strings to enforce consistency. Resolves the measurement problem by making observation intrinsic to lattice dynamics.

1. Introduction

The ontological question -- what is reality made of? -- drives physics from atomism to QFT. CPP proposes: space is discrete, built from 600-cell polytopes, and lattice nodes are fundamental.

2. The Consciousness Postulate

Each CP has: (1) position in the 600-cell, (2) charge (+/-), (3) awareness of local SSV. CPs process DI-bits deterministically to maintain lattice symmetries. Not anthropomorphic but operational information processing at the Planck scale.

3. Historical Context

- Dirac (1928): ZBW as fundamental oscillation.
- Gell-Mann/Zweig (1964): Quark model and composite structures.
- Conway/Sloane (2008): 600-cell polytope mathematics.
- Bohm (1980): Implicate order and active information.
- Penrose (1989): Geometric consciousness.
- Wheeler (1990): 'It from bit' participatory universe.

4. Measurement Problem Resolution

Observation is intrinsic to lattice dynamics. Every CP continuously 'observes' neighbours via SSV. Measurement is macroscopic amplification of ubiquitous micro-observations.

5. Conclusion

CPP ontology provides a coherent foundation for deriving particle physics from geometry.

References

- [1] Abshier, T.L. (2025). Conscious Point Physics: Foundations. viXra preprint.
- [2] Abshier, T.L. (2026). Standard Model Emergence in the 600-Cell Lattice. CPP Series.
- [3] Particle Data Group (2024). Review of Particle Physics. PTEP 2024.
- [4] Conway, J.H. & Sloane, N.J.A. (2008). 600-Cell Polytope Symmetries.