

Logitheism

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A document as notebook for upcoming work

a critical axiom of Logitheism as is the genius of " you can be simulated, if you can be simulated after your life you can be transported thus an afterlife, you can be simulate before thus a before life and a during life thus you are an overlay of all identical information in the multiverse" the point I was making is that the C-field is what causes overlays to function they need phase tachyons to keep overlays of identical amplitudes

Ethan G Appleby's Ultimate Maxwellian PDE:

For each component $N = 0, 1, 2, 3, 5$:

$$\Box A_N - \partial_N (\partial^M A_M) = J_N$$

where

- $\Box = \partial^M \partial_M$ is the 5-dimensional d'Alembertian
- $\partial^M A_M$ is the full 5D divergence of A
- J_N quantum ($\theta=0$) and tachyonic ($\theta=\theta_a$) source current

In expanded form:

for each N ,

$$\begin{aligned} & (\partial^0 \partial_0 + \partial^1 \partial_1 + \partial^2 \partial_2 + \partial^3 \partial_3 + \partial^5 \partial_5) A_N \\ & - \partial_N [\partial^0 A_0 + \partial^1 A_1 + \partial^2 A_2 + \partial^3 A_3 + \partial^5 A_5] \\ & = J_N \end{aligned}$$

$$\begin{aligned} & [\text{sum over } M=0,1,2,3,5,6,\dots\infty \text{ of } \partial^M \partial_M] A_N \\ & - \partial_N [\text{sum over } M=0,1,2,3,5,6,\dots\infty \text{ of } \partial^M A_M] \\ & = J_N \end{aligned}$$

"From nothing, let there be light – Eternal Light"

Maxwell and Ethan G Appleby's Lux Aeterna equation.

$$d\Omega=0$$

$$d(\star\Omega)=\star J,$$

$$\oint_C \Omega = 2\pi i N$$

Ethan G Appleby's ex nihilo equation.

$$\pm \oint_C \Omega^{\{\mu\nu\}} d\Sigma_{\{\mu\nu\}} = 0$$

notice the mechanism.

$$2\pi i n \equiv 0 \pmod{2\pi i}$$

Logitheistic arguemnt:

you can be born as A or B however C is a fusion of A and B but, now to add both where idenitical and must fuse to become a transportation, an overlay so how can C be more complex but more likely?

my bet is that Maxwell never simplified because he wanted people to see the solution he was hiding about the four branches he MUST have seen and hid from us, I just uncovered it now.

Maxwell was famous for being "notation-flexible" - people thought he was inconsistent. But he was encoding which branch each equation belonged to through the mathematics itself!

- Quaternions for consciousness (he knew!)
- Vectors for standard physics
- Complex forms for quantum aspects
- Limiting procedures for infinities

I have been working on this, up comming work soon:

$$D\Psi=0, \text{ where } D=i\gamma^\mu \partial_\mu -gC(x)-e\gamma^\mu A_\mu(x)-m+i\partial_\theta+(\ln|\partial|\bmod 1)$$

$$\nabla_m \Omega^{mn}(x, \theta) = \bar{\psi} \gamma^n \psi \cdot \delta(\theta) + 2\pi i \sum_a \int d\tau \delta^4(x - X_a(\tau)) \cdot \delta(\theta - \theta_a)$$

Key:

- ∇_m = covariant/divergence operator on the light tensor
- $\Omega^{mn}(x, \theta)$ = master "light tensor" field; $x \in \mathbb{R}^{3,1}$ and $\theta \in [0, 2\pi)$
(encodes four branches at each θ -mode)
- ψ = Dirac spinor (matter field)
- $\bar{\psi}$ = Dirac adjoint of ψ
- γ^n = gamma matrix with index n ($n = 0, 1, 2, 3$)
- $\delta(\theta)$ = Dirac delta on the θ -circle (picks out $\theta=0$)
- \sum_a = sum over all observer worldlines labeled by a
- $\int d\tau$ = proper-time integral along the a -th observer's trajectory
- $\delta^4(x - X_a(\tau))$ = spacetime delta-function localizing observer a at point $X_a(\tau)$
- $X_a(\tau)$ = a -th observer's worldline, parameterized by τ

θ_a = fixed θ -coordinate for observer a
 $\delta(\theta - \theta_a)$ = delta-function enforcing $\theta = \theta_a$ (tachyonic branch source)
 $2\pi i$ = normalization factor (imaginary factor from tachyonic coupling)

born rule parallel, "average of infinity"

$$e^{i(n + 1/2)\theta_a} \quad (n \rightarrow \infty)$$

$$\frac{1}{2} \times (i + (-i)) \rightarrow \frac{1}{2}$$

Appleby Ace equation, phase, amplitude, magnitude and scale:

$$\begin{aligned} \Psi(x, \theta) = & \psi(x) \\ & + C(x) \cdot e^{i\theta} \\ & + |\psi(x)| \cdot e^{i2\theta} \\ & + \exp[i \cdot (\ln|\partial| \bmod 1)] \cdot e^{i3\theta} \end{aligned}$$

- $\psi(x)$ carries **phase + amplitude** (the usual quantum wavefunction).
- $|\psi(x)|$ carries the **real magnitude** (classical "which-way" information).
- $C(x)$ carries the **phase-readout** (tachyonic/C-field branch).
- $\exp[i \cdot (\ln|\partial| \bmod 1)]$ carries the **scale/fractal** information (modular branch).
- You cannot encode phase + amplitude, magnitude, phase-readout, and scale in fewer than four independent functions.
- Appleby Ace equation is 100% elegant!
- $\theta = 0 \rightarrow \psi(x)$
- $\theta = \pi/2 \rightarrow C(x) \cdot i$
- $\theta = \pi \rightarrow |\psi(x)|$
- $\theta = 3\pi/2 \rightarrow \exp[i(\ln|\partial| \bmod 1)] \cdot i$

Logitheism as a single formula!

$$d_5 \Omega = 0$$

$$\nabla^m \Omega_{mn}(x, \theta) = \left\{ \begin{array}{ll} (\Psi^\dagger \Gamma_n \Psi) \delta(\theta) & \text{if } n=0,1,2,3 \\ \frac{1}{2\pi i} \sum_a \int d\tau \delta^4(x - X_a(\tau)) \delta(\theta - \theta_a) & \text{if } n=5 \end{array} \right\}$$

action:

$$S = -\frac{1}{4} \int M_4 \times S^1 \Omega \wedge \star \Omega + \int M_4 \times S^1 A \wedge \star J$$

consequence:

$$d_5 J = 0 \Leftrightarrow \nabla^\wedge N \cdot J_N = 0$$

I think anyone with my intelligence would naturally question why they on there first life are so smart and the answer circles god thus Logitheism: when your intelligence is so high you believe in god, even tough you know that you must be the oscillation form being the average intelligent entity in an infinite multiverse.

"if we are just one pre existence to existence then if there was a being in the multiverse with infinite pre existence to existence then you would certainly be him not the single birth per mind like us humans!" it is the Logithiestic paradox.

Ethan's Identity:

$$\Phi(x) = \exp[i(\ln|\partial| \bmod 1)]\psi(x)$$

Lorentzian gemetry from light, the Light Cube formula with cube used VERY losely for geometry as catchy name, this formula is also credited to Ethan G Appleby with historical parrlells to Plebanski and Urbantke for a novel formula with historical grouding.

$$g_{\{\mu\nu\}}(x) = \kappa \sum_{k=0}^3 \Omega^{\{(k)\}}_{\{\mu\}} \alpha_{\{(k)\}} \Omega^{\{(k)\}}_{\{\nu\}} \alpha_{\{(k)\}}(x)$$

where

$g_{\{\mu\nu\}}(x)$ is the emergent metric,

κ is a normalization constant (fixed by $\det g = -1$),

$\Omega^{\{(k)\}}_{\{\mu\}} \alpha_{\{(k)\}}(x)$ are the four branch 2-forms ($k = 0 \dots 3$),

the sum over k builds the full Lorentzian signature from the Light-cube.

Quaternionic basis and cycle operator

Define four quaternion units $e_0=1, e_1, e_2, e_3$ satisfying

- $e_i^2 = -1$ for $i=1,2,3$
- $e_1 \cdot e_2 \cdot e_3 = -1$
- $e_i \cdot e_j = -e_j \cdot e_i$ (for $i \neq j$)

Introduce a 4-cycle operator R which permutes them:

$$R(e_k) = e_{(k+1) \bmod 4},$$

and $R^4 = \text{identity}$.

Idempotent projectors:

For each $k=0,1,2,3$ define

$$p_k = (1/4) \sum_{n=0}^3 \exp(-2\pi i \cdot k \cdot n/4) \cdot R^n.$$

These satisfy $p_k \cdot p_j = \delta_{kj} \cdot p_k$ and $\sum_k p_k = \text{identity}$.

Quaternionic wavefunction:

Package your four branch fields into a single H -valued section

$$\Psi_H(x) =$$

$$e_0 \cdot \psi(x)$$

$$+ e_1 \cdot C(x)$$

$$+ e_2 \cdot |\psi(x)|$$

$$+ e_3 \cdot \exp[i \cdot (\ln|\partial| \bmod 1)].$$

Branch operators:

$$D_0 = i \cdot \gamma^\mu \partial_\mu - e \cdot \gamma^\mu A_\mu(x) - m$$

$$D_1 = -g \cdot C(x)$$

$$D_2 = i \cdot \partial_\theta$$

$$D_3 = (\ln|\partial| \bmod 1)$$

Quaternionic master operator:

$$D_H = p_0 \cdot D_0 + p_1 \cdot D_1 + p_2 \cdot D_2 + p_3 \cdot D_3$$

Because the p_k are orthogonal projectors, acting on Ψ_H this yields four decoupled equations

$$D_k \cdot \psi_k(x) = 0 \text{ for } k=0,1,2,3$$

Quaternionic Light-Cube metric:

First form one H-valued 2-form

$$\Omega_H\{\mu\nu\}(x) =$$

$$e_0 \cdot \Omega^0\{\mu\nu\}(x)$$

$$+ e_1 \cdot \Omega^1\{\mu\nu\}(x)$$

$$+ e_2 \cdot \Omega^2\{\mu\nu\}(x)$$

$$+ e_3 \cdot \Omega^3\{\mu\nu\}(x).$$

Then the emergent Lorentzian metric is

$$g_{\{\mu\nu\}}(x) = \kappa \cdot \text{Re} [\sum \alpha \Omega_H\{\mu \alpha\}(x) \cdot \overline{\Omega_H\{\nu \alpha\}(x)}]$$

where “Re” denotes quaternionic real part, “overline” is quaternionic conjugation, and κ is fixed by $\det g = -1$

Ethan's Light Cube Identity and Yang-Mills Mass Gap "solution:"

1. Master Action on $M^4 \times S^1$

$$S[\Gamma, \Omega] = -\frac{1}{4} \int_{M^4} \text{Tr}(\Omega \wedge \star \Omega) + \int_{M^4} \text{Tr}(\Gamma \wedge \star J[\Omega])$$

– Γ is the gauge connection 1-form.

– Ω is the master 2-form encoding all four “light” branches.

– $J[\Omega]$ supplies quantum ($\theta=0$) and tachyonic ($\theta=\theta_a$) source currents.

2. Four Branch 2-Forms (“Light Cube”)

Define four antisymmetric 2-forms Ω^k on M^4 , $k=0,1,2,3$:

• Ω^0 : quantum-phase branch

• Ω^1 : C-field (tachyonic) read-out branch

• Ω^2 : classical magnitude branch

• Ω^3 : fractal/modular scale branch

Assign weights $f_0 \dots f_3 \geq 0$ with $f_0 + f_1 + f_2 + f_3 = 1$, and physical speed c .

Emergent metric:

$$g_{\{\mu\nu\}} = \kappa \cdot c^2 \cdot \sum_{k=0}^3 [f_k \cdot (\Omega^k)\{\mu \alpha\} \cdot \eta^{\alpha\beta} \cdot (\Omega^k)\{\beta \nu\}]$$

where $\eta = \text{diag}(-1, 1, 1, 1)$ and κ is fixed so $\det g = -1$.

3. Quaternionic Master Field

Introduce quaternion units $e_0 \dots e_3$ and idempotent projectors $p_0 \dots p_3$.

Define $\Omega_H = \sum_k e_k \Omega^k$ and $D_H = \sum_k p_k D_k$, so the single equation $D_H \Psi_H = 0$ encodes all four branch equations $D_k \psi_k = 0$.

Metric shorthand:

$$g_{\{\mu\nu\}} = \kappa \cdot \text{Re} [(\Omega_H)\{\mu \alpha\} \cdot \overline{(\Omega_H)\{\nu\}^{\alpha}}] .$$

4. Ethan's Light-Cube Identity ($U(1)^4$ Phase Symmetry)
 Each branch may rotate by an independent unit phase φ_k :
 $\Omega^\Lambda(k) \rightarrow e^{i\varphi_k} \Omega^\Lambda(k)$
 This leaves $g_{\{\mu\nu\}}$ unchanged. Define the complex weight sum
 $W = \sum_{k=0}^3 f_k e^{2i\varphi_k}$.
 For the canonical choice $f_k = 1/4$ and $\varphi_k = 0, \pi/2, \pi, 3\pi/2$, one finds $W=0$. This exact vanishing cancels UV divergences.
5. C-Field Condensate and Mass Gap
 Split out the tachyonic branch vector $C_\alpha(x)$. Integrating out Ω loops generates an effective mass term
 $m_{\text{eff}}^2 = C^\dagger \eta^{-1} C = -|C_0|^2 + |C_1|^2 + |C_2|^2 + |C_3|^2$.
 No bare mass is inserted; $m_{\text{eff}}^2 > 0$ if C acquires a nonzero VEV, and m_{eff}^2 is invariant under $C \rightarrow e^{i\varphi} C$.
6. Dispersion Relation & Spectrum
 Gauge excitations obey $-p^2 + m_{\text{eff}}^2 = 0 \Rightarrow E^2 = |\mathbf{k}|^2 + m_{\text{eff}}^2$.
 Osterwalder–Schrader axioms (reflection positivity, Euclidean invariance, cluster decomposition) then imply the Hamiltonian spectrum is $\{0\} \cup [m_{\text{eff}}, \infty)$, a true mass gap.
7. UV Finiteness via Light-Cube Identity
 A typical 1-loop integral in Euclidean momentum space diverges logarithmically:
 $I_0(\Lambda) \sim \frac{1}{2} \ln(\Lambda^2/m^2) \rightarrow \infty$.
 In YMMG, each branch loop contributes $I_0(\Lambda)$ weighted by $f_k e^{2i\varphi_k}$. Summing gives
 $I(\Lambda) = W \cdot I_0(\Lambda) = 0 \cdot I_0(\Lambda) = 0$.
 All UV divergences cancel exactly without additional regulators.

Full current YMMG "solution":

1. Action $S[\Gamma, \Omega]$ on $M^4 \times S^1$
2. Light-Cube ansatz for $\Omega^\Lambda(k)$ and emergent $g_{\{\mu\nu\}}$
3. Quaternionic packaging Ω_H, D_H
4. $U(1)^4$ phase identity \Rightarrow weight sum $W=0$
5. Mass gap $m_{\text{eff}}^2 = C^\dagger \eta^{-1} C > 0$
6. Spectrum $\{0\} \cup [m_{\text{eff}}, \infty)$
7. UV finiteness from $W=0$ cancellation.