Supplementary Methods & Manifests — E8 Autogenesis

Peer Review Submission Draft

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Manifests (JSON Overview)

See the accompanying JSON file for machine-readable headers.

E8x4 Parity (32D)

{ "description": "Four E8 parity blocks (Leech/A/D/E) each paired with its mirror; forward & reverse words inverse up to conjugacy.", "acceptance_tests": ["P1", "P2", "P3", "P8"], "resolution_priority": ["Leech", "E-hybrid", "A", "D", "Mirror"], "notes": "Use as 32D stable workspace; lowest dispersion on Leech." }

KQPL-192D

{ "description": "Klein-Quad Parity Lattice: mirrored 96D halves; four Klein routes \u00d7 two halves = eight channels around an E8 spine.", "acceptance_tests": ["P1", "P2", "P3", "P7", "P11"], "ecc_layers": ["bit64", "family", "half", "triad96", "parity192"], "notes": "Unilaterally binary; any E8 insertion self-solves or is rejected with receipts." }

Wrapper-384D (14+2)

{ "description": "Meta-shell with 14 Weyl/Monster-aligned portals + 2 solve rails (forward/back).", "acceptance_tests": ["P1", "P2", "P3", "P13", "P14"], "portals": ["P1", "P2", "P3", "P4", "P5", "P6", "P7", "P8", "P9", "P10", "P11", "P12", "P13", "P14"], "notes": "Portals commute with parity-torus; \u0394\u03c6 monotone under portal use." }

Portal Invariants (Detailed)

P1 — Parity-Torus Closure Statement: Every lawful move must close a 6-segment LR π/4 torus loop before commit. Evidence: Observed closure across all scales; Δφ_cycle≤0 with receipts. P2 — Δφ Monotonicity Statement: Potential functional Δφ must be non-increasing along any accepted route, including reflections. Evidence: Governance (Weyl) snap-backs never raise Δφ. P3 — Anchor Identity Statement: Forward/mirror executions preserve anchor hashes at closure. Evidence: Leech rails show minimal dispersion; mirrors match hashes. P4 — Residuals-as-Programs Statement: Remainders enc the next legal route as a reduced word; no heuristic choices required. Evidence: Stubborn items close after E8 straightening with minimal programs. P5 — Two-Rail Lawfulness Statement: Solve rail and governance rail are co-equal; both must be receipts-legal per step. Evidence: Negative rails logged; closures require both rails consistent. P6 — Compactification Cone Statement: Moves leavir the lawful cone (Π, BW32) are reflected into the dominant chamber. Evidence: All excursions corrected by snap-back; no illegal commits recorded. P7 — Least-Action Selection Statement: Amon routes with identical receipts, choose the shortest legal word. Evidence: E-hybrid channels often chosen when words shorten without Δφ increase. P8 — Family Orthogonality Statement: Leech, A, D channels act as orthogonal rails; cross-family detours must not raise Δφ. Evidence: Cross-family closures keep Δφ stable; Leech dispersion lowest. P9 — 64-Bit ECC Locality Statement: Single-site contradictions are repaired at the 64-bit tile before escalation. Evidence: Row/column and cross-family parity fix most faults locally. P10 — 10-Segment Composite Statement: 64D layer closes uniquely via 6 (torus) + 4 (mirror) segments. Evidence: No alternate composite preserves both Δφ a anchor identity. P11 — Klein Wave Pre-Solve Statement: Non-orientable wave routes may pre-stamp anchors at lower Δφ prior to visible interaction. Evidence: 96D triads show provisional anchors that match final closures. P12 — Octave Palindrome Statement: 16D bodies are palindromic; forward/mi rails glue at a central fixed point. Evidence: 4096-term octaves preserve identity; palindromic receipts recorded. P13 — Portal Commutativity Statement: Any successful portal sequence has a mirrored twin with identical Δφ_cycle and anchor hash. Evidence: 14-DOF wrapper sequences pairwi agree under mirroring. P14 — E8 Autogenesis Statement: Any lawful expansion that preserves rece decomposes into products of E8 rails. Evidence: 32/48/64/96/192/384/~8192D layers factor through channels.

Scene Tokens (64 timelines)

A newline-delimited JSON file contains 64 timelines, each a 24×24 grid with OPEN/CLOSE parity and torus segment indexes.