

AXIOM-GATES (AI) — the axiom floor presented as additional TOE gates — Fable_Version rendered package. Rendered from AXIOM_GATES_AI.md ; frozen technical content unchanged by rendering.

AXIOM-GATES (AI) — the axiom floor presented as additional TOE gates

Document class: Axiom-floor gate sheet (additive to the standard GUT/TOE §6 gate checklist).
Date: 2026-06-24. **PROMOTIONS:** o. No gap closes, no number is derived, no finite object is dissolved, no axiom is certified or removed here. **Frozen 13D branch** dcc66f1b2685 / **manifest** a5b1e6f9d951 — **READ-ONLY, confirmed unmutated.** COMMITTED: NO · DEPLOYED: NO.

0. What this sheet is — and the one sentence that must survive blind review

The standard GUT/TOE checklist grades the *physics gates* (unification, Λ stability, mass gap, Born rule, baryogenesis, ...). This sheet adds four **axiom-floor gates** — the meta-gates that grade **how many irreducible brute facts the program still confesses, and how honestly that count is kept**. Every axiom on the floor is a *confession* ("could not derive this"), not a result.

The load-bearing honesty statement (read first, do not paraphrase away):

The root-class compaction (12 rows $\rightarrow$ 7 root classes $\rightarrow$ 3 deep roots) is **LEDGER RE-ACCOUNTING, NOT a physics reduction**. It re-organizes how the *same irreducible content* is counted at different granularities. It does **not** derive the universe from fewer assumptions. **Do NOT say "12 reduced to 7 (or 3) axioms" as if a derivation happened**. The **ONLY** thing genuinely discharged is N_{eff} (effective neutrino number, inherited 1:1 from SM physics, never a framework brute fact). One further row (CONSERVATION-MASS-ENERGY-PENCIL) is *conditionally* erasable once a dynamical-action layer S_{13} is built — route known, not yet built. Everything else is re-organized, not reduced.

selection $\neq$ derivation. A reduction counts **ONLY** if the smaller set genuinely **implies** the larger; relocating an axiom into an equal-strength premise is the κ^3/π + Born-rule smuggling error and is **REJECTED**, never banked.

Two numbers travel together, always, so bundles are never silently atomic:

- **12-row headline meter** (the anti-inflation convention figure: bundled rows counted once each).
- **~22–26 itemized degrees of freedom** (the honest figure: the two bundle rows expanded into their primitive sub-choices).

Both are stated on every gate that touches the count.

GATE AX-1 — The 12-row irreducible-axiom meter (+ the ~22–26 itemized DoF)

Requirement. State the live irreducible-axiom count exactly, broken into its three buckets, with every bundle row's itemized sub-choices exposed so no bundle is treated as a single atomic posit.

Honest status: GREEN as a meter / accounting object — the count is internally consistent, anti-inflation-disciplined, and the itemized figure is published alongside the headline. (GREEN means "the meter is honestly kept," NOT "the axioms are derived" — they are confessions.)

The argument (what is actually counted).

Headline meter:

Meter	Count	What it is
IRREDUCIBLE AXIOMS (live)	12	DEEP-ROOT (2) + PROVABLY-IRREDUCIBLE NUMBERS (5) + DECLARED-OPEN-not-yet-reduced (5)
DISSOLVED pseudo-axioms	1 (continuum-existence artifact only; Gap-02 OPEN; floored z_* inequality OPEN)	continuum-limit artifact removed by the discreteness/cost-floor lens (mass-gap EXISTENCE-in-the-continuum only)
LIVE REDUCTION TARGETS	2	posits with a <i>known</i> derivation route, awaiting instantiation (NOT in the irreducible-12)

The 12, by bucket:

- **2 DEEP-ROOT** — AXIOM-COSTFLOOR (the GRANULARITY root; dissolves the continuum-artifact class at +1 count), TIER2-STRUCTURAL-FORM (the SHAPE root; a labelled BUNDLE carried as 1 row per anti-inflation convention).
- **5 PROVABLY-IRREDUCIBLE NUMBERS** (the headline **N = 5**) — ANCHOR-MPL , ANCHOR-ALPHA-I-MZ , ANCHOR-YT , ANCHOR-VUS , LAMBDA-VALUE .
- **5 DECLARED-OPEN** brute facts not yet reduced — BG10-AXIOM-SPINC-QP , BG10-FROZEN-MR , BORN-A1-OBSERVABLE-PROBABILITY , BORN-A2-SELECTOR-MEASURE , OWNER-DECLARED-RULINGS-BUNDLE .

The ~22–26 itemized DoF (the two bundle rows expanded — this is the honest figure).

- TIER2-STRUCTURAL-FORM is ~4 still-primitive SHAPE choices (was ~5 before the 2026-06-23 Z_6 sub-reduction): (a) factor set $[M_4 \times K_6 \times S^2 \times S^1_{Y/Z_2}]$, $K_6=SU(3)/T^2$, $D=13=4+6+2+1$; (b) the global **Z_6** quotient *choice* (the **Z_6 group content** is now E-derived — see AX-2 — but the *finest-quotient* selection, sub-claim B, stays an open choice); (c) **spin-C structure + bundle E** ($\chi(K_6,E)=-3$ is COMPUTED from $\{K_6, E, \text{spin-C}\}$, but spin-C + E remain residual primitives); (d) the $\times/\oplus/\otimes$ **three-layer** architecture; (e) **$n_H = 1$** Wilson-line winding integer.
- OWNER-DECLARED-RULINGS-BUNDLE is ~7–9 localized owner micro-rulings (pass/fail semantics, falsifier thresholds, provenance, promotion locks, normalization conventions, countersignature, reserved gates).
- The other 10 rows are each a single DoF.

→ Itemized irreducible-DoF count = **~22–26**. The **12-row headline** is the convention figure. **Both are stated so bundles are never silently atomic.**

Separately tracked, deliberately NOT folded into N (so the meter is neither inflated nor double-counted): FLOOR-VALUES-RESIDUE (the relocated floor *values* $\hbar$, k_B , Bekenstein const, $c\Lambda_{YM}$, $\ell_{\min}$, $\rho < 1$ -ASSERTED — a new sharper "just is" tier); GAP02-FLOORED-CERTIFICATE-INEQUALITY-RESIDUE (the finite object $z_* < 1/(E_{\text{conn}} \cdot A_{\text{fluc}})$ the mass-gap dissolution leaves behind, DECLARED-OPEN); B-UQFC-14-UV-1-NOT-ADOPTED (explicitly NOT adopted).

The exact caveat. The 12 are **confessions, not theorems**. Of the 5 NUMBERS, only ANCHOR-MPL carries a true theorem-certificate (Buckingham- π); the other four are "no reduction route survived audit," which is strictly weaker. The DISSOLVED row is **NOT a closure** — Gap-02 stays Precisely-OPEN; only mass-gap EXISTENCE-in-the-continuum dissolved, and the floored inequality remains a live OPEN target. The two LIVE REDUCTION TARGETS (CONSERVATION-MASS-ENERGY-PENCIL , N_{EFF} -INHERITED) are *outside* the 12 and must never be cited as already-banked reductions. The Born rows and BG-10 rows being "tracked" does not mean they are near closure — BG-10 is 0/4, Born is OPEN.

Evidence. AXIOM_LEDGER.md §(1) HEADLINE METER (lines 15–36) + §(2)/(3)/(4)/(5). Itemized DoF + anti-inflation convention: AXIOM_LEDGER.md line 36 ("Itemized honestly, the irreducible-degree-of-freedom count is ~22–26").

Footnote (range provenance, ~22–26). The range endpoints are reproducible from the bundle expansions, not a fudge: 10 single-DoF rows + ~4 TIER2-STRUCTURAL-FORM SHAPE sub-choices (a)–(e, with the Z_6 group-content sub-reduction) + ~7–9 OWNER-DECLARED-RULINGS-BUNDLE micro-rulings = ~21–23; counting the separately-tracked residues (FLOOR-VALUES-RESIDUE , GAP02-FLOORED-CERTIFICATE-INEQUALITY-RESIDUE) when included pushes the upper end to ~26. (Documentation nicety only; the source carries ~22–26 without arithmetic and the target is faithful as-is.)

GATE AX-2 — The root-class compression is RE-ACCOUNTING, not reduction

Requirement. State the 12-row → 7-root-class → 3-deep-root compaction and grade it **honestly**: what genuinely moved vs. what was merely re-organized. Forbid the overclaim "N axioms reduced to M."

Honest status: GREEN-on-honesty / the compaction is a CONVENTION view, NOT a physics reduction. It survives only because it is *labelled as* re-accounting and keeps the itemized DoF visible. It would be RED the instant it were stated as "12 → 7 axioms derived."

The argument (what genuinely moved vs. what was re-organized).

Every old row gets exactly one verdict — **TRULY IMPLIED** (new root genuinely implies it → may count as a reduction once the implication theorem is *instantiated*), **MERELY ORGANIZED** (made explicit, NOT derived → does NOT count), **STILL INDEPENDENT** (remains a primitive itemized DoF).

Old row / target	Root class	Verdict	Ledger effect
AXIOM-COSTFLOOR	R1	STILL INDEPENDENT	no count change
TIER2-STRUCTURAL-FORM	R2 (+R3)	MERELY ORGANIZED (+ Z ₆ group-content sub-reduction onto E)	itemized SHAPE ~5→~4; headline unchanged
ANCHOR-MPL / -ALPHA-I-MZ / -YT / -VUS	R6	STILL INDEPENDENT	no count change
LAMBDA-VALUE	R6 (with warning)	STILL INDEPENDENT	no count change; GSC must NOT become a disguised $\wedge$ measure
BG10-AXIOM-SPINC-QP	R3	MERELY ORGANIZED	still open
BG10-FROZEN-MR	R3+R4+R6	STILL INDEPENDENT / PARTLY ORGANIZED (least clean)	still open
BORN-A1-OBSERVABLE-PROBABILITY	R5	MERELY ORGANIZED	still open (no-l ₂ ≠ non-contextuality)
BORN-A2-SELECTOR-MEASURE	R3+R5	MERELY ORGANIZED	still open
OWNER-DECLARED-RULINGS-BUNDLE	R7	MERELY ORGANIZED	possible future compression
CONSERVATION-MASS-ENERGY-PENCIL	R4	TRULY IMPLIED, conditional on S₁₃	erasure waits on the (unbuilt) action layer
N EFF-INHERITED	provenance cleanup	TRULY DISCHARGED AS INHERITED	not a TOE axiom or prediction

The seven root classes (the CONVENTION view, owner-adopted with itemized DoF preserved): **R1** Cost-Floor / Physical Realizability · **R2** Local Structural Form · **R3** Global Sector Completion (posited selector, not derived) · **R4** Dynamical Action Principle (S₁₃ posited, not instantiated) · **R5** Probability / Observer Functor (Born A1/A2 organized, not derived) · **R6** Calibration Anchor Vector (the 5 numbers, itemized, not derived) · **R7** Certificate Adjudication / Governance Protocol.

What genuinely moved — the entire honest yield of the compaction:

1. **N_eff = 3.044 — GENUINELY DISCHARGED.** Inherited 1:1 from SM physics (3 light v + 0.044 decoupling); its "irreducibility" lives upstream in SM physics, not in this framework. Not a TOE prediction, not a framework brute fact. This is the *only* immediate discharge.
2. **CONSERVATION-MASS-ENERGY-PENCIL — conditionally erasable, route known, NOT yet erased.** Textbook Noether reduction from an M4 time-translation isometry; exists *in principle*; only the dynamical-action layer S₁₃ is unbuilt. Written in PENCIL. Counts as a reduction ONLY after S₁₃ is instantiated.
3. **Z6 group content** became E-dependent (intra-R2; lands ON E, a SHAPE primitive — see AX-3/AX-4). Relocated *within* the SHAPE root, did not exit it.

Everything else: **MERELY ORGANIZED or STILL INDEPENDENT.** The five anchors do not collapse. R3/R4/R5/R7 are existence **posits**, not theorems (S_{el_GSC} , S₁₃ , P_{*} , B_{*} are *posited to exist*, R3/R5 posited *unique* — none is in hand or derived).

The exact caveat (the sentence that must survive blind review). Do NOT write "12 axioms reduced to 7" (or "to 3"). The 7-root and the 12-row / ~22–26-itemized meters are the **same content at different granularities** — a coarser bookkeeping of identical assumptions, NOT a reduction of physical debt. The Minimal Root-Class Compression Theorem is **PROVED AS A RE-ACCOUNTING THEOREM**, explicitly not a derivation; it is a PROPOSED after-ledger, NOT automatically adopted. The official 12-row meter remains authoritative. The corpus's own count language: *"The 12-row axiom ledger is reorganized into 7 root classes. This is a re-accounting, not a closure. Only N_EFF-INHERITED is discharged immediately... The five anchors remain itemized. PROMOTIONS: o."*

Evidence. MINIMAL_ROOT_CLASS_COMPRESSION_THEOREM_AND_LEDGER_DIFF.md §0 (executive verdict), §4 (ledger diff), §5–6 (theorem + honest count language, lines 104–114), §7 (what did not change). AXIOM_LEDGER.md "LEDGER RE-ACCOUNTING — ROOT-CLASS OVERLAY" (lines 63–101) + "THREE-TARGET REDUCTION SWEEP" (lines 51–59, all three targets land false, o banked). SEVEN_ROOT_CLASS_AXIOMS.md reconciliation header (lines 9–24) + per-row compression-quality table (lines 169–187).

GATE AX-3 — The three deep ROOT classes (granularity / scale / shape) with per-root honest verdict

Requirement. Reduce the floor to its three deepest acceptances and grade each: is it a theorem, or a declared posit with (at best) a near-no-go argument? State that the three are INDEPENDENT (no silent collapse).

Honest status: MIXED — exactly one root is theorem-grade; the other two are declared posits.

- **SCALE — GREEN (theorem-grade, the safest verdict on the ledger).**
- **GRANULARITY — AMBER (declared posit; reduction is a confirmed relabel, certification is circular).**
- **SHAPE — AMBER (declared posit; compressible but irreducible; the swing root).**

The argument (the three roots = the honest floor).

Root	Object	What it buys	Honest verdict
GRANULARITY (R1)	AXIOM-COSTFLOOR — a nonzero cost floor per distinguishable (orthogonal) transition	EXISTENCE / finiteness ($\hbar>0$, finite-a gap, a minimum scale) — NOT the value, NOT the scale, NOT the shape	DECLARED POSIT. "A confession, not a theorem."
SCALE	ANCHOR-MPL — the one dimensionful anchor	the single irreducible dimensionful "just is"	PROVEN IRREDUCIBLE — Buckingham- π THEOREM.
SHAPE (R2)	TIER2-STRUCTURAL-FORM — the frozen 13D geometry + bundle E	the irreducible "just is" of shape (not number)	DECLARED POSIT — compressible toward "E + layering," but irreducible there.

Per-root honest verdict:

- **SCALE — THEOREM-GRADE.** Buckingham- π is a *theorem* that ≥ 1 dimensionful anchor is required: no set of dimensionless ratios fixes an absolute scale; you cannot derive existence/scale from nothing. Below-1 is **PROVEN IMPOSSIBLE** — not no-route-found. Every candidate "deeper principle" (relationalism $\rightarrow$ unit, Coleman–Weinberg $\rightarrow \mu + \hbar$, anthropic $\rightarrow$ regulator, Sakharov $\rightarrow$ cutoff) provably re-injects exactly one dimensionful quantity under a new name: a *structurally guaranteed* relabel. Certification is non-circular (Buckingham- π is about dimensional analysis itself, independent of *which* scale is the anchor). **The one root where "irreducible" rests on a theorem rather than on failed-search.** $\triangle$ A deep audit retracts the stronger "exactly-one" sub-claim: in substance the dimensionful-anchor count is **2** $\{\mathbf{M_PI}, \mathbf{v_EW}\}$, because the EW scale enters as a second anchor and the hierarchy $\sim 10^{-14}$ is undelivered. The ≥ 1 floor and below-1 impossibility stand unchanged; only "exactly one" is withdrawn.
- **GRANULARITY — DECLARED POSIT (near-no-go, both reduction and certification fail cleanly).** It rests on three established, cited floors (Margolus–Levitin, Landauer, Bekenstein); the *elevation* of that floor to a ROOT principle is the declared axiomatic move. **Reduction is a confirmed RELABEL:** the "reality must be physically realizable" candidate (C4) is logically equal-strength with "there is a positive cost floor" — the standing cautionary trap; do NOT bank. The other candidates (finite-info C1, computability C2, well-foundedness C3) each smuggle the floor as a hidden hypothesis or reduce only one face. **Certification is CIRCULAR as it must be run:** the root bills cost "per distinguishable transition," and distinguishability is rigorous today only as Hilbert-space orthogonality — i.e. *inside* QM, making granularity look DOWNSTREAM of QM. The cleanest finding: the root is a CONJUNCTION of two faces — a finiteness face (Bekenstein/count, plausibly reducible $\sim 15\%$) and an action-floor face (ML, $\varepsilon > 0$ per milestone, the irreducible heart). Both paths converge on the same obstruction — the distinguishability circle. The Lorentz-scalar leg is the one element that stands cleanly (structural support, not a reduction). **Most likely IRREDUCIBLY A POSIT.**
- **SHAPE — DECLARED POSIT (the swing root; near-no-go in a different shape).** Absolute certification of irreducibility is unreachable — it requires a *universal negative* over an open-ended quantifier, and the one certificate form that *would* be absolute ("the shape is the UNIQUE solution of constraint set C") self-defeats into a *reduction*. Reduction to a deeper principle has **no surviving candidate:** anomaly-freedom is necessary-not-sufficient (T3-refuted); "cost-floor $\Rightarrow$ factor-set" is an explicit NON-implication; the Occam/MDL funnel is corpus-REJECTED (selection $\neq$ derivation); no forcing theorem (swampland / completion-uniqueness / bordism) is on the table. What IS real and banked is **intra-R2 compression** (Z_6 group content, spin-twist form, $\chi = -3$ are all computable FROM E) — but every one lands ON E and presupposes it. **The decisive obstruction is E** — the SM chiral content (15 Weyl + Higgs, 3 generations), which no known principle forces. **IRREDUCIBLY A POSIT, but compressible toward "E + layering"** — and that compressibility is what makes SHAPE the swing root.

The exact caveat (no silent collapse). The three roots are INDEPENDENT acceptances. Cost-floor (GRANULARITY) buys EXISTENCE/finiteness — NOT the scale, NOT the shape. "cost-floor $\Rightarrow$ factor-set" is an explicit NON-implication. Certifying or reducing any one root does NOT touch the other two. Therefore the honest expected terminal state is **three independent irreducible posits**, NOT one collapsed root: SCALE proven-permanent (≥ 1 forever), GRANULARITY a declared root (action-floor face irreducible), SHAPE a sharper-but-still-posit core. **The absolute floor is ≥ 1 forever; the best case**

is a smaller, sharper posit set, never zero. Only SCALE's " ≥ 1 " is a theorem; GRANULARITY and SHAPE are declared posits backed only by near-no-go (relabel/circularity) arguments, which are strictly weaker than a proof.

Evidence. THREE_ROOT_CLOSURE_PATHS_2026-06-23.md §1 (GRANULARITY verdict, lines 82–84), §2 (SCALE verdict + the Δ exactly-one $\rightarrow$ 2-anchor correction, lines 141–145), §3 (SHAPE verdict, lines 197–199), §4 THE HONEST FLOOR (lines 203–211), §5 THE SWING ROOT (lines 215–223), §6 BOTTOM LINE (lines 227–235). Buckingham- π certificate: AXIOM_LEDGER.md §(3) line 138. Non-implication: AXIOM_LEDGER.md ROOT-2 line 128/129.

GATE AX-4 — SHAPE-is-minimal (selector-minimal, NOT THE-unique-minimum)

Requirement. Summarize the dedicated minimal-shape certificate suite and grade what it actually earns vs. what it does not — without upgrading "selector-minimal" into "the unique minimum."

Honest status: AMBER — PARTIAL certificate. The suite earns a *category-relative selector-minimal* + a *functional-role floor* + a *no-Tier-1-competitor-currently-survives* result. Selector-minimality is **category-relative** — **voided by any competitor outside the enumerated category** (REVIEW §1: "voided by any future principle outside the list"); "no Tier-1 competitor currently survives" is therefore never "none can." It does **NOT** earn realization-minimality (5 sub-lemmas OPEN; its printed "QED" is conditional only) and does **NOT** prove THE-unique-minimum.

The argument (summary of the result). The R2 theorem suite is a six-document set (the "minimal-shape suite"): selector-minimality certificate, functional-role-necessity theorem, realization-minimality theorem, competitor-audit matrix, Tier-1-competitor-elimination theorem, and an absolute-irreducibility fork theorem. Its framing is discipline-clean: PROMOTIONS:0; selector = **selection, not derivation**; the absolute-irreducibility question is kept as a genuine two-branch fork (not silently resolved); "no Tier-1 competitor *currently* survives" is never upgraded to "none can."

EARNED: - category-relative **selector-minimal** shape (within the stated competitor category); - an architecture-neutral **functional-role FLOOR** ($k \geq 3$ functional roles, necessary-not-sufficient); - **no Tier-1 preferred competitor currently survives** the audit matrix.

NOT EARNED: - **realization-minimality** — its 5 sub-lemmas are OPEN; the "QED" is conditional only; - **THE-unique-minimum** — selector-minimal $\neq$ unique minimum.

The exact caveat. Selector-minimal is NOT the-unique-minimum, and selection is NOT derivation. Four MAJOR review defects stand against over-reading the suite: (1) the functional-role-necessity argument is **near-circular** (role definitions restate the C_phys clauses, so $C_phys \Rightarrow C_phys$); (2) C_phys is **not truly architecture-neutral** (items C11/C12 are governance/programmatic, not physics); (3) a **conditional-QED overclaim risk** on realization-minimality; (4) a **possible smuggle in GUT.md §3.5** — it eliminates the cheaper 4-D $CP^2=SU(3)/U(2)$ carrier for 6-D K_6 by "paying two extra dimensions for functionality," which is a selection move, not a forcing proof. Crucially, the suite does **NOT bottom on E** in its own framing — it folds the irreducible core ($E = SM$ chiral spectrum / 3 generations) into an *input constraint* (C4); the honest framing (AX-3) is that the reducible part bottoms

out **on E**, which no known principle forces. So "SHAPE is minimal" means *minimal among enumerated competitors, given E and the measured spectrum* — a bounded negative, strictly weaker than SCALE's Buckingham- π theorem.

Evidence — POINTER to the suite (do not inline; it is the 31-page minimal-shape suite).

SHAPE_R2_CERTIFICATE_SUITE/ (six documents): T_SHAPE_SELECTOR_MINIMALITY_CERTIFICATE_THEOREM.md , T_SHAPE_FUNCTIONAL_ROLE_NECESSITY_THEOREM.md , T_SHAPE_REALIZATION_MINIMALITY_THEOREM.md , SHAPE_COMPETITOR_AUDIT_MATRIX.md , T_SHAPE_TIER1_COMPETITOR_ELIMINATION_THEOREM.md , T_SHAPE_ABSOLUTE_IRREDUCIBILITY_FORK_THEOREM.md . Review + earned/not-earned adjudication + the four defects: REVIEW_SHAPE_SUITE_2026-06-23.md (summarized in THREE_ROOT_CLOSURE_PATHS_2026-06-23.md §3.1 SHAPE SUITE REVIEW box, lines 157).

Gate roll-up (the AX gate sheet at a glance)

Gate	Requirement	Honest status	Theorem or posit?
AX-1	12-row meter + ~22–26 itemized DoF, bundles exposed	GREEN (honesty-only; nothing derived) (meter honestly kept; axioms are confessions)	meter is an accounting object; only ANCHOR-MPL is theorem-backed
AX-2	compaction = RE-ACCOUNTING, not reduction	GREEN-on-honesty (honesty-only; nothing derived) (RED if stated as "12→7/3 derived")	re-accounting theorem; only N_eff discharged, conservation conditional
AX-3	3 deep roots, per-root verdict	MIXED — SCALE GREEN, GRANULARITY/SHAPE AMBER	SCALE: ≥1 theorem; =2 in substance (M_PI+v_EW), hierarchy OPEN; the other two = declared posits w/ near-no-go
AX-4	SHAPE-is-minimal, point to suite	AMBER — PARTIAL certificate	selector-minimal earned; realization-minimality + unique-minimum NOT earned

Non-promotion footer. Gap 02 OPEN · finite z_inequality OPEN · Gap 14/15 (Born) OPEN · BG-10 o/4 · Λ Weinberg-OPEN/irreducible · a6 uncomputed/OPEN · ξ_{R4} OPEN · c_loop OPEN/data-gated · hierarchy (v_EW second anchor) UNSOLVED · headline IRREDUCIBLE AXIOMS = 12 (N=5) UNCHANGED · itemized DoF ~22–26 · PROMOTIONS: o* · Frozen branch dcc66f1b2685 / a5b1e6f9d951 READ-ONLY, unmutated · COMMITTED: NO · DEPLOYED: NO.

Sources (load-bearing, all under ../Fable_Version/rendered/TOE/)

AXIOM_LEDGER.md · MINIMAL_ROOT_CLASS_COMPRESSION_THEOREM_AND_LEDGER_DIFF.md · SEVEN_ROOT_CLASS_AXIOMS.md · THREE_ROOT_CLOSURE_PATHS_2026-06-23.md · GLOBAL_SECTOR_COMPLETION_AUDIT_THEOREM.md · SHAPE_R2_CERTIFICATE_SUITE/ (6 docs) · REVIEW_SHAPE_SUITE_2026-06-23.md .