The Flip

Artist's Proof 47

Physics · Particles and Matter

The matter-side cost of a held distinction – the neutron's realised difference at second order, from the family's one mechanism.

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Artist's Note

This is Artist's Proof 47 of The 420 Code. It belongs to Notebook V – Particles and Matter, beside AP30's proton, and it prices what the old formula priced as free.

Structurally perfect balance is impossible. Always. The reason why anything is, is the minimal structural imbalance – that is the key to the entire 420 Code. A very small imbalance is structural; it has to be. In AP40 – The Irrational, this structural imperfection, or imbalance, is conceptually developed.

The neutron is where that structural imbalance meets a scale, at the seventh decimal place, and either survives or dies there.

On the 2nd of August 2026 my neutron prediction died – cleanly, at 7.24σ. I made a mistake and I was wrong. That means, simply, that I betrayed the structure and did not look closely enough. The death forced me to look harder and deeper. And the structure's deepest wound became its biggest blessing in disguise.

My mistake was a structural omission. Priced at the arena, the same omission sharpened the gravity derivation – AP44, The Snap: the realised coupling of its section 5. Priced here, finding it did not revive the fired row; it produced a new one beside it. Nothing got fixed. The corpse stays.

This is living work. I will work at it until the day I die, and nothing in it is above correction – the switches below are guides for my own thinking first, and teeth for the claim second. I made a mistake. I might have made more. So what. What is important is that the system can correct itself, and it did – the switches caught the structural error; the audits caught the arithmetic. Both were needed, and neither found the other's. Now, I wait. Nature agrees, or nature doesn't. That is all that matters.

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0 – Dependency and Scope

0.1 – What this paper does

AP47 prices the strained hold: what a configuration pays, at second order, to keep a difference open against its ground state. Three things, each at its stated grade.

First. It derives the form and scope of the cost. A held distinction discounts the booking of the difference itself – a quotient, never a new term – and the cost is defined on flips: no flip, no cost, the ground excluded by definition.

Second. It names the cost as one process – the window's leak – with a located rate (the substrate's, α, from AP30's own lemma), a located depth (the held grain's α-worth, carried with its conditional), and a located geometry (the pair's eight dimensional expressions under AP30's own construction, giving $1/(8\pi)$).

Third. It freezes one row against nature. $\Delta_{real} = \Delta_{bare}/(1 + \alpha^2/8\pi) = 2.530988570035$ at CODATA-2022 α, against the measured $2.530988574 \pm 7.4\times10^{-7}$ – a residual of -0.005σ where the bare row fired at 7.24σ – with the switches of section 10 armed on it.

It also rules the bound neutron (the distinction is held against the structural alternative; binding closes the exit, not the window) and declares, rather than dresses, that the ruling carries no mass-face observable.

0.2 – Dependencies

AP30 (The Resistance): the dimensional-expression construction and its leakage lemma – the static count through the four spacetime dimensions, the isotropic $1/(\text{count}\cdot\pi)$ normalisation, the substrate's rate ("the substrate speaks at α_{em}"), and the principle quoted at its own hedge: "*the leakage is normalised by the very structure it leaks through.*" AP46 (The Stretch, v0.2): the mechanism in its exact words – "*holding is tension, and tension sheds*" – the pairs-balance ruling, and the thread ruling that fixes the family's one base rate. AP45 (The Blink, draft v0.2.1 – the version of record; a draft awaiting its lock, and every inheritance from it says so): the toll's two faces, the spent clause, the no-new-energy-term refusal, the grain's denomination. AP44 (The Snap, locked): the $\varepsilon = \alpha_{em}$ selection, argued in its section 5, booked as D-CCC.4. AP06 (The Leakage Constant, part of the published work): the domain field the selection was made among, held open at its section 0.7. WP-ROAD.1 v1.2: the family instrument. One measured comparator, CODATA 2022, lines named in section 6. No other inputs exist.

0.3 – Claimed, and refused

Claimed: that a configuration holding a distinction – an orientation differing from its ground state under the same grip – pays a continuous second-order cost on the booking of the difference itself; that the cost is one process, the window's leak, with a located rate, depth, and

geometry; that its order is α^2 (the grain's worth times the substrate's rate) at the structural register, riders stated; that its divisor is 8π, derived by AP30's own construction at support two; that the realised difference is the expression Δ_bare/(1 + α^2/8π) at CODATA-2022 α; that the bound neutron pays; and that the binding ruling carries no mass-face observable, under either answer, declared rather than dressed as an edge.

Refused, in advance: any new term in any energy budget at any size; any identification of Δ_bare's terms with the standard electromagnetic/strong decomposition; any repair of the fired row KS-NPP.1; any third-order term; any claim on the bound neutron's mass face; any probability deviation; and any contact between the construction and standing measured numbers beyond those disclosed in this paper – the eliminations of section 5 and the proton check of section 7, where data killed candidates and generated none, and the single frozen comparison of section 6 – all made after the structure was described, in the order the record shows.

0.4 – The honesty box

The bare row fired at 7.24σ and is shown in full in section 7; this paper prices the structure the fired row was missing and never touches the corpse. The paper's central structural claim – AP30's maintenance mechanics read at a strained hold instead of a ground's upkeep – is STATED, located, and switch-guarded, not derived from anything deeper; every grade in this paper rides it in the open. The order carries three riders (T-b, a registered conjecture; D-CCC.1, the formalisation; the ε = α_em closure, DERIVED-CONDITIONAL-ON-AP45 via D-CCC.4) and the divisor inherits KS-30.2's isotropy assumption, live in its parent. The landing itself, at −0.005σ, is weak evidence by the family's own standard: the paper is worth having for the structure and the falsification surface, not for the number.

0.5 – Epistemic status per section

Section 1: the family seat, orientation. Section 2: DEFINITIONAL – the scope, ruled. Section 3: DERIVED-AT-THE-STRUCTURAL-REGISTER – the mechanism, inherited and read on the mass face. Section 4: the process STATED and located; the order α^2 DERIVED-AT-THE-STRUCTURAL-REGISTER with riders. Section 5: the divisor 8π DERIVED, wearing its clauses and inheritance. Section 6: EMPIRICAL – one frozen row, reported once, never evidence of the structure. Section 7: deaths, shown. Section 8: RULED, with a declared null. Section 9: the census, open and honest about its size.

0.6 – Kill switch summary

KS-FLIP.1 — the frozen row dies if measurement departs beyond the bar. KS-FLIP.2 — forced structure; fires on any element shown selected by comparison with measurement; binding on everyone who built it. KS-FLIP.3 — the truncation; the absent α^3 term is a prediction, dated at ~20× better B_d metrology. KS-FLIP.4 — the scope; dies if a ground state requires the cost or

a domain member escapes it. KS-30.2 — inherited isotropy; both divisors move together. KS-NPP.1 — fired 2 August 2026, shown forever. Full statements in section 10.

0.7 – Items held open without claiming debt status

The lifetime dynamics of the window's snap – the free neutron's decay clock, including the standing beam-versus-bottle tension in its measurement – forward-register, no claim made. The census of section 9. The α^3 silence until metrology reaches it. The ROAD v1.2's AP45 state-table line, corrected at that instrument's next revision (a v0.3 is recorded there that does not exist in the archive; v0.2.1 is the version of record; should a file answering that entry ever surface, its four fence clauses are re-read before anything relies on it).

0.8 – Structural relationships

AP30: parent of the construction; KS-30.2 shared; no locked value touched (WP-FLIP.1 section 9's independence sentence superseded as stated in section 5). AP46: source of the mechanism and the pairs-balance ruling, both quoted verbatim; the one-base-rate reconciliation runs on its own thread ruling. AP45 (draft): source of the toll clauses and the grain's denomination; every inheritance conditional on its lock. AP44: source of the $\varepsilon = \alpha_em$ selection; D-CCC.4 carries the closure. AP06: the domain field. AP40: the conceptual development of the structural imbalance this paper prices. AP42/AP28 and the cosmology: untouched. The Assembly (AP48, forthcoming): none of its content is load-bearing here, and none of this paper's rows move on its verdict. One line is filed to the record-algebra programme (D-CCC.1): the availability field recomputes structurally, blind to energetic accessibility – section 8's ruling is an axiom of that algebra. No new debt books: D-FLIP.1 was reserved for an underived divisor and is not needed.

0.9 – Symbols and numbers

Δ_bare = $3(1 - 1/2\pi) + \alpha(1 + 1/2\pi)$: the ideal neutron–proton difference in electron masses, the flip priced as free. **Δ_real** = $\Delta_bare/(1 + \alpha^2/8\pi)$: the realised difference, the claim of this paper. **f_2** = $\alpha^2/8\pi$: the hold-cost fraction. **α** = $7.2973525643(11)\times10^{-3}$, CODATA 2022. **$\Delta_meas$** = 2.530988574, u = 7.4×10^{-7} (0.29 ppm) – CODATA 2022, the exact difference of m_n/m_e = 1838.68366200(74) and m_p/m_e = 1836.152673426(32), the uncertainty stated decade-safe because its parenthetical form caused one audited slip. **The window:** the held gap between a coupling's actual and ground orientations. **The window's leak:** the one process of section 4. **ε, three postures:** the arena's splinter (held forever), the Blink's slivers (spent per event), the flip's grain (held-and-leaking, terminally released at the snap-shut).

1 – The Family Seat

Four costs, one axiom, one mechanism read at four sites. The Snap prices existence, once, at the arena: the held $+1\times\varepsilon$, the first-order discount $1/(1+\alpha)$ on the coupling. The Blink prices every

actualization: one grain of possibility, dimensionless, the alternatives not taken. The Stretch prices persistence: the tension's continuous shed, the sky's own growth. The Flip prices the strained hold: what a configuration pays, at second order, to keep a difference open against its ground state.

The ladder, stated carefully because canon itself sharpens it. The first-order cost is the arena's, booked once, on the coupling – it is not the proton's, and no reader should hunt for it inside 1836. Ground states carry the costs of their own constitution and upkeep: AP30's proton carries a first-order maintenance leakage, 1/(84π) on its dynamic term, and a second-order recursion – the leakage of the leakage, the break operating on its own maintenance – whose coefficient is carried with its structural decomposition owed under KS-30.3. What a ground state does **not** carry is a distinction. It holds nothing open against itself, and so it pays no distinction cost at any order. The Flip is the distinction cost: defined on flips, and only there.

2 – What Is Held

A ground state is a tug-of-war settled at the rope's middle: the couplings sit where the balance rests. The proton is that state – three couplings in the minimal orientation, nothing extra, nothing held open.

The neutron is not the proton plus a thing. Same inventory: three couplings, nothing added. One of the three sits in the other orientation. What the neutron holds is therefore not an object but a **distinction** – the gap between where one coupling sits and where the balance would put it. A window held open against the wind that wants it shut.

That is the whole scope, and it is definitional: the cost is defined on flips. No flip, no cost. The proton is excluded not by a check but by the definition – there is no distinction to hold when you are the ground.

The form of the correction is the fingerprint of this scope. A new thing would add a term. A held distinction discounts the difference itself – you multiply the ideal gap by the cost of keeping it open, and you touch nothing else. The old formula's omission was exactly this: it priced the flip as if holding it were free, and nothing in the ledger holds for free.

3 – Why a Held Distinction Costs

Holding is tension, and tension sheds – the family's derived mechanism, now cited at its verbatim locus: AP46 pays the debt in those exact words, "*holding is tension, and tension sheds,*" inherited from the Blink and the Stretch and read here on the mass face. A strained hold sheds more than its ground state. The excess is spent, and spent books nowhere. So the persisting booking of the difference is discounted: the realised gap sits below the ideal one. The sign was never chosen; it is what "spent" means.

Now the step that makes the cost small, and it comes straight from the axiom. When the grip re-settles around the flip, the re-settling is free – pairs balance, and the locus is file-verified: AP46's ruled reading, verbatim, "*the pairs balance at every AS instant … and the moving traffic leaks*." And a residual remains anyway, because **perfectly balanced is structurally impossible**: if it equalled out perfectly, there would be nothing there. The reason anything is, is the minimal structural imbalance. The axiom names the mandatory leftover: +1×ε. The Stretch already said this at cosmic scale, in its own words: "*the leak is the ε's signature riding on top of a balanced flow, not the pairs failing*" – the same architecture this paper reads at one strained hold.

Singular is the load-bearing word. A dynamical failure-to-rebalance would be distributed – strain smeared across the inventory, a channel count owed somewhere. The axiom's residue is one grain, and one grain smears across nothing. Nothing in the inventory is strained. One ε is held. **The open window is the flip-site's ε.** The grain is not a fourth item in the inventory – section 2's "nothing added" stands; it is the strained configuration's own residue, held on the possibility face, which is why it can be one grain while the inventory stays three couplings. The flip's constitution is an instance of the one event class the family has confirmed at three scales – arena, actualization, persistence – and reads here at a fourth site; the held residue of that event is one grain, no matter the crowd.

Three postures of ε, so no reader conflates them: the arena's splinter, held forever, never cycling; the Blink's slivers, spent per event; and the flip's grain – **held-and-leaking** – held open across time, shedding continuously, terminally released when the window snaps shut. In a stable nucleus the window never snaps shut, and the hold sheds forever. That is not an anomaly; the Stretch sheds forever too. Spent books nowhere. That is what spent means.

4 – The Window's Leak: One Process

The cost is one process, and this paper names it before dividing it into an order and a divisor. **The window's leak:** the held grain leaks through the strained hold's own structure, into the substrate, at the substrate's rate. Its three parts each have an address.

The rate is the substrate's, and the locus is canon. AP30, Lemma 3: "the substrate's leakage rate is α_em (AP06: the leakage constant)" – "the substrate speaks at α_em" – and in AP30's own summary, α_em "provides both the dynamic maintenance rate and the perturbative expansion parameter." The wind that wants the window shut is the same substrate that presses on every break; it speaks at one rate everywhere. The flip's hold sheds against it at that rate: one factor of α. One voice at every door, file-verified: AP46's shed rate is "*one part in α^{-18} per electron-tick*" because, by its own thread ruling, escape means "*threading eighteen sequential gates – one α-transparent door each.*" The door is α everywhere, and each site's structure sets only how the rate assembles: parallel channels multiply it by a count (α × 21, the proton's

maintenance – AP30: "*each channel contributes α_em*"), sequential gates exponentiate it (α^{-18}, the eighteen threaded faces of the cosmic shed), and a held grain multiplies rate by worth (α^2, the flip). Three assemblies, one base rate. No second base rate exists anywhere in the family.

The depth is the grain's worth. What leaks is the held ε, one grain of α-worth – AP45's own words in the draft in hand: "*one ε-grain, α-worth, dimensionless*" – the rider unchanged, since a draft's wording is not a lock. The denomination has a canon face – AP30 itself writes "α_em ... identified as ε – the leakage constant, the substrate's fundamental coupling strength (AP06)" – and its forcing is carried honestly, file-verified at the canon audit: $\varepsilon = \alpha$_em in the quotient was SELECTED among AP06 section 0.7's domain readings (the AP06 file holds that field open against the canonical work-wide $\varepsilon = \alpha$_em, exactly as cited), the selection argued in AP44 section 5 and booked as D-CCC.4 – AP44's own section 9 saying it plainly: "*the value is not [derived], and the paper says so*" – its closure route graded DERIVED-CONDITIONAL-ON-AP45, the route's target being precisely AP06 section 0.7's held-open field. This paper inherits that conditional and says so. Worth times rate: α^2.

The geometry belongs to section 5, where the same process is counted through the structure it leaks through. One process; section 4 is its depth, section 5 its shape.

And the cost enters lawfully. It never books: it is a dimensionless fraction of the flip's own booking, which is exactly what a possibility-side cost looks like from the energy face under the family's clause. No reference is carried anywhere – not on the energy face (that would be a booking, double-counted at order one) and not on the possibility face (dimensionless quantities do not compose with mass). The ground exerts its pull for free; the grain is held against it; the substrate's press does the rest.

The one claim sections 4 and 5 share, stated as itself: AP30's maintenance mechanics – the substrate's rate, expression-leakage, normalisation by the leaking structure – read at a strained hold instead of a ground's upkeep. That transfer is the paper's central structural claim. It is not derived from anything deeper here; it is stated, located, and switch-guarded (KS-FLIP.2, KS-30.2), and every grade in this paper rides it in the open.

Grade of the order, worn on the face: **DERIVED-AT-THE-STRUCTURAL-REGISTER**, riding – the stated transfer above; T-b (balance-impossibility, a registered conjecture); D-CCC.1 (the formalisation); and the $\varepsilon = \alpha$_em closure conditional on AP45's lock.

5 – The Divisor: the Same Leak, Counted

The proton's own correction carries the construction, and this paper takes it from the AP30 file directly, quoted at its own hedges. The manifold has 21 geometric channels and resolves into 4 spacetime dimensions – three spatial plus one temporal (AP10, AP20). Each channel expresses through each dimension: 21 × 4 = 84 dimensional expressions. The dynamic

coupling leaks isotropically into the 3D substrate, and the leakage per dimensional expression per solid angle is 1/(84π) – the 84 in the leakage denominator being the same 84 as the static count. AP30's own sentence is the principle: **the leakage is normalised by the very structure it leaks through.**

Count the window's leak the same way. The structure the flip's leak runs through is not the arena – a distinction's static count is its **orientation pair through the four dimensions**: 2 × 4 = 8 dimensional expressions, each leaking under the same lemma. The divisor is 1/(8π). One construction, two supports: the proton's correction is a thing held in the whole arena, support 21; the flip's is a distinction, support 2, because the window's configuration space is the pair. The support difference is the scope itself – thing versus distinction – so the divisor's derivation costs the paper one sentence it already owed.

Why four dimensions, not three. Because "held" is the scope's own word, and to be held is to persist. The pair's three spatial expressions are the orientation's projections; its temporal expression *is the holding* – a difference with no temporal expression is an instant, not a window, and an instant prices nothing under this paper's own definition. So the count runs through all four by the scope, not by analogy. The transfer also preserves AP30's own split exactly: there too the static count runs through four while the radiation goes into three-dimensional space's solid angle. (For the record only, and never as a reason: a three-dimensional count would give 6π = 18.85, outside the window – but the argument above stands with the window covered, as KS-FLIP.2 requires.)

Two earlier readings retire from the derivation chain, on the record: 8π as "four conditions times the delta's native circle," and an identification of the four dimensions with the four conditions {S, B, R, C}. The first is true arithmetic and not the forcing. The second is not in AP30 – the file says three spatial plus one temporal, and the construction never needed the identification; it was deleted, not repaired, when the file check caught it.

Order and geometry are independent axes, and canon proves it in one paper. AP30 carries a first-order term wearing π (the 84π expression-leakage) and a second-order term wearing none (the recursion $\alpha^2 \times 21 \times 16/1836$, the leakage of the leakage, no solid angle, its coefficient owed under KS-30.3). The π tracks *geometric expression-leakage*, not the power of α. The arena's 1/(1+α) is first order without π; AP30's maintenance is first order with π; AP30's recursion is second order without π; the Flip is second order with π – an expression-leakage at ledger depth two. No canon rule stands against it, because canon's own pair shows the axes come apart. This paragraph was written before the grade was decided, as review demanded.

Inheritance, on the face. Lemma 4's leakage is assumed perfectly isotropic, and AP30's KS-30.2 is live on exactly that assumption: shown anisotropic, the 1/(84π) correction changes – and with it, by the same lemma, the 1/(8π). The Flip inherits KS-30.2, and AP30's own section 8 notes its 5 ppb residual is consistent with a small anisotropic contribution, so the shared

edge is genuinely live. Accordingly, WP-FLIP.1 section 9's sentence that the Flip "touches no locked value anywhere" is superseded: it still touches no locked *value* – the proton row, the G row, the clock and the cosmology stand exactly as they were – but it shares a locked paper's construction and inherits that paper's empirical switch, and says so.

Grade: **DERIVED**, wearing the support clause, the temporal-expression argument, the KS-30.2 inheritance, and the shared transfer claim of section 4. The solid-angle normalisation inside the lemma is taken on the lemma's word at both sites; the uniformity depends only on it being identical at both, which it is by construction.

The elimination, shown as the record of a killing. After the structure above was described – the words first, the pair before any arithmetic – the alternatives were run against the number. Required divisor: 25.1499. Window at the audited bar (7.4×10^{-7} m_e, 0.29 ppm): [22.096, 29.183].

Candidate	**Assembly**	**Value**	**Standing**
support 2	2 × 4 × π (the construction)	25.13	**lands; −0.005σ**
support 3	3 × 4 × π	37.70	dead on arithmetic
support 6	6 × 4 × π	75.40	dead on arithmetic
support 18	18 × 4 × π	226.19	dead on arithmetic
support 21	21 × 4 × π	263.89	dead on arithmetic
three-dimensional count	2 × 3 × π	18.85	outside the window; structurally incoherent (section 5, "held")
9π	18 × π/2 (no construction)	28.27	in-window at +0.80σ; dead structurally – no half-circle warrant, no support of eighteen, the singular grain forbids the eighteen

The constructed assembly forces the support into [1.76, 2.32]: only 2 survives. Metrology also holds a dated tiebreak it does not currently need: roughly a threefold improvement in the bar separates 8π from 9π at ~2.4σ. Data eliminated candidates here; data generated nothing. The 2 was described before it was counted, and the record shows the order.

6 – The Application, Once

The cost is a quotient on the flip's own booking, because the quotient is what the axiom writes; the quotient and the subtractive form differ by 1.14×10^{-11} – a sixty-five-thousandth of the measurement bar – so the choice of form is structural, not numerical.

$\Delta_{real} = \Delta_{bare} / (1 + \alpha^2/8\pi) = 2.53098857035$

The claim is the expression, frozen at CODATA-2022 α, displayed at eleven decimals; KS-FLIP.1's kill test runs against the expression, not the display (a stated rule, applied). The display's trailing decimals carry the expression, not the measurement: the bar sits at the seventh decimal and nature adjudicates there; digits beyond it exist for exact reproducibility of the claim and carry no metrological weight.

Against the measured line, stated decade-safe: **$\Delta_{meas} = 2.530988574$, $u = 7.4\times10^{-7}$ (0.29 ppm)** – CODATA 2022, from m_n/m_e = 1838.68366200(74) and m_p/m_e = 1836.152673426(32); the central value is the exact difference of those two lines. The residual is -0.005σ where the bare row fired at 7.24σ. α is CODATA 2022, $7.2973525643(11)\times10^{-3}$. At ten decimals the row is vintage-insensitive; at the eleven-decimal display it is not – CODATA-2018 α gives 2.53098857036, one in the last place. The freeze therefore names the α line, and the kill test runs against the expression, not the display. The realised row enters the registry as a new frozen claim beside the corpse, never in its place.

What the claim is, and is not. The claim is the *total*: Δ_{bare}'s two terms are structural layers of the work's own construction, and this paper identifies neither of them with the standard decomposition into electromagnetic and strong contributions. That decomposition assigns the electromagnetic piece roughly minus one MeV – opposite in sign to the α-term here – and the flip cost, at about 2.7 eV, is five orders of magnitude too small to be a repair of any such piece, and is not one. Anyone attacking the anatomy is attacking a claim this paper does not make; the claim that can die is the total, at the frozen row.

7 – The Deaths, Shown

KS-NPP.1 fired at 7.24σ on 2 August 2026, on the bare difference — and the source audit confirms the frozen figure on the audited bar (7.235σ). It is shown here in full, it goes nowhere, and it will always be shown. No repair was offered then and none is offered now: this paper does not fix the fired row, it prices the structure the fired row was missing, and the new row stands beside the corpse. The proton check is also shown as the lawful elimination it was: applying the flip cost to the ground state moves the proton by 0.00389 electron masses — **121,576σ** at the named bar, $u(m_p/m_e) = 3.2\times10^{-8}$, CODATA 2022 — and kills it instantly. (The origin note quoted 223σ against an unnamed coarser bar; the honest figure only strengthens the elimination.) Which is the definition doing its work, since there is no distinction to hold when you are the ground.

8 – Binding: the Ruling

A bound neutron is still udd. The orientation is intact; nothing in the nuclear well touches the flip. The ruling, spoken and standing: **the distinction is held against the structural alternative; binding closes the exit, not the window.** The ε is a structural residue, not a dynamical option – availability in the ledger is structural, and reachability is the exit's business. The bound neutron pays. Its stability needs no second mechanism: the release is blocked (for the deuteron, energetically – there is no bound diproton; Pauli blocking proper does the work in larger nuclei), and a blocked exit over an open window is a hold that sheds forever, which the family already knows how to say.

Proposition (the capture-chain identity). The gamma plus recoil in $n + p \to d + \gamma$ equals the free neutron's booking plus the proton's minus the deuteron's, identically, by energy conservation, whatever happens inside. Therefore the tabulated neutron mass is the free booking always; the frozen row of section 6 tests the free neutron regardless of this ruling; an independent free-neutron mass would match the table either way; and a closed window's 2.7 eV would hide inside the deuteron's binding bookkeeping – B_d = 2,224,566.362 ± 0.373 eV from the CODATA-2022 mass triplet – where theory is a thousand times too coarse to look.

Declared plainly, because honesty counts edges rather than collecting them: **this ruling carries no mass-face observable, under either answer.** No switch is armed on it because no measurement can reach it. The only conceivable future handle is dynamics – the lifetime physics of the window's snap – and that is forward-register, held open in section 0.7.

9 – What Else Flips

The census is open and currently honest about its size: the neutron is the one priced member of the domain. Other strained holds the work can reach will be described first and priced after, one system at a time, at the work's own pace, none hunted. Every system that pays becomes a prediction; every system that structurally cannot pay becomes a consistency check; and if the neutron remains the only member, this paper stands as a one-row claim with its switches, which is enough.

10 – Kill Switches

KS-FLIP.1 — the frozen row. ARMED. The claim is the expression $\Delta_{real} = \Delta_{bare}/(1 + \alpha^2/8\pi)$ at CODATA-2022 α, displayed 2.53098857035. Dies if an improved measurement of the neutron–proton mass difference departs from it beyond the bar — the bar being the audited 1σ of the source lines: 7.4×10^{-7} m_e (0.29 ppm), CODATA 2022. Nature-facing, live from this lock.

KS-FLIP.2 — forced structure. ARMED, binding on everyone who built it. Fires if any element of the construction — the order, the divisor, the scope, the form, the process claim of

section 4 — is ever shown to have been selected by comparison with measurement rather than by the stated structural argument. The chain's true order is on the record: the structure in words first; the pair described before any count arithmetic; the elimination arriving afterward, as elimination; every canon locus checked against its file.

KS-FLIP.3 — the truncation. ARMED. The construction terminates at second order: no α^3 term exists. The absent third-order piece sits at 3.9×10^{-8} — 5.3% of the audited bar, 0.020 eV — so adjudication waits on roughly twentyfold better metrology on the deuteron binding energy (B_d currently ±0.373 eV, CODATA 2022). The claim's silence at third order is itself a prediction, and nature will eventually rule on it.

KS-FLIP.4 — the scope. ARMED. Formal domain: the cost operator's domain is the set of configurations holding a non-zero second-scale ε — an orientation differing from its ground state under the same grip — and ground states are outside the domain by construction. The domain is blind to energetic accessibility, per section 8. Dies if a ground state is ever shown to require the cost, or a configuration inside the domain shown to escape it.

KS-30.2 — inherited, live in its parent. The isotropy assumption under both 84π and 8π. Shown anisotropic, both divisors move together, and this paper's row moves with its parent's.

KS-NPP.1 — fired, and shown. Forever.

11 – What This Establishes and What Remains Open

Grades. Scope: DEFINITIONAL (ruled). Mechanism: DERIVED-AT-THE-STRUCTURAL-REGISTER, inheriting the Blink's theorem and the Stretch's tension mechanism. The transfer: STATED – located, guarded by KS-FLIP.2 and KS-30.2, ridden by everything below. Order α^2: DERIVED-AT-THE-STRUCTURAL-REGISTER with its riders – the transfer; T-b; D-CCC.1; the $\varepsilon = \alpha$_em closure DERIVED-CONDITIONAL-ON-AP45 (D-CCC.4). Divisor 8π: DERIVED, wearing the support clause, the temporal-expression argument, KS-30.2, and the transfer. The landing (-0.005σ): EMPIRICAL, reported once, never evidence of the structure. Binding: RULED, with a declared null.

The closing. One structural sentence – a held distinction pays to stay held – priced by the family's one mechanism at its fourth site, landing on the neutron at the seventh decimal place. If the row dies, the paper dies with it, and the corpse will be shown here.

Dated notes

7 September 2026. Two matters of record. Nothing in the body is altered.

1. The second-order correction written in §5 as a divisor, $\Delta_{bare}/(1 + \alpha^2/8\pi)$, reads as the multiplier, $\Delta_{bare}\cdot(1 - \alpha^2/8\pi)$: the isotropic-leakage lemma has one form everywhere in the work, because a returned leak is not an expression and does not itself leak (AP30 dated note 9; AP49 §4). At this paper's precision the two differ by 4.5×10^{-12}; no digit moves.

2. §5's retirement of the identification of the four dimensions with the four conditions applies to this paper's derivation chain, which did not need it; it is not a ruling against AP10, which identifies each of the four axioms with one face of the manifold.

Claim Summary

Section 0 (Dependency and Scope). Contract with the reader. Dependencies, claims and refusals, the honesty box, epistemic status, switch summary, items held open, relationships, symbols.

Section 1 (The Family Seat). ORIENTATION. Four costs, one axiom, one mechanism at four sites; the ladder stated so no reader hunts the arena's cost inside 1836.

Section 2 (What Is Held). DEFINITIONAL. The neutron holds a distinction, not a thing; no flip, no cost; the multiplicative form as the scope's fingerprint.

Section 3 (Why a Held Distinction Costs). DERIVED-AT-THE-STRUCTURAL-REGISTER. Holding is tension and tension sheds (AP46, verbatim); pairs balance and the singular ε remains; the open window is the flip-site's grain; three postures of ε.

Section 4 (The Window's Leak). PROCESS STATED; ORDER AT THE STRUCTURAL REGISTER. One process with a located rate (the substrate's α), depth (the grain's α-worth, conditional carried), and the transfer claim stated as itself. Worth times rate: α^2.

Section 5 (The Divisor). DERIVED. AP30's construction at support two: 2 × 4 = 8 expressions, $1/(8\pi)$; the temporal expression is the holding; order and geometry independent axes; KS-30.2 inherited; the elimination shown as a killing.

Section 6 (The Application). EMPIRICAL. $\Delta_{real} = \Delta_{bare}/(1 + \alpha^2/8\pi) = 2.530988570035$ at CODATA-2022 α, against $2.530988574 \pm 7.4\times10^{-7}$: -0.005σ. The claim is the total, never the anatomy.

Section 7 (The Deaths). SHOWN. KS-NPP.1 at 7.24σ, forever; the proton eliminated at $121{,}576\sigma$.

Section 8 (Binding). RULED. The exit closes, not the window; the bound neutron pays; the capture-chain identity; no mass-face observable, declared.

Section 9 (The Census). OPEN. One priced member, honestly counted.

Section 10 (Kill Switches). Four armed, one inherited, one fired and shown.

Section 11 (Establishes and Open). Grades with riders on the face; provenance in the true order; the closing.

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