

SuperGrokTOE — Premise notes

26 notes. Build S328a.

What a premise note is. Each note takes one registered premise — a postulate, an adopted premise, a measured input, a convention, a loaded correspondence, a fence or an open requirement — and shows every place the sealed suite invokes it, with a verbatim quote and its role there (stated, load-bearing, conditional, mentioned, discharged), the Registrar claims that rest on it, and what the suite itself says fails without it. The notes were drafted by the ChatGPT drafting lane (A1634, dispatch D1288) and verified by the house: every quote was checked against the suite source at its line. A claim → premise link is declared only after the house has read the passage (R76), and it remains an editorial house judgment. Under R78 an edge is declared only where the record's result ASSUMES the premise; a record that is merely about a premise is shown on its note, not as a dependency. The drafting lane saw at most twelve passages per premise; the house read every remaining hit in the full suite TeX and added those passages to the notes, marked as house additions. Where the PI corrected the register row (R81), the note says at the top what changed; the lane's text below it quotes the row the lane was given. Two notes — PRM-025 and PRM-026, for the premises R81 registered — were drafted wholly by the house, from a census of every line of the suite that names them. **A note explains a premise; it never promotes or demotes one.**

Registrar master sha256 e64bfa7ef06444bf9ebd1abb9bf2c9b7562264ad903d1f881f65c38a19ce07be. BUILD_STAMP S328a · 2026-09-11 18:58Z

PRM-001 · Neutral signature

Premise

Register kind: **ADOPTED_PREMISE**. Located suite statement:

`\emph{We adopt} a sign-convention-neutral fibre: placing both conventions on equal footing inside a single composition algebra \emph{motivates} an inner product of signature  $(1,3)+(3,1)=(4,4)$ .`

Paper 0 · Neutral-signature premise · PDF p.15 · `p0_framework_foundations.tex:791`.

What kind of premise this is

The register calls this **ADOPTED_PREMISE**. Paper 0 calls the neutral signature a model choice and an adopted premise, not a derivation. It motivates treating both Lorentz-sign conventions in one fibre; it does not deduce that choice from the physical equivalence of conventions. Paper 1 uses the same qualified step in its carrier-selection discussion. No retirement test for the convention-neutral choice is supplied. Source status words: `adopted` `premise`, not a derivation. (`p0_framework_foundations.tex:797`).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	<code>p0_framework_foundations.tex:791</code> Paper 0 · Neutral-signature premise · PDF p.15	<code>\emph{We adopt} a sign-convention-neutral fibre</code>	STATED	Convention-neutral fibre
2	<code>p1_peirce_gauge_group.tex:57</code> Paper 1 · Why $J_3(\mathbb{O}_s)?$ · PDF p.24	placing both conventions on equal footing in a single composition algebra <code>\emph{motivates} a neutral $(4,4)$ norm</code>	CONDITIONAL	Neutral-norm step in the carrier chain
3	<code>p0_framework_foundations.tex:798</code> Paper 0 · Neutral-signature premise · PDF p.16	The equivalence of the two conventions does <code>\emph{not}</code> by itself require an algebra carrying both at once	MENTIONED	Necessity limitation
4	<code>p1_peirce_gauge_group.tex:43</code> Paper 1 · Abstract · PDF p.23	<code>\emph{under the added requirement} of an eight-dimensional real normed composition algebra this selects the split octonion algebra $\mathbb{O}_s$</code>	CONDITIONAL	Conditional composition-algebra selection

Arguments that rest on it

NO RECORD — neutral-norm step in the carrier chain, `p1_peirce_gauge_group.tex:57`. The step invokes the adopted simultaneous treatment of conventions. No carrying record is identified in the supplied candidate set; an actionable ADD is therefore not submitted. The same argument is summarized in the abstract at `p1_peirce_gauge_group.tex:43`.

What breaks without it

The source limits necessity rather than asserting a failure of rival theories: `p0_framework_foundations.tex:799–801` says either convention alone remains consistent and the premise buys neutrality, not necessity. NOT ASSESSED — removal of this choice is not followed through the carrier chain in the supplied print. The abstract’s selection also expressly requires the eight-dimensional real normed-composition condition; no omission test for that combined condition is supplied.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: none (UNKNOWN, not INDEPENDENT). The lane's lines below describe the master as it was supplied to the lane (d0aa26db154ff43f), before these changes.

Declared today in the supplied material, Registrar master **d0aa26db154ff43f: none** (UNKNOWN, not INDEPENDENT). Draft dispositions — no ADD, CONFIRM or DISPUTE row; there is no declared edge to adjudicate. Unbound NO RECORD arguments are not graph ADDs. No candidate record is supplied. This is unknown mapping coverage, not evidence that every result is independent of the premise.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: p0_framework_foundations.tex:791; p0_framework_foundations.tex:797; p0_framework_foundations.tex:798; p0_framework_foundations.tex:799–801; p1_peirce_gauge_group.tex:43; p1_peirce_gauge_group.tex:57. Registrar: no carrying record identified in the supplied material. Premise: PRM-001.

PRM-002 · Split Jordan carrier J3(O_s) (indefinite trace form)

Premise

Register corrected — R81 (D1, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Name now *Split Jordan carrier J3(O_s) (indefinite trace form)* (was *Split Jordan carrier*). The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register's history (R29: nothing is overwritten).

Register kind: **ADOPTED_PREMISE**. Located suite statement:

The raw split algebra $J_3(\mathbb{0}_s)$ has signature $(15,12)$ (indefinite, not formally real), decomposing as $(3,0)_{\text{diag}} \oplus 3 \times (4,4)_{\text{off}\text{-}\text{diag}}$.

Appendix L · Trace-form signature discriminator · PDF p.236 · appendix_l_born_bell_foundations.tex:117.

The registered excerpt and/or kind needs the scope clarification below; the registry itself is not edited.

What kind of premise this is

ADOPTED_PREMISE is the register kind. The located passage itself is a proposition about the chosen split algebra, not a sentence adopting that algebra. Appendix E separately locates the choice of algebra and trace form upstream of its selector. The distinction matters: a trace-signature calculation on a specified carrier is not a proof that physics must choose that carrier. The source supplies no retirement condition for the carrier choice here. Source status words: Trace-form signature discriminator; s215 (appendix_l_born_bell_foundations.tex:114).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	appendix_l_born_bell_foundations.tex:117 Appendix L · Trace-form signature discriminator · PDF p.236	The raw split algebra $J_3(\mathbb{0}_s)$ has signature $(15,12)$ (indefinite, not formally real)	STATED	Split trace-form discriminator
2	appendix_l_born_bell_foundations.tex:118 Appendix L · Trace-form signature discriminator · PDF p.236	decomposing as $(3,0)_{\text{diag}} \oplus 3 \times (4,4)_{\text{off}\text{-}\text{diag}}$	LOAD_BEARING	Trace-signature decomposition
3	appendix_e_vacuum_selector.tex:509 Appendix E · Status · PDF p.172	the choice of the cubic Jordan algebra J and its trace form	MENTIONED	Upstream carrier choice

Arguments that rest on it

NO RECORD — trace-signature discriminator, appendix_l_born_bell_foundations.tex:114–119, kernel s215. Its decomposition is explicitly that of the split carrier. No carrying record is identified in the supplied candidates; no graph ADD is fabricated.

What breaks without it

NOT ASSESSED — the passage contrasts compact and split signatures, but does not derive consequences of removing the carrier choice from every subsequent argument. The calculation and the adoption should not be conflated.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: none (UNKNOWN, not INDEPENDENT). The lane's lines below describe the master as it was supplied to the lane (d0aa26db154ff43f), before these changes.

Declared today in the supplied material, Registrar master **d0aa26db154ff43f: none** (UNKNOWN, not INDEPENDENT). Draft dispositions — no ADD, CONFIRM or DISPUTE row; there is no declared edge to adjudicate. Unbound NO RECORD arguments are not graph ADDs. There are no declared or candidate records in this material. An empty list does not establish independence.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: appendix_e_vacuum_selector.tex:509; appendix_l_born_bell_foundations.tex:114; appendix_l_born_bell_foundations.tex:114–119; appendix_l_born_bell_foundations.tex:117; appendix_l_born_bell_foundations.tex:118. Registrar: no carrying record identified in the supplied material. Premise: PRM-002. Suite-cited kernels: s215.

PRM-003 · AX-COT

Premise

Register corrected — R81 (D2, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Statement now (PRM-003/r2, appendix_t_cartan_observation.tex:436-438, quality EXTRACTION_VERBATIM): selector/order/depth $\equiv$ transvection/polar/oriented-axial.. On-shell price discharged into AX-MOS (App T:837); off-shell independence stands (App T:602). The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register's history (R29: nothing is overwritten).

Register kind: **POSTULATE**. Located suite statement:

selector/order/depth $\equiv$ transvection/polar/oriented-axial.

Appendix T · AX-COT — the Cartan-occupancy transgression · PDF p.306 · appendix_t_cartan_observation.tex:438.

The registered excerpt and/or kind needs the scope clarification below; the registry itself is not edited.

What kind of premise this is

The register kind is POSTULATE. Appendix T names AX-COT an axiom and prices one independent cross-layer typing row with zero continuous moduli. Its sign twist matches two otherwise different occupancy/Cartan characters. The later on-shell discharge is explicitly through log-Hodge naturality absorbed into AX-MOS; it does not overturn off-shell independence. Paper 7 names an isometric universal property tying chamber, Cartan spin factor and occupancy as the off-shell discharge target. Source status words: one independent cross-layer typing row with zero continuous moduli (appendix_t_cartan_observation.tex:470).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, $\leq$ 30 words)	role	argument
1	appendix_t_cartan_observation.tex:438 Appendix T · The frontier round: AX-COT, positivity, envelope, actuality · PDF p.306	selector/order/depth $\equiv$ transvection/polar/oriented-axial.	STATED	Cartan-occupancy transgression
2	appendix_t_cartan_observation.tex:457 Appendix T · AX-COT axiom · PDF p.306	the match above is obtained only through $B_3 \otimes \mathrm{sgn} = \mathbf{1} \oplus E$	LOAD_BEARING	Occupancy-Cartan character match
3	appendix_t_cartan_observation.tex:491 Appendix T · OS-time attachment · PDF p.306	the ten C -coefficients follow only under the triple conditional load AX-COT $\equiv$ the D_5 mixed dictionary $\equiv$ the Stiefel/radial branch	CONDITIONAL	Ten-coefficient attachment
4	appendix_t_cartan_observation.tex:837 Appendix T · Residual pricing table · PDF p.312	discharged on shell by log-Hodge naturality, itself absorbed into AX-MOS	DISCHARGED	On-shell AX-COT price
5	appendix_t_cartan_observation.tex:602 Appendix T · Log-Hodge attachment · PDF p.308	The $\{\text{off-shell}\}$ arrow (arrows differing by $\ker J$) is not forced	MENTIONED	Off-shell independence remains
6	p7_precision_tests_falsification.tex:250 Paper 7 · Premise-discharge tests · PDF p.115	such a property would discharge the clause off shell.	MENTIONED	Off-shell discharge test
7	appendix_s_selector_ledger.tex:257 Appendix S · Two ten-dimensional carriers · PDF p.289	the Appendix-T axiom buys the $(4 \cdot 3 \cdot 3)$ match only after the sign twist $B_3 \otimes \mathrm{sgn} = \mathbf{1} \oplus E$	LOAD_BEARING	Occupancy-Cartan character match

#	locator	quote (verbatim, ≤ 30 words)	role	argument
8	appendix_t_cartan_observation.tex:470 Appendix T · AX-COT independence theorem · PDF p.306	Ordinary equivariance is provably insufficient.	MENTIONED	AX-COT independence
9	appendix_t_cartan_observation.tex:481 Appendix T · AX-COT continuous-stabilizer theorem · PDF p.306	The obstruction is now a theorem, not an example, and AX-COT stays	MENTIONED	Continuous-stabilizer obstruction
10	appendix_x_zero_parameter_input_ledger.tex:723 Appendix X · Assumption/attachment and falsifier table · PDF p.340	AX-COT; log-Hodge naturality, absorbed into AX-M05	MENTIONED	Source-arrow assumption ledger
11	appendix_x_zero_parameter_input_ledger.tex:758 Appendix X · The Rev28 kill list · PDF p.341	every AX-COT derivation route	MENTIONED	Retired derivation attempts, not the axiom
12	appendix_y_laboratory_notebook.tex:305 Appendix Y · Rev28 round ledger · PDF p.365	AX-COT named; the conditional arrow; nonlinear OS positivity; associative envelope; Born/Tsirelson at regulator tier	MENTIONED	Recorded AX-COT round
13	appendix_y_laboratory_notebook.tex:306 Appendix Y · Rev28 round ledger · PDF p.365	$\text{AX-COT independence theorem}$	MENTIONED	Recorded independence round
14	appendix_y_laboratory_notebook.tex:310 Appendix Y · Rev28 round ledger · PDF p.365	the AX-COT stabilizer obstruction becomes a theorem	MENTIONED	Recorded stabilizer round
15	appendix_y_laboratory_notebook.tex:679 Appendix Y · Theorem index · PDF p.381	AX-COT and its independence theorem & A1443, A1444	MENTIONED	Theorem index pointer

Arguments that rest on it

NO RECORD — occupancy–Cartan character match, appendix_t_cartan_observation.tex:455–460. The sign twist is explicitly the axiom’s content. NO RECORD — ten-coefficient attachment, appendix_t_cartan_observation.tex:491–493. AX-COT is one of three named conditional loads, not the sole hypothesis. Neither argument has an identified carrying record in this material; no unbound graph ADD is submitted.

What breaks without it

Character match: the source says the match is obtained only through the sign twist (appendix_t_cartan_observation.tex:457–460). Ten-coefficient attachment: the stated triple conditional load and underived Stiefel/radial domain remain binding (lines 491–493).

Retirement clause: p7_precision_tests_falsification.tex:248–250 requires the stated isometric universal property to discharge AX-COT off shell. The on-shell discharge at appendix_t_cartan_observation.tex:835–837 is limited to that tier.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: none (UNKNOWN, not INDEPENDENT). The lane’s lines below describe the master as it was supplied to the lane (d0aa26db154ff43f), before these changes.

Declared today in the supplied material, Registrar master d0aa26db154ff43f: **none** (UNKNOWN, not INDEPENDENT). Draft dispositions — no ADD, CONFIRM or DISPUTE row; there is no declared edge to adjudicate. Unbound NO RECORD arguments are not graph ADDs. No candidate records are supplied. The AX-MG countermodel sentence at the register’s first locator belongs to the preceding item, not to AX-COT’s definition.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited.

Unlocated dependencies remain unknown.

Sources

TeX: appendix_s_selector_ledger.tex:257; appendix_t_cartan_observation.tex:438;
appendix_t_cartan_observation.tex:455–460; appendix_t_cartan_observation.tex:457;
appendix_t_cartan_observation.tex:457–460; appendix_t_cartan_observation.tex:470;
appendix_t_cartan_observation.tex:481; appendix_t_cartan_observation.tex:491;
appendix_t_cartan_observation.tex:491–493; appendix_t_cartan_observation.tex:602;
appendix_t_cartan_observation.tex:835–837; appendix_t_cartan_observation.tex:837;
appendix_x_zero_parameter_input_ledger.tex:723; appendix_x_zero_parameter_input_ledger.tex:758;
appendix_y_laboratory_notebook.tex:305; appendix_y_laboratory_notebook.tex:306;
appendix_y_laboratory_notebook.tex:310; appendix_y_laboratory_notebook.tex:679;
p7_precision_tests_falsification.tex:248–250; p7_precision_tests_falsification.tex:250. Registrar: no
carrying record identified in the supplied material. Premise: PRM-003. Suite-cited kernels: s921, s923, s927.

Premise

Register corrected — R81 (D3, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Statement now (PRM-004/r2, appendix_s_selector_ledger.tex:548, quality EXTRACTION_VERBATIM): One unit affine transfer $\equiv$ one complete normalized Fibonacci cap-cup/Jones interface; boundary amplitudes multiply along the unique rooted geodesic.. Two clauses, coefficient-one and degree-one, each proved independent by exact countermodel (p0:276-280). The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register's history (R29: nothing is overwritten).

Register kind: **POSTULATE**. Located suite statement:

One unit affine transfer $\equiv$ one complete normalized Fibonacci cap-cup/Jones interface; boundary amplitudes multiply along the unique rooted geodesic.

Appendix S · AX-MG — normalized Markov-geodesic boundary coherence · PDF p.294 · appendix_s_selector_ledger.tex:548.

The registered excerpt and/or kind needs the scope clarification below; the registry itself is not edited.

What kind of premise this is

POSTULATE is the register kind. The suite explicitly calls AX-MG an axiom, with two independent clauses: coefficient-one and degree-one. The normalized-interface and geodesic multiplication conventions are not derived by the later scalar-shadow extraction. Paper 7 states what would discharge their price: derive a clause from the banked boundary rows without inserting an edge-functor property. The effective operator remains conditional and awaits a positivity/semigroup test. Source status words: AX-MG (two independent clauses, priced, dated) (appendix_s_selector_ledger.tex:595).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	appendix_s_selector_ledger.tex:548 Appendix S · AX-MG axiom · PDF p.294	One unit affine transfer $\equiv$ one complete normalized Fibonacci cap-cup/Jones interface; boundary amplitudes multiply along the unique rooted geodesic.	STATED	Normalized Markov-geodesic coherence
2	appendix_s_selector_ledger.tex:597 Appendix S · The boundary question, closed at this tier · PDF p.294	the coefficient-one clause is load-bearing \emph{by declaration}	LOAD_BEARING	Boundary scalar shadow
3	appendix_s_selector_ledger.tex:616 Appendix S · Effective-operator label · PDF p.295	The law is conditional on AX-MG, value-open, and behind the \texttt{s900} wall	CONDITIONAL	Effective boundary operator law
4	p7_precision_tests_falsification.tex:243 Paper 7 · Premise-discharge tests · PDF p.115	Exhibit a derivation of either clause --- coefficient-one or degree-one --- from the banked boundary rows without	MENTIONED	AX-MG discharge test

#	locator	quote (verbatim, ≤ 30 words)	role	argument
		inserting an edge-functor property		
5	appendix_e_vacuum_selector.tex:423 Appendix E · Coefficient prices have an adjudicated precedent class · PDF p.171	the AX-MG coefficient-one clause} was proved a genuine independent axiom by exact countermodel	MENTIONED	Coefficient-price precedent
6	appendix_t_cartan_observation.tex:471 Appendix T · AX-COT independence theorem · PDF p.306	the same epistemic shape as AX-MG after its two independence theorems.	MENTIONED	AX-COT pricing analogy
7	appendix_x_zero_parameter_input_ledger.tex:675 Appendix X · Layer inventory · PDF p.339	L3 & boundary and export & P_{ann} / P_{aff} \$, caps and interfaces, AX-MG	MENTIONED	Boundary/export layer inventory
8	appendix_x_zero_parameter_input_ledger.tex:689 Appendix X · One-sentence layer reconciliation · PDF p.340	the boundary exports through a pointed affine interface priced by AX-MG and one registration coordinate	LOAD_BEARING	Pointed affine boundary export
9	appendix_x_zero_parameter_input_ledger.tex:716 Appendix X · Assumption/attachment and falsifier table · PDF p.340	boundary state $[\text{g}_{\rho}]$ & $\rho \in \mathbb{R}/20\mathbb{Z}$ (one continuous) & AX-MG, two clauses; cross-layer interface	CONDITIONAL	Boundary-state attachment
10	appendix_x_zero_parameter_input_ledger.tex:757 Appendix X · The Rev28 kill list · PDF p.341	AX-MG derivation at the Markov/annular/affine tier, both clauses	MENTIONED	Failed derivation routes
11	appendix_y_laboratory_notebook.tex:292 Appendix Y · Rev28 round ledger · PDF p.364	positivity-uniqueness closed; AX-MG named	MENTIONED	Recorded non-selection round
12	appendix_y_laboratory_notebook.tex:293 Appendix Y · Rev28 round ledger · PDF p.364	AX-MG typing: split quantization degree independence}	MENTIONED	Recorded degree-independence round

House additions – R78-c (S327i)

The house read the rest of the suite for this premise. The material sent to the drafting lane showed at most twelve passages per premise, so A1634 FINDINGS §7 lists 2 hit lines for PRM-004 that the lane never saw. Under R78-c the house read all 2 in the full suite TeX: 2 passages are added below. Every quote was matched against the TeX at its locator. With the lane's table above, every hit of this premise's search keys is now accounted for.

#	locator	quote (verbatim, TeX source)	role	argument
H1	appendix_y_laboratory_notebook.tex:664 PDF p.380	AX-MG, two independent clauses & A1434, A1435 & App.~5	MENTIONED	Laboratory-notebook ledger: where the two AX-MG clauses were shown independent
H2	p0_framework_foundations.tex:276-280 PDF p.5	AX-MG is proved a genuine independent boundary axiom in both clauses} (coefficient-one and degree-one) by exact countermodel	STATED	Paper 0 status summary: the boundary question closed at its tier

Arguments that rest on it

NO RECORD — boundary scalar shadow, appendix_s_selector_ledger.tex:595–598: coefficient-one is load-bearing by declaration. NO RECORD — effective boundary operator law, appendix_s_selector_ledger.tex:613–618: the text expressly conditions the law on AX-MG. No carrying record is identified in this material, so no unbound ADD is submitted. NO RECORD — pointed affine export and boundary-state attachment, appendix_x_zero_parameter_input_ledger.tex:690,716–718. These are explicitly priced/conditional uses, without an identified record in the material.

What breaks without it

Boundary scalar shadow: its coefficient-one source is the declaration itself (appendix_s_selector_ledger.tex:597–598). NOT ASSESSED — a replacement coefficient or law without that declaration is not supplied.

Effective law: the printed conditional status cannot be removed; positivity-preservation of the semigroup has not been bank-tested (lines 613–617). The falsifier is the clause-derivation test at p7_precision_tests_falsification.tex:243–247.

Boundary-state/export price: the printed falsifier is a derived edge normalization collapsing the coefficient without the axiom (appendix_x_zero_parameter_input_ledger.tex:716–718). NOT ASSESSED — no replacement export after removing AX-MG is supplied.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: none (UNKNOWN, not INDEPENDENT). The R78-c reading found no further record whose result assumes this premise. The lane's lines below describe the master as it was supplied to the lane (d0aa26db154ff43f), before these changes.

Declared today in the supplied material, Registrar master d0aa26db154ff43f: **none** (UNKNOWN, not INDEPENDENT). Draft dispositions — no ADD, CONFIRM or DISPUTE row; there is no declared edge to adjudicate. Unbound NO RECORD arguments are not graph ADDs. No candidate records are supplied. Mentions using AX-MG as an analogy for another coefficient price do not establish a dependency on AX-MG.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: appendix_e_vacuum_selector.tex:423; appendix_s_selector_ledger.tex:548; appendix_s_selector_ledger.tex:595; appendix_s_selector_ledger.tex:595–598; appendix_s_selector_ledger.tex:597; appendix_s_selector_ledger.tex:597–598; appendix_s_selector_ledger.tex:613–618; appendix_s_selector_ledger.tex:616; appendix_t_cartan_observation.tex:471; appendix_x_zero_parameter_input_ledger.tex:675; appendix_x_zero_parameter_input_ledger.tex:689; appendix_x_zero_parameter_input_ledger.tex:690; appendix_x_zero_parameter_input_ledger.tex:716; appendix_x_zero_parameter_input_ledger.tex:716–718; appendix_x_zero_parameter_input_ledger.tex:757; appendix_y_laboratory_notebook.tex:292; appendix_y_laboratory_notebook.tex:293; p7_precision_tests_falsification.tex:243; p7_precision_tests_falsification.tex:243–247. Registrar: no carrying record identified in the supplied material. Premise: PRM-004. Suite-cited kernels: s900.

Premise

Register corrected — R81 (D4, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Statement now (PRM-005/r2, appendix_t_cartan_observation.tex:715-722, quality EXTRACTION_VERBATIM): Given the active c_3/c_2 branch, $(1, 0, -1)$ is the unique assignment by enumeration ... AX-MOS carries no new bit inside the loaded branch – honest compression, not unconditional derivation.. The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register's history (R29: nothing is overwritten).

Register kind: **POSTULATE**. Located suite statement:

Given the active c_3/c_2 branch, $(1,0,-1)$ is the unique assignment by enumeration; the shell reversal gives $S_J+S=J_-$ and $S_D\backslash\text{phg } S=-D\backslash\text{phg}$ exactly, so the arrow $\text{\emph{is}}$ the standing OS/time $\mathbb{Z}_2$; the relative entropies are exactly equal both ways ($\log\text{phg}/\text{phg}$, via $1-\text{phg}^{-2}=\text{phg}^{-1}$) and the spectra coincide, so no inversion-symmetric scalar orients.

Appendix T · AX-MOS, compressed · PDF p.309 · appendix_t_cartan_observation.tex:716.

The registered excerpt and/or kind needs the scope clarification below; the registry itself is not edited.

What kind of premise this is

The register kind is POSTULATE. Appendix T presents compressed AX-MOS as the active branch plus the standing time-orientation bit. The score assignment is conditional on that branch; compression does not turn physical realization into a theorem. The log leg is discharged as a separately priced clause and absorbed into AX-MOS. Appendix X leaves the ordered experiment and minimal UCP/OS readout conditional on a microscopic derivation. Source status words: no new bit inside the loaded branch (appendix_t_cartan_observation.tex:721).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	appendix_t_cartan_observation.tex:716 Appendix T · AX-MOS, compressed · PDF p.309	Given the active c_3/c_2 branch, $(1,0,-1)$ is the unique assignment by enumeration	CONDITIONAL	Ordered golden score assignment
2	appendix_t_cartan_observation.tex:718 Appendix T · AX-MOS, compressed · PDF p.310	the arrow $\text{\emph{is}}$ the standing OS/time $\mathbb{Z}_2$	LOAD_BEARING	Time orientation of the ordered readout
3	appendix_x_zero_parameter_input_ledger.tex:939 Appendix X · Conditional — true given a named premise · PDF p.345	$\text{\textsc{ax-mos}}$ minimal modular-OS observation & $\text{\textsc{conditional}}$	CONDITIONAL	Minimal modular-OS observation
4	appendix_t_cartan_observation.tex:605 Appendix T · Log-Hodge attachment · PDF p.308	the log leg of this clause is itself a theorem (Theorem- $\text{\ref{thm:krel}}$) and the clause is absorbed into AX-MOS.	DISCHARGED	Separate log-leg price
5	appendix_t_cartan_observation.tex:711 Appendix T · Record-quotient pointer · PDF p.309	that fold does not select $0_{\text{\rm MOS}}$ either.	MENTIONED	Record-channel construction versus physical selection

#	locator	quote (verbatim, ≤ 30 words)	role	argument
6	appendix_t_cartan_observation.tex:838 Appendix T · Residual pricing table · PDF p.312	AX-MOS & the active \$c_3/c_2\$ branch \$+\$ one time-orientation bit	STATED	Compressed residual price
7	appendix_t_cartan_observation.tex:837 Appendix T · Residual pricing table · PDF p.312	discharged on shell by log-Hodge naturality, itself absorbed into AX- MOS	MENTIONED	On-shell AX-COT fold
8	appendix_x_zero_parameter_input_ledger.tex:723 Appendix X · Assumption/attachment and falsifier table · PDF p.340	AX-COT; log-Hodge naturality, absorbed into AX-MOS	MENTIONED	Source- arrow assumption ledger
9	appendix_x_zero_parameter_input_ledger.tex:779 Appendix X · Retirements (zero-cost) · PDF p.341	log-Hodge naturality (absorbed into AX-MOS).	DISCHARGED	Separate log-Hodge price
10	appendix_x_zero_parameter_input_ledger.tex:821 Appendix X · Remaining physical objects · PDF p.342	AX-MOS realization --- equivalently, $\text{\emph{is}}$ the physical observation functor the logarithmic Cartan spectral functor?	MENTIONED	Unresolved microscopic realization
11	appendix_x_zero_parameter_input_ledger.tex:940 Appendix X · Conditional — true given a named premise · PDF p.345	$\text{\textsc{log-hodge}}$ naturality} & $\text{\textsc{conditional}}$; folded into $\text{\textsc{ax-}}$ mos}	CONDITIONAL	Relative- modular-log export
12	appendix_y_laboratory_notebook.tex:313 Appendix Y · Rev28 round ledger · PDF p.365	AX-MOS $\text{\emph{compressed}}$	MENTIONED	Recorded compression round

Arguments that rest on it

LIB2-173 — CONFIRM. Confirm only the registered ordered-pair/branch assignment used for the score. The text makes that assignment conditional on the active branch; it does not derive the physical experiment from microscopic dynamics. Step locator: appendix_t_cartan_observation.tex:716 (CONDITIONAL).

LIB2-174 — CONFIRM. The minimal modular-OS observation is expressly conditional in the premise ledger. This supports the loaded readout package in the record, while its uniqueness-under-conditions statement does not select the microscopic realization. Step locator: appendix_x_zero_parameter_input_ledger.tex:939 (CONDITIONAL).

LIB2-182 — DISPUTE. The supplied passage distinguishes existence of the record-quotient channel family from selecting O_MOS. No read passage establishes that the family-existence/endpoint-bound predicate requires the physical AX-MOS attachment. Hold this declared edge for PI review; this is not a proof of independence. Step locator: appendix_t_cartan_observation.tex:711 (MENTIONED).

NO RECORD — conditional relative-modular-log export, appendix_x_zero_parameter_input_ledger.tex:940; no separate carrier is identified beyond the registered score/readout records.

What breaks without it

LIB2-173: the assignment is expressly given the active branch (appendix_t_cartan_observation.tex:716); no source for an unconditionally selected branch is supplied. The time arrow remains the standing OS/time bit (lines 718–720).

LIB2-174: appendix_x_zero_parameter_input_ledger.tex:939 requires deriving the ordered golden/inverse experiment and its minimal readout from microscopic parent dynamics. NOT ASSESSED — the text does not specify a replacement uniqueness theorem after deleting individual AX-MOS conditions. The relative-log export is likewise explicitly a microscopic state/readout derivation target at line 940.

LIB2-182 is disputed as a dependency, not refuted as a channel theorem. No counterfactual failure is claimed for that family.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: LIB2-173. Retired, each recorded in full in the record's version history: LIB2-174 (R82-b) — A uniqueness construction for O_MOS under its own seven premises plus a status sentence ("the microscopic theory has not selected it"); it does not assume that O_MOS is the physical observation. As R78-b LIB2-182; LIB2-182 (R78-b) — The record asserts that the record-quotient channel family exists for $|\lambda| \leq \sqrt{2}$; that construction does not assume AX-MOS (App T:711 "that fold does not select O_MOS either"). The lane's lines below describe the master as it was supplied to the lane (d0aa26db154ff43f), before these changes.

Declared today in the supplied material, Registrar master **d0aa26db154ff43f**: LIB2-173, LIB2-174, LIB2-182. Supplied transitive-only closure: LIB2-176, LIB2-183. It is not itself a new direct-edge declaration. Draft dispositions — CONFIRM: LIB2-173, LIB2-174; DISPUTE: LIB2-182. LIB2-176 and LIB2-183 are in the supplied transitive closure. Their record-process and score-solder predicates are not automatically made new direct edges. The channel pointer at appendix_t_cartan_observation.tex:709–711 mentions the readout but expressly does not select it; mention is insufficient for this physical-attachment dependency.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: appendix_t_cartan_observation.tex:605; appendix_t_cartan_observation.tex:709–711; appendix_t_cartan_observation.tex:711; appendix_t_cartan_observation.tex:716; appendix_t_cartan_observation.tex:718; appendix_t_cartan_observation.tex:721; appendix_t_cartan_observation.tex:837; appendix_t_cartan_observation.tex:838; appendix_x_zero_parameter_input_ledger.tex:723; appendix_x_zero_parameter_input_ledger.tex:779; appendix_x_zero_parameter_input_ledger.tex:821; appendix_x_zero_parameter_input_ledger.tex:939; appendix_x_zero_parameter_input_ledger.tex:940; appendix_y_laboratory_notebook.tex:313. Registrar: LIB2-173, LIB2-174, LIB2-176, LIB2-182, LIB2-183. Premise: PRM-005. Suite-cited kernels: s927.

PRM-006 · AX6_pol — polarisation postulate (weak-angle orbit selector)

Premise

Register corrected — R81 (D5, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Statement now (PRM-006/r2, p4_higgs_ewsb.tex:348-352, quality EXTRACTION_VERBATIM): AX6pol is the polarisation postulate $\Lambda^* = 3P/Q(Y) = 6\phi - 1$ on the exact-colour I4 = ϕ^3 orbit. Name now *AX6_pol — polarisation postulate (weak-angle orbit selector)* (was *AX6pol*). The Det² object that shared the label is registered separately as PRM-026 (historical). The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register's history (R29: nothing is overwritten).

Register kind: **POSTULATE**. Located suite statement:

AX6 $\$_{\rm pol}$: $\Lambda_{\star}=3P/Q(Y)=6\phi-1$ on the exact-colour orbit; readout $\sin^2\theta_W=3/(4+\Lambda_{\star})=\phi^{-3}$ exactly.

Appendix X · Fit-free-interior ledger — Weak-angle selector · PDF p.323 · appendix_x_zero_parameter_input_ledger.tex:90.

What kind of premise this is

POSTULATE is the register kind. The ledger calls this an independent orbit-selector postulate. It fixes the polarization branch; the algebraic readout then has the displayed value. The present Coleman–Weinberg framework does not select it. The Det-squared angle and AX6pol are explicitly different objects: retiring the former as a selector does not retire the latter premise. Source status words: Independent orbit-selector postulate (appendix_x_zero_parameter_input_ledger.tex:90).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	appendix_x_zero_parameter_input_ledger.tex:90 Appendix X · Fit-free-interior ledger · PDF p.323	AX6 $\$_{\rm pol}$: $\Lambda_{\star}=3P/Q(Y)=6\phi-1$ on the exact-colour orbit	STATED	Independent polarization branch
2	appendix_x_zero_parameter_input_ledger.tex:90 Appendix X · Fit-free-interior ledger · PDF p.323	readout $\sin^2\theta_W=3/(4+\Lambda_{\star})=\phi^{-3}$ exactly.	CONDITIONAL	Registered weak-angle readout
3	appendix_a_lagrangian_derivation.tex:382 Appendix A · Polarization frontier and AX6pol · PDF p.143	AX6 is a <i>\emph{genuine independent postulate}</i> , not a consequence of the present CW framework.	MENTIONED	CW non-selection of polarization
4	appendix_x_zero_parameter_input_ledger.tex:90 Appendix X · Fit-free-interior ledger · PDF p.323	retired as a selector of AX6 $\$_{\rm pol}$	DISCHARGED	Det-squared selector interpretation
5	appendix_a_lagrangian_derivation.tex:373 Appendix A · Polarization frontier and AX6pol · PDF p.143	The $\sin^2\theta_W=\phi^{-3}$ target is achieved at $\tan^2\psi_{\rm pol}=(6\phi-1)/4\approx 2.177$	CONDITIONAL	Polarization value for weak angle target
6	appendix_y_laboratory_notebook.tex:567 Appendix Y · Rev32 carrier/weak-angle review ledger · PDF p.377	the lane found the same AX6 label collision the house found in parallel (s1135)	MENTIONED	Recorded lat collision
7	p0_framework_foundations.tex:78 Paper 0 · Declared inputs · PDF p.1	the independent AX6 orbit selector for the Weinberg-angle branch	STATED	Input inventory
8	p0_framework_foundations.tex:99 Paper 0 · Declared input and correspondence map · PDF p.2	($\vac$, Route-B, AX6, ordering, Dirac- ν) are the loading.	MENTIONED	Loaded responder inventory

#	locator	quote (verbatim, ≤ 30 words)	role	argument
9	p0_framework_foundations.tex:177 Paper 0 · Programme positioning · PDF p.3	AX6, and the formal heavy-quark amplitude proof remain the principal tasks.	MENTIONED	Open selecto status
10	p0_framework_foundations.tex:1075 Paper 0 · Conclusion · PDF p.21	The weak-angle AX6 selector and the heavy-quark S-matrix amplitude bridge remain the principal open items	MENTIONED	Conclusion status
11	p1_peirce_gauge_group.tex:51 Paper 1 · Introduction · PDF p.23	is an independent postulate required to fix the Weinberg-angle branch within the identified group	CONDITIONAL	Weak branch within loader gauge group
12	p1_peirce_gauge_group.tex:352 Paper 1 · Scope of the gauge-group claim · PDF p.29	the independent AX6 orbit selector fixes the Weinberg-angle branch within the already identified gauge group, not the gauge group itself	CONDITIONAL	Weak branch not group selection
13	p2_mass_hierarchy_resolvent_quintics.tex:725 Paper 2 · Status · PDF p.44	the AX6 axiom	MENTIONED	Mass-paper open-item pointer
14	p4_higgs_ewsb.tex:367 Paper 4 · AX6pol vocabulary footnote · PDF p.73	Readout identity: $\$3/(4+(6\phi-1))=1/\phi^3=\sqrt{5-2}$.	CONDITIONAL	Separated polarization readout

House additions – R78-c (S327i)

The house read the rest of the suite for this premise. The material sent to the drafting lane showed at most twelve passages per premise, so A1634 FINDINGS §7 lists 9 hit lines for PRM-006 that the lane never saw. Under R78-c the house read all 9 in the full suite TeX: 6 passages are added below (3 further hit lines fall inside them). Every quote was matched against the TeX at its locator. With the lane's table above, every hit of this premise's search keys is now accounted for.

#	locator	quote (verbatim, TeX source)	role	argument
H1	p4_higgs_ewsb.tex:342-347 PDF p.73	two distinct objects have carried the one label ``AX6'' and the one symbol $\psi_\star$ in print	MENTIONED	Rev32.2 repair: two objects printed under the one label AX6
H2	p4_higgs_ewsb.tex:348-352 PDF p.73	$\texttt{\textbf{AX6}_{\rm pol}}\$$ is the polarisation postulate $\Lambda_\star=3P/Q(Y)=6\phi-1$ on the exact-colour $I_4=\phi^3$ orbit	STATED	AX6_pol stated: the polarisation postulate on the exact-colour orbit
H3	p4_higgs_ewsb.tex:353-358 PDF p.73	The Det^2 object is therefore $\texttt{\textbf{retired as a selector of AX6}_{\rm pol}}\$$	MENTIONED	The Det^2 object ($\cos 6\psi = 1/2$, 50-degree branch) is not a solution of AX6_pol and is retired as its selector
H4	p4_higgs_ewsb.tex:358-360 PDF p.73	The value identity establishes the readout once $\texttt{\textbf{AX6}_{\rm pol}}\$$ is assumed; it does not derive or select $\texttt{\textbf{AX6}_{\rm pol}}\$$, which remains an independent postulate at tier.	CONDITIONAL	Weak-angle readout $\sin^2 \theta_W = \phi^{-3}$: an identity once AX6_pol is assumed
H5	p6_rg_thresholds.tex:211-212 PDF p.90	AX6 is an independent orbit selector, decoupled from the value ϕ^{-3} .	MENTIONED	Paper 6 weak-angle status: AX6 decoupled from the value ϕ^{-3}
H6	p6_rg_thresholds.tex:1187-1188 PDF p.104	is a structural target under the independent orbit-selector postulate AX6 (it is not citable as algebraically derived without that named premise	CONDITIONAL	Paper 6 Rev29 status box: the tree-level weak-angle value as a structural target under AX6

House reading notes:

- p4_higgs_ewsb.tex:342-347 — The suite itself records the conflation the register row carries (R78-d).
- p4_higgs_ewsb.tex:358-360 — LIB2-200 carries this argument; the house refused its ADD at A1634 until the PRM-006 register repair (R78-d). LIB2-199 (the value ϕ^{-3} as a structural target) is NOT proposed:

- p4_higgs_ewsb.tex:344 prints ϕ^3 as a constant identity in the Peirce eigenvalues, not a function of any orbit angle.
- p6_rg_thresholds.tex:211-212 — PRINT DEFECT (REV32.8 candidate): the clause "decoupled from the value ϕ^3 ." is printed twice (tex lines 211-212; also in the sealed Rev32.7 text). The label is the unsubscripted AX6.
 - p6_rg_thresholds.tex:1187-1188 — STALE PRINT (REV32.8 candidate): the box prints $\sin^2 \theta_W = 3/13$ as the target under AX6, while p6_rg_thresholds.tex:166 marks $3/13$ superseded by ϕ^3 and p4_higgs_ewsb.tex:293 closes the $3/13$ trace-ratio estimate; the operative readout is ϕ^3 under AX6_pol (p4_higgs_ewsb.tex:348-360).

Arguments that rest on it

LIB2-200 — ADD. The ledger places the exact weak-angle readout after the independently postulated Lambda-star value on the exact-colour orbit. The record carries precisely this conditional identity, not a derivation of the polarization selector. Step locator: appendix_x_zero_parameter_input_ledger.tex:90 (CONDITIONAL).

What breaks without it

LIB2-200: without the postulated orbit value, this passage does not supply the selected Lambda-star for the registered readout. Appendix A states that the present CW framework does not supply that selector (appendix_a_lagrangian_derivation.tex:382). NOT ASSESSED — no replacement physical weak angle is printed for dropping AX6pol. The group-level passages condition only the weak-angle branch, not selection of the gauge group (p1_peirce_gauge_group.tex:51,352).

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: LIB2-200. Declared at S327j under R82-c, after R81-D5 made this row AX6_pol alone and the house re-read the passage: LIB2-200. The R78-c reading found no further record whose result assumes this premise. The lane's lines below describe the master as it was supplied to the lane (d0aa26db154ff43f), before these changes.

Declared today in the supplied material, Registrar master d0aa26db154ff43f: **none** (UNKNOWN, not INDEPENDENT). Draft dispositions — ADD: LIB2-200. LIB2-249 concerns the former Det-squared selector account, explicitly retired for this task. LIB2-289 and LIB2-292 are archived targets/proof prompts, not present conditional derivations. No dependency is added to them.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: appendix_a_lagrangian_derivation.tex:373; appendix_a_lagrangian_derivation.tex:382; appendix_x_zero_parameter_input_ledger.tex:90; appendix_y_laboratory_notebook.tex:567; p0_framework_foundations.tex:1075; p0_framework_foundations.tex:177; p0_framework_foundations.tex:78; p0_framework_foundations.tex:99; p1_peirce_gauge_group.tex:352; p1_peirce_gauge_group.tex:51; p2_mass_hierarchy_resolvent_quintics.tex:725; p4_higgs_ewsb.tex:367. Registrar: LIB2-200, LIB2-249, LIB2-289, LIB2-292. Premise: PRM-006. Suite-cited kernels: s1135.

PRM-007 · Action shape (the adopted principle Φ_{diag})

Premise

Register corrected — R81 (D6, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Statement now (PRM-007/r2, appendix_s_selector_ledger.tex:776-784, quality EXTRACTION_VERBATIM): The clause $\Phi_{\text{diag}} : \{v = 0, w = 0, u = t, 27z = t\}$ – four coefficient relations – isolates exactly the F_{char} orbit and is minimal in codimension (dropping any one relation restores a projective one-parameter family). It is not intrinsic: it identifies the units of three inequivalent primitive generator lines (inequivalent by Theorem 9.3’s Casimir separation), and independent generator rescaling moves the selected action. It is adopted here as a declared structural principle – the named form of the previously implicit choice that nature’s action is F_{char} -shaped.. Name now *Action shape (the adopted principle Φ_{diag})* (was *Action shape*). The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register’s history (R29: nothing is overwritten).

Register kind: **ADOPTED_PREMISE**. Located suite statement:

The clause $\Phi_{\text{diag}} : \{v=0, w=0, u=t, 27z=t\}$ --- four coefficient relations --- isolates exactly the F_{char} orbit

Appendix S · Priced axiom Phi-diag · PDF p.297 · appendix_s_selector_ledger.tex:778.

What kind of premise this is

The register kind is ADOPTED_PREMISE. The suite calls Phi-diag a declared structural principle, not an intrinsic selection. It equates units on inequivalent primitive generator lines; independent rescaling moves the selected action. This adopts the nonlinear shape after the variational representation is established. The class restriction is part of the premise: enlarging the word class needs a further coefficient relation. Source status words: declared structural principle (appendix_s_selector_ledger.tex:783).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	p0_framework_foundations.tex:238 Paper 0 · Selector-arc update · PDF p.4	Φ_{diag} is $\text{\textbf{adopted as a declared structural principle}}$, not derived.	STATED	Action-shape adoption
2	appendix_s_selector_ledger.tex:662 Appendix S · Selector production arc · PDF p.296	eigenvalue $\text{\textbf{weights}}$ are the Hessian of a rank-normalized carrier-character action, every constant a rank	MENTIONED	Variational representation versus selection
3	appendix_s_selector_ledger.tex:778 Appendix S · Priced axiom Phi-diag · PDF p.297	The clause $\Phi_{\text{diag}} : \{v=0, w=0, u=t, 27z=t\}$ --- four coefficient relations --- isolates exactly the F_{char} orbit	CONDITIONAL	Selected action orbit
4	appendix_s_selector_ledger.tex:779 Appendix S · Priced axiom Phi-diag · PDF p.297	dropping any one relation restores a projective one-parameter family	CONDITIONAL	Minimal codimension of selection
5	appendix_s_selector_ledger.tex:787 Appendix S · Priced axiom Phi-diag · PDF p.298	the moduli grow $4\text{to}5$ and Φ_{diag} requires the further relation $t_2=0$	CONDITIONAL	One-word class enlargement

Arguments that rest on it

LIB2-026 — DISPUTE. The record asserts a Hessian identity for the displayed Fchar, whereas this premise chooses that action as nature’s action. The source separates variational representation from unselected nonlinear shape. Computing the given functional is not conditioned on adopting its physical selection; retain an explanatory association, not this proof-dependency edge. Step locator: `appendix_s_selector_ledger.tex:662` (MENTIONED).

LIB2-028 — ADD. The record is exactly the in-class isolation result under the four adopted coefficient relations. It is the action-selection argument, unlike the preceding representation identity. Step locator: `appendix_s_selector_ledger.tex:778` (CONDITIONAL).

NO RECORD — the stated one-word enlargement at `appendix_s_selector_ledger.tex:786–789` is a separate class-scope argument. No additional carrying record was supplied for a graph ADD.

What breaks without it

LIB2-028: the printed deletion test says dropping any one diagonal relation restores a projective one-parameter family (`appendix_s_selector_ledger.tex:779–780`). Under one-word enlargement the printed moduli increase and a further relation is required (lines 786–789). These are class-specific losses of selection, not a universal impossibility claim.

LIB2-026 is disputed only as an edge. Its Hessian identity is not recomputed or demoted here.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: none (UNKNOWN, not INDEPENDENT). Retired, each recorded in full in the record's version history: LIB2-026 (R78-b) — A Hessian identity of the displayed F_char is unconditional; the action-shape premise concerns adopting F_char as the action of nature (App S:662-667 separates the two). Proposed ADDs not declared: LIB2-028 — declined under R78-a — the record states the adoption status of Φ_{diag} ; it is about the premise, and its result does not assume it. The lane's lines below describe the master as it was supplied to the lane (d0aa26db154ff43f), before these changes.

Declared today in the supplied material, Registrar master **d0aa26db154ff43f**: LIB2-026. Draft dispositions — ADD: LIB2-028; DISPUTE: LIB2-026. LIB2-026 contains a representation theorem and cites a fence saying microscopic selection is absent. It should not be made dependent merely because its functional is later adopted. LIB2-028 carries the conditional selecting-relations argument.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: `appendix_s_selector_ledger.tex:662`; `appendix_s_selector_ledger.tex:778`;
`appendix_s_selector_ledger.tex:779`; `appendix_s_selector_ledger.tex:779–780`;
`appendix_s_selector_ledger.tex:783`; `appendix_s_selector_ledger.tex:786–789`;
`appendix_s_selector_ledger.tex:787`; `p0_framework_foundations.tex:238`. Registrar: LIB2-026, LIB2-028.
Premise: PRM-007. Suite-cited kernels: s1055.

PRM-008 · Alpha as declared input

Premise

Register corrected — R81 (D7, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Statement now (PRM-008/r1, appendix_n_selector_fences.tex:55, quality EXTRACTION_VERBATIM): The framework declares α (the U(1)EM fibre scale) an input.. The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register's history (R29: nothing is overwritten).

Register kind: **MEASURED_INPUT**. Located suite statement:

The framework declares α (the U(1)EM fibre scale) an input.

Appendix N · Part N.A — The fine-structure constant is fenced · PDF p.252 · appendix_n_selector_fences.tex:55.

What kind of premise this is

MEASURED_INPUT is the register kind. The suite calls alpha an input modulus and an external anchor. Its five-leg fence says the golden axiom does not derive it; a geometric value also lacks a derived privileged scale. In the QED chain alpha is consumed in a specified correction, rather than inferred from successful mass agreement. No new numerical matching test is performed in this note. Source status words: input modulus (appendix_n_selector_fences.tex:112).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	appendix_n_selector_fences.tex:55 Appendix N · Part N.A — The fine-structure constant is fenced · PDF p.252	The framework declares α (the U(1)EM fibre scale) an input.	STATED	Electromagnetic scale input
2	appendix_n_selector_fences.tex:112 Appendix N · Fine-structure-constant ledger · PDF p.253	α is an input modulus, fenced on five independent legs	MENTIONED	Alpha input ledger
3	appendix_x_zero_parameter_input_ledger.tex:97 Appendix X · Fit-free-interior ledger — QED correction · PDF p.324	$\delta_{\text{QED}} = \frac{3\alpha}{4\pi \ln \frac{\Lambda_{G_2}^2}{m_{\mu, \text{phys}}^2}} + 0.3125\%$	LOAD_BEARING	QED matching correction
4	appendix_x_zero_parameter_input_ledger.tex:97 Appendix X · Fit-free-interior ledger — QED correction · PDF p.324	$m_{\mu, \text{phys}} = m_{\mu} \frac{\text{tree}}{(1 + \delta)}$	LOAD_BEARING	Muon UV-to-physical matching
5	appendix_n_selector_fences.tex:114 Appendix N · Fine-structure-constant ledger · PDF p.253	a fixed geometric value is ill-posed without a derived privileged scale --- none exists in the banked framework.	MENTIONED	Scale fence on geometric alpha
6	appendix_n_selector_fences.tex:48 Appendix N · Abstract · PDF p.251	α remains an input modulus and nothing is promoted.	MENTIONED	Input status in selector-fence abstract
7	appendix_x_zero_parameter_input_ledger.tex:522 Appendix X · Selector fences · PDF p.336	The fine-structure constant α is an <code>\textsc{Input}</code> modulus, fenced on <code>\textbf{five}</code> independent legs	MENTIONED	Repeated alpha fence

Arguments that rest on it

LIB2-126 — CONFIRM. Alpha appears explicitly in the correction used by the record's division by $1 + \delta_{\text{QED}}$. Confirm the supplied-input dependency, not an independent derivation of alpha, the matching scale, or the numerical correction. Step locator: appendix_x_zero_parameter_input_ledger.tex:97 (LOAD_BEARING).

What breaks without it

LIB2-126: the displayed correction contains the supplied alpha, and that correction enters the physical-mass division (appendix_x_zero_parameter_input_ledger.tex:97). NOT ASSESSED — the source does not supply an alternative correction after removing the electromagnetic input.

The printed scale limitation at appendix_n_selector_fences.tex:114–116 remains binding; a change of scale is not a derivation of the coupling.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: LIB2-126. The lane's lines below describe the master as it was supplied to the lane (d0aa26db154ff43f), before these changes.

Declared today in the supplied material, Registrar master **d0aa26db154ff43f**: LIB2-126. Supplied transitive-only closure: LIB2-127. It is not itself a new direct-edge declaration. Draft dispositions — CONFIRM: LIB2-126. LIB2-127 is already in the supplied transitive closure through the QED-matched muon value. Its electron-root predicate additionally consumes the external Koide rule. No new direct edge is inferred merely from closure membership.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: appendix_n_selector_fences.tex:112; appendix_n_selector_fences.tex:114;
appendix_n_selector_fences.tex:114–116; appendix_n_selector_fences.tex:48;
appendix_n_selector_fences.tex:55; appendix_x_zero_parameter_input_ledger.tex:522;
appendix_x_zero_parameter_input_ledger.tex:97. Registrar: LIB2-126, LIB2-127. Premise: PRM-008.

PRM-009 · Basepoint / tensor equivalence

Premise

Register corrected — R81 (D8, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Statement now (PRM-009/r1, appendix_t_cartan_observation.tex:922, quality EXTRACTION_VERBATIM): Tensor equivalence is not intrinsic basepoint selection;. Kind now FENCE (was ADOPTED_PREMISE). The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register's history (R29: nothing is overwritten).

Register kind: **ADOPTED_PREMISE**. Located suite statement:

Tensor equivalence is not intrinsic basepoint selection;

Appendix T · Reading rule and scope · PDF p.314 · appendix_t_cartan_observation.tex:922.

The registered excerpt and/or kind needs the scope clarification below; the registry itself is not edited.

What kind of premise this is

The register labels this ADOPTED_PREMISE, but the located sentence is a scope distinction. It prevents a transported tensor equivalence from being presented as an intrinsic selector. It does not itself supply a basepoint, an observation map, or a new coefficient. The nearby declared amplitude premise is a different item and must not be substituted for this register row. Source status words: Reading rule and scope. (appendix_t_cartan_observation.tex:919).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	appendix_t_cartan_observation.tex:922 Appendix T · Reading rule and scope · PDF p.314	Tensor equivalence is not intrinsic basepoint selection;	STATED	Carrier-arc scope distinction

Arguments that rest on it

NO RECORD — carrier-arc reading rule, appendix_t_cartan_observation.tex:919–926. No load-bearing hypothesis/result pair is identified for this fence; no ADD is submitted. The missing intrinsic selection should not be converted into an assumed selection.

What breaks without it

NOT ASSESSED — the suite does not formulate a theorem obtained by assuming this negative scope sentence, or compute a failure after deleting it. What the sentence prohibits is a change of interpretation from carrier equivalence to intrinsic selection.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: none (UNKNOWN, not INDEPENDENT). The lane's lines below describe the master as it was supplied to the lane (d0aa26db154ff43f), before these changes.

Declared today in the supplied material, Registrar master **d0aa26db154ff43f: none** (UNKNOWN, not INDEPENDENT). Draft dispositions — no ADD, CONFIRM or DISPUTE row; there is no declared edge to adjudicate. Unbound NO RECORD arguments are not graph ADDs. No declared or candidate edges are supplied.

Nearby channel, amplitude and spectral-pair statements name other objects; they are not dependency evidence for this fence.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: `appendix_t_cartan_observation.tex:919`; `appendix_t_cartan_observation.tex:919-926`; `appendix_t_cartan_observation.tex:922`. Registrar: no carrying record identified in the supplied material. Premise: PRM-009. Suite-cited kernels: s1148, s1150, s1152, s1153.

PRM-010 · Boundary datum

Premise

Register corrected — R81 (D9, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Kind now LOADED_CORRESPONDENCE (was MEASURED_INPUT). The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register's history (R29: nothing is overwritten).

Register kind: **MEASURED_INPUT**. Located suite statement:

The datum the action is conditional on is single: j ; $\rightarrow$;
 ∂ ; $\rightarrow$; $E^* = \operatorname{span}\{i_{Bj}, \omega i_{Bj}\}$ --- three faces of
 $\{one\}$ ten-continuous boundary object, priced once.

Appendix E · The boundary datum: one ten-dimensional object, three exact faces · PDF p.168 ·
appendix_e_vacuum_selector.tex:308.

What kind of premise this is

MEASURED_INPUT is the register kind, retained as printed. The suite instead calls this object Input (loaded), with physical selection open/loaded. The supplied passage gives no measured numerical value or measurement procedure. Its three faces represent one boundary choice; it conditions the finite selector and contributes the ten-continuous part of the price. The separately grammar-derived dark ray must not be charged as this boundary datum. Source status words: `\textsc{Input}` (loaded) (appendix_x_zero_parameter_input_ledger.tex:1492).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role
1	appendix_e_vacuum_selector.tex:308 Appendix E · The boundary datum: one ten-dimensional object, three exact faces · PDF p.168	The datum the action is conditional on is single: j ; $\rightarrow$; ∂ ; $\rightarrow$; $E^* = \operatorname{span}\{i_{Bj}, \omega i_{Bj}\}$	CONDITION
2	appendix_e_vacuum_selector.tex:310 Appendix E · The boundary datum: one ten-dimensional object, three exact faces · PDF p.168	three faces of $\{one\}$ ten-continuous boundary object, priced once.	LOAD_BEAL
3	appendix_x_zero_parameter_input_ledger.tex:1493 Appendix X · The Rev31 register clause · PDF p.357	the price $\{irreducible\}$ within the grammar, so this row cannot be discharged from inside	MENTIONEI
4	appendix_x_zero_parameter_input_ledger.tex:1499 Appendix X · The Rev31 register clause · PDF p.357	Physical boundary selection remains <code>\textsc{open/loaded}</code> .	MENTIONEI
5	appendix_x_zero_parameter_input_ledger.tex:1500 Appendix X · The Rev31 register clause · PDF p.357	The dark projective ray W_0 , by contrast, enters at $\{no\}$ register cost	MENTIONEI
6	appendix_f_gauge_boundary.tex:625 Appendix F · The parallel dependency survives the kill · PDF p.183	row-1 consumes only frozen-frame tensors together with the boundary datum ∂	LOAD_BEAL
7	appendix_n_selector_fences.tex:221 Appendix N · Frozen-carrier orphan verdict · PDF p.255	not the missing external boundary datum	MENTIONEI
8	appendix_x_zero_parameter_input_ledger.tex:1184 Appendix X · Typed input census · PDF p.351	Boundary datum ∂ & 10 & 0	LOAD_BEAL

#	locator	quote (verbatim, ≤ 30 words)	role
9	appendix_y_laboratory_notebook.tex:483 Appendix Y · Freeze-first round ledger · PDF p.373	the orphan is the carrier-level shadow of $\sigma_{\rm sel}$, not the missing boundary datum.	MENTIONEI

Arguments that rest on it

LIB2-021 — ADD. The source explicitly identifies this datum as what the action is conditional on. The record’s finite/internal global-minimum statement is the loaded-profile selector result, not an intrinsic choice of this boundary. Step locator: `appendix_e_vacuum_selector.tex:308` (CONDITIONAL).

LIB2-022 — ADD. The incremental-price record counts this single ten-continuous object once through its three faces. The counting step uses the declared boundary identification, not three independent inputs. Step locator: `appendix_e_vacuum_selector.tex:310` (LOAD_BEARING).

NO RECORD — parallel carrier-plan row 1, `appendix_f_gauge_boundary.tex:623–627`. This additional boundary-consuming step has no separately identified carrier in the supplied candidates.

What breaks without it

LIB2-021: the action is explicitly conditional on this datum (`appendix_e_vacuum_selector.tex:308`). NOT ASSESSED — the source does not supply a boundary-free version of the quoted minimum theorem.

LIB2-022: counting the equivalent faces separately would double-count the loaded object (`appendix_x_zero_parameter_input_ledger.tex:1491`). The boundary price cannot be discharged within the stated grammar; only a genuinely external category could move it (lines 1492–1494).

Parallel row 1 explicitly consumes the boundary datum (`appendix_f_gauge_boundary.tex:625–626`). NOT ASSESSED — no boundary-free replacement of that row is supplied.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master `0e1418ad6501767d`). Declared today: LIB2-021. Declared at S327i from A1634 after the house read each passage (R76): LIB2-021. Proposed ADDs not declared: LIB2-022 — declined under R78-a — the record prices the boundary datum; it is about the premise, and its result does not assume it. The lane’s lines below describe the master as it was supplied to the lane (`d0aa26db154ff43f`), before these changes.

Declared today in the supplied material, Registrar master `d0aa26db154ff43f`: **none** (UNKNOWN, not INDEPENDENT). Draft dispositions — ADD: LIB2-021, LIB2-022. LIB2-021 and LIB2-022 are relevant candidates, despite the current empty direct-edge list. The nearby zero-cost dark-ray statement is a contrasting result, not proof that the loaded boundary has been selected.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: `appendix_e_vacuum_selector.tex:308`; `appendix_e_vacuum_selector.tex:310`; `appendix_f_gauge_boundary.tex:623–627`; `appendix_f_gauge_boundary.tex:625`; `appendix_f_gauge_boundary.tex:625–626`; `appendix_n_selector_fences.tex:221`; `appendix_x_zero_parameter_input_ledger.tex:1184`; `appendix_x_zero_parameter_input_ledger.tex:1491`; `appendix_x_zero_parameter_input_ledger.tex:1492`; `appendix_x_zero_parameter_input_ledger.tex:1493`; `appendix_x_zero_parameter_input_ledger.tex:1499`; `appendix_x_zero_parameter_input_ledger.tex:1500`; `appendix_y_laboratory_notebook.tex:483`. Registrar: LIB2-021, LIB2-022. Premise: PRM-010.

PRM-011 · Colour real form as declared input

Premise

Register corrected — R81 (D10, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Kind now ADOPTED_PREMISE (was MEASURED_INPUT). The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register's history (R29: nothing is overwritten).

Register kind: **MEASURED_INPUT**. Located suite statement:

```
\textbf{Fenced / input (unchanged).}  $\alpha$  (five-legged fence, Appendix-N); the compact colour real form;
```

Paper 0 · Fenced / input · PDF p.7 · p0_framework_foundations.tex:399.

What kind of premise this is

The register kind is MEASURED_INPUT. The suite's own status words are input (named) and chosen, not derived. In these passages it is a compact real-form choice in the field dictionary, not a measured scalar with an uncertainty. The scoped obstruction explains why the banked construction does not select that choice; it does not make every real-form problem impossible. No measurement procedure is supplied here. Source status words: chosen, not derived (appendix_n_selector_fences.tex:279).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	p0_framework_foundations.tex:399 Paper 0 · Fenced / input · PDF p.7	\textbf{Fenced / input (unchanged).} α (five-legged fence, Appendix-N); the compact colour real form;	STATED	Compact-colour input
2	appendix_n_selector_fences.tex:48 Appendix N · Abstract · PDF p.251	the choice of real form is an input.	MENTIONED	Scoped colour real-form obstruction
3	appendix_n_selector_fences.tex:279 Appendix N · Real-form/colour ledger · PDF p.256	real-form / colour selector & \textbf{input (named)} & chosen, not derived	STATED	Named real-form choice
4	p1_peirce_gauge_group.tex:51 Paper 1 · Introduction · PDF p.23	The gauge group is thus \emph{identified} by the algebra as a group-level \emph{input} --- not \emph{produced} by it	CONDITIONAL	Loaded compact field dictionary
5	appendix_x_zero_parameter_input_ledger.tex:526 Appendix X · Selector fences · PDF p.336	The compact colour real form is an \textsc{Input}	MENTIONED	Repeated compact-colour fence
6	appendix_n_selector_fences.tex:285 Appendix N · Real-form/colour conclusion · PDF p.256	naming \emph{why} α and the colour real form are inputs	MENTIONED	Scoped reason for declared inputs

Arguments that rest on it

LIB2-108 — CONFIRM. Hypothesis-level confirmation: the supplied record expressly assumes the compact field dictionary; these TeX passages identify the compact real form/group assignment as input. The detailed B-map/hypercharge calculation is not rerun or fully exposed by these snippets. Step locator:

p1_peirce_gauge_group.tex:51 (CONDITIONAL).

What breaks without it

LIB2-108: its predicate is explicitly under the compact field dictionary. NOT ASSESSED — neither the read TeX nor the supplied record computes alternative hypercharges after removing that dictionary. Do not replace this gap with a general representation-theoretic argument.

The real-form obstruction is the scope printed in `appendix_n_selector_fences.tex:46–49`, not a new global no-go inferred here.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master `0e1418ad6501767d`). Declared today: LIB2-108. The lane's lines below describe the master as it was supplied to the lane (`d0aa26db154ff43f`), before these changes.

Declared today in the supplied material, Registrar master `d0aa26db154ff43f`: LIB2-108. Supplied transitive-only closure: LIB2-109. It is not itself a new direct-edge declaration. Draft dispositions — CONFIRM: LIB2-108. LIB2-109 is already a transitive consequence in the supplied material and assumes the $B + SU(5)$ embedding. No new direct edge is inferred from that closure alone. Alpha appears in the same input sentence but is a distinct premise.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: `appendix_n_selector_fences.tex:279`; `appendix_n_selector_fences.tex:285`;
`appendix_n_selector_fences.tex:46–49`; `appendix_n_selector_fences.tex:48`;
`appendix_x_zero_parameter_input_ledger.tex:526`; `p0_framework_foundations.tex:399`;
`p1_peirce_gauge_group.tex:51`. Registrar: LIB2-108, LIB2-109. Premise: PRM-011.

PRM-012 · Correspondence map algebra to SM

Premise

Register kind: **LOADED_CORRESPONDENCE**. Located suite statement:

The specified correspondence map is itself a chosen (loaded) embedding, not shown to be forced or unique by the algebra

Paper 0 · Declared input and correspondence map · PDF p.2 · p0_framework_foundations.tex:97.

What kind of premise this is

LOADED_CORRESPONDENCE is the register kind and matches the explicit chosen-embedding statement. The suite distinguishes internal economy after the map is granted from derivation of the physical readout. The specified vacuum, Route B, AX6, ordering and Dirac-neutrino choice are named loadings. The records below consume particular attachments; the broad premise does not make every internal algebraic identity depend on phenomenology. Source status words: chosen (loaded) embedding (p0_framework_foundations.tex:97).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	p0_framework_foundations.tex:97 Paper 0 · Declared input and correspondence map · PDF p.2	The specified correspondence map is itself a chosen (loaded) embedding, not shown to be forced or unique by the algebra	STATED	Algebra-to-physics correspondence
2	p3_ckm_pmns_mixing.tex:582 Paper 3 · Mixing summary table · PDF p.55	physical octant \textsc{Loaded-correspondence} (A1566)	LOAD_BEARING	Physical atmospheric registration
3	appendix_x_zero_parameter_input_ledger.tex:85 Appendix X · Fit-free-interior ledger — Mass anchor · PDF p.322	re-tiered \textsc{Structural} / \textsc{Loaded-correspondence} / \textsc{Reproduced}	CONDITIONAL	Charged-lepton ratio attachment
4	appendix_x_zero_parameter_input_ledger.tex:87 Appendix X · Fit-free-interior ledger — Mass exponent · PDF p.322	that it is \emph{the} mass exponent is not, alone, established by it	MENTIONED	Dimension ratio versus mass exponent
5	p1_peirce_gauge_group.tex:51 Paper 1 · Introduction · PDF p.23	The gauge group is thus \emph{identified} by the algebra as a group-level \emph{input} --- not \emph{produced} by it	CONDITIONAL	B-map compact field assignment
6	p0_framework_foundations.tex:101 Paper 0 · Declared input and correspondence map · PDF p.2	the derivation of the map itself from a physical readout functor is the program's named head wall	MENTIONED	Physical readout provenance

Arguments that rest on it

LIB2-002 — CONFIRM. Confirm only the physical atmospheric registration: the internal mismatch theorem does not choose the octant attachment, which the read row explicitly labels Loaded-correspondence. Step locator: p3_ckm_pmns_mixing.tex:582 (LOAD_BEARING).

LIB2-108 — CONFIRM. The record is expressly under the explicit B-map and compact field dictionary. The premise is that chosen correspondence, not a claim that the raw algebra selects the dictionary. This is a hypothesis-level confirmation, not a rerun of all charge placements. Step locator: `p1_peirce_gauge_group.tex:51` (CONDITIONAL).

LIB2-122 — CONFIRM. The retained ratio’s physical attachment is expressly Loaded-correspondence. The source separately warns that its dimension ratio alone is not a physical mass exponent; the loaded attachment is what this dependency confirms. Step locator: `appendix_x_zero_parameter_input_ledger.tex:85` (CONDITIONAL).

What breaks without it

LIB2-002: the physical octant registration is loaded, while the internal mismatch identity remains separately typed (`p3_ckm_pmns_mixing.tex:582`). NOT ASSESSED — no unique replacement physical octant is supplied after deleting the registration.

LIB2-108: NOT ASSESSED — its field placements are conditional on the B-map/dictionary, but the supplied print gives no replacement dictionary without that load.

LIB2-122: the physical mass-exponent identification is not established by the dimension ratio alone (`appendix_x_zero_parameter_input_ledger.tex:87`). The microscopic readout derivation remains the named head wall (`p0_framework_foundations.tex:100–103`).

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master `0e1418ad6501767d`). Declared today: LIB2-002, LIB2-108, LIB2-122. The lane's lines below describe the master as it was supplied to the lane (`d0aa26db154ff43f`), before these changes.

Declared today in the supplied material, Registrar master `d0aa26db154ff43f`: LIB2-002, LIB2-108, LIB2-122. Supplied transitive-only closure: LIB2-065, LIB2-066, LIB2-067, LIB2-109, LIB2-125, LIB2-126, LIB2-127. It is not itself a new direct-edge declaration. Draft dispositions — CONFIRM: LIB2-002, LIB2-108, LIB2-122. LIB2-065, LIB2-066, LIB2-067, LIB2-109, LIB2-125, LIB2-126 and LIB2-127 are in the supplied closure/candidate set; transitive membership is not turned into duplicate direct proposals. An internal dimension identity or unitary normalization is not, merely by occurring nearby, a use of the chosen physical correspondence.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: `appendix_x_zero_parameter_input_ledger.tex:85`; `appendix_x_zero_parameter_input_ledger.tex:87`; `p0_framework_foundations.tex:100–103`; `p0_framework_foundations.tex:101`; `p0_framework_foundations.tex:97`; `p1_peirce_gauge_group.tex:51`; `p3_ckm_pmns_mixing.tex:582`. Registrar: LIB2-002, LIB2-065, LIB2-066, LIB2-067, LIB2-108, LIB2-109, LIB2-122, LIB2-125, LIB2-126, LIB2-127. Premise: PRM-012.

PRM-013 · DET-7 structural postulate

Premise

Register note (R78-d; R81: no change). Status words differ in print: "structural postulate" (App E) and "named structural input, not promoted to an axiom" (App X). Recorded for the PI; the PI ruled no change to the row.

Register kind: **POSTULATE**. Located suite statement:

DET-7 enters this appendix as a structural `\emph{postulate}`, not a derived necessity; the result is therefore a `\emph{conditional}` selector theorem.

Appendix E · Status of (H2) — honest label · PDF p.164 · `appendix_e_vacuum_selector.tex:98`.

What kind of premise this is

POSTULATE is the register kind. Appendix E names H2 as the Gram equality and explicitly makes its selector conditional. H0 is unit norm; Route A adds inversion symmetry, while Route B adds a golden-field restriction. Neither route derives the necessity of seven. The first-principles origin remains open in Appendix X, whose separate structural-input wording should not be silently rewritten into a uniform axiom declaration. Source status words: structural `\emph{postulate}` (`appendix_e_vacuum_selector.tex:98`).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	<code>appendix_e_vacuum_selector.tex:44</code> Appendix E · Setup and hypotheses · PDF p.163	<code>\$\det\mathrm{Gram}</code> <code>(\vac,\vac^{\{#\}})=7\$</code>	STATED	DET-7 hypothesis H2
2	<code>appendix_e_vacuum_selector.tex:98</code> Appendix E · Status of (H2) — honest label · PDF p.164	DET-7 enters this appendix as a structural <code>\emph{postulate}</code> , not a derived necessity	STATED	Status of H2
3	<code>appendix_e_vacuum_selector.tex:65</code> Appendix E · DET-7 invariant in elementary form · PDF p.164	Setting this equal to <code>\$7\$</code> gives <code>\eqref{eq:det7-16}</code> .	LOAD_BEARING	Gram-product normalization
4	<code>appendix_e_vacuum_selector.tex:79</code> Appendix E · Route A: symmetry + DET-7 · PDF p.164	A real positive diagonal <code>\$\vac\in\mathcal{J}\$</code> satisfying <code>\emph{(H0)}--(H2)}</code> is unique up to permutation:	CONDITIONAL	Symmetry-form vacuum selector
5	<code>appendix_e_vacuum_selector.tex:117</code> Appendix E · Route B: golden-field units + DET-7 · PDF p.165	Then <code>\emph{(H2)}</code> forces <code>\$\vac=\diag(\phi,1,\phi^{-1})\$</code> up to permutation.	CONDITIONAL	Arithmetic vacuum selector
6	<code>appendix_e_vacuum_selector.tex:121</code> Appendix E · Route B: arithmetic proof · PDF p.165	By Lemma~\ref{lem:e-det7}, (H2) reads	LOAD_BEARING	Route-B gap classification
7	<code>p3_ckm_pmns_mixing.tex:582</code> Paper 3 · Mixing summary table · PDF p.55	AX2 eliminated: <code>\$\mathcal{J}^2=4\$</code> from DET-7+ <code>\$N(J)=1\$</code>	LOAD_BEARING	Internal mismatch normalization
8	<code>appendix_x_zero_parameter_input_ledger.tex:65</code> Appendix X · Fit-free-interior ledger — C1 coefficient · PDF p.319	Exact <code>\$c=1/2\$</code> from DET-7, Frobenius norm, and Peirce orthogonality.	LOAD_BEARING	C1 generator coefficient
9	<code>appendix_x_zero_parameter_input_ledger.tex:73</code> Appendix X · Fit-free-interior ledger — Quark 2–3 entry · PDF p.320	DET-7 ``7 unification''; inherits the loaded atmospheric attachment	LOAD_BEARING	Retained quark 2–3 relation
10	<code>appendix_e_vacuum_selector.tex:164</code> Appendix E · Spectral corollary and the solar-angle theorem · PDF p.166	From <code>\$\rho^2+\rho^{-2}=3\$</code> at <code>\$\rho=\phi\$</code> (Theorem~\ref{thm:routeA}).	CONDITIONAL	Selected-spectrum identity

#	locator	quote (verbatim, ≤ 30 words)	role	argument
11	appendix_b_independent_verification.tex:131 Appendix B · B.5 theorem summary · PDF p.153	Gram determinant $\$7\$, fixing the mismatch geometry and the normalization of the \$(1,3)\$ sector.$	MENTIONED	Evaluation on the selected vacuum
12	appendix_e_vacuum_selector.tex:34 Appendix E · Abstract · PDF p.163	Route-B re-derives the same vacuum arithmetically as the unique golden-field unit triple compatible with DET-7.	CONDITIONAL	Arithmetic selector summary
13	appendix_e_vacuum_selector.tex:94 Appendix E · Route A residual-input remark · PDF p.164	The only structural hypotheses are (H1) inversion symmetry and (H2) DET-7; (H0) is the normalization.	MENTIONED	Named Route-A assumptions
14	appendix_e_vacuum_selector.tex:106 Appendix E · Status of H2 · PDF p.164	A first-principles derivation of DET-7 itself remains open and is carried as such.	MENTIONED	Unresolved origin of the postulate
15	appendix_e_vacuum_selector.tex:111 Appendix E · Origin of phi remark · PDF p.165	The golden ratio enters solely through the selector theorem above (unit determinant $\$+\$$ inversion/palindromic symmetry $\$+\$$ DET-7)	MENTIONED	Selector rather than richer origin claims
16	appendix_e_vacuum_selector.tex:144 Appendix E · Route-B residual-input remark · PDF p.165	Each, together with (H0) and DET-7, removes all continuous freedom.	MENTIONED	Shared equality input of two routes
17	appendix_e_vacuum_selector.tex:509 Appendix E · Status · PDF p.172	conditional on the named hypotheses (unit norm; inversion symmetry, or the golden-field restriction; DET-7)	CONDITIONAL	Current selector status
18	appendix_e_vacuum_selector.tex:513 Appendix E · Status · PDF p.172	It shares DET-7 / unit-coupling as structural inputs and does <code>\emph{not}</code> upgrade the tier of this selector	MENTIONED	Separately scoped variational probe
19	appendix_x_zero_parameter_input_ledger.tex:63 Appendix X · Fit-free-interior ledger · PDF p.319	uniquely forced by unit determinant $\$+\$$ inversion symmetry $\$+\$$ DET-7 (field-free)	CONDITIONAL	Working-vacuum ledger
20	appendix_x_zero_parameter_input_ledger.tex:64 Appendix X · Fit-free-interior ledger · PDF p.319	carried as a named structural input, not promoted to an axiom.	MENTIONED	Ledger wording of DET-7 status
21	appendix_x_zero_parameter_input_ledger.tex:69 Appendix X · Fit-free-interior ledger · PDF p.319	DET-7 mismatch geometry exact; lower-octant registration selected against data	LOAD_BEARING	Internal geometry versus physical registration
22	appendix_x_zero_parameter_input_ledger.tex:96 Appendix X · Fit-free-interior ledger · PDF p.324	DET-7 Gram-ratio bridge. <code>\emph{Independent route}:</code>	MENTIONED	Gram route versus vacuum-free dimension route
23	p0_framework_foundations.tex:701 Paper 0 · Mixing provenance ledger · PDF p.14	$\$n_{23}=7\$$ from $\$ \det G(\mathrm{diag}(\phi,1,\phi^{-1}))=7\$$ (DET-7 theorem; Gram matrix criterion); AX2 eliminated	MENTIONED	Selected-vacuum Gram evaluation
24	p2_mass_hierarchy_resolvent_quintics.tex:517 Paper 2 · Seven-unification bridge · PDF p.39	The DET-7 theorem then confirms $\$n_{23}=7\$$ for $\$J_{\mathrm{vac}}=\mathrm{diag}(\phi,1,\phi^{-1})\$$	MENTIONED	Independent-route consistency check
25	p3_ckm_pmns_mixing.tex:576 Paper 3 · Mixing summary table · PDF p.54	$\$ V_{cb} \$ & \$1/(9\sqrt{7})\$ via DET-7 ‘7-unification’$	LOAD_BEARING	Repeated quark 2–3 provenance

The house read the rest of the suite for this premise. The material sent to the drafting lane showed at most twelve passages per premise, so A1634 FINDINGS §7 lists 14 hit lines for PRM-013 that the lane never saw. Under R78-c the house read all 14 in the full suite TeX: 12 passages are added below, 2 are TeX source comments. Every quote was matched against the TeX at its locator. With the lane's table above, every hit of this premise's search keys is now accounted for.

#	locator	quote (verbatim, TeX source)	role	argument
H1	p0_framework_foundations.tex:621 PDF p.12	unit determinant, inversion symmetry, and the DET-7 condition force $\rho^2 + \rho^{-2} = 3$, hence $\rho = \phi$	CONDITIONAL	Paper 0 framework: the vacuum selector of Appendix E
H2	p2_mass_hierarchy_resolvent_quintics.tex:368-370 PDF p.36	The DET-7 invariant $n_{23} = \det(\mathrm{Gram}(J_{\mathrm{vac}}, J_{\mathrm{vac}}^{\#})) = 7$ and the Jordan rank $\mathrm{rank}(J_3) = 3$ together force the ratio $n_{23} / \mathrm{rank} = 7/3$	LOAD_BEARING	The 7/3 heavy- quark bridge: $n_{23} = 7$ over rank 3
H3	p2_mass_hierarchy_resolvent_quintics.tex:413-414 PDF p.37	The DET-7 theorem gives the MS-bar mass directly at the self-consistent threshold $\mu = m_Q$	LOAD_BEARING	The 7/3 bridge: the mass read at the self- consistent threshold
H4	p2_mass_hierarchy_resolvent_quintics.tex:533-536 PDF p.39	This identity follows from the DET-7 Gram structure and Peirce orthogonality	LOAD_BEARING	Freudenthal complementarity $R_{12} + R_{23} = 1$ (E49)
H5	p2_mass_hierarchy_resolvent_quintics.tex:669 PDF p.41	no status (Rev32.1 retype, A1531/T2; \S3.6, App.-X). DET-7 threshold.	MENTIONED	Mass ledger row: bottom, 7/3 unification, DET-7 threshold
H6	p2_mass_hierarchy_resolvent_quintics.tex:670-674 PDF p.41	cross-scheme audit metadata, not status. DET- 7 threshold.	MENTIONED	Mass ledger row: charm, 7/3 unification, DET-7 threshold
H7	p2_mass_hierarchy_resolvent_quintics.tex:715-716 PDF p.43	Bottom and charm masses are unified via the 7/3 DET-7 bridge at STRUCTURAL $\star\star\star$ accuracy.	MENTIONED	Paper 2 summary: bottom and charm unified via the 7/3 bridge
H8	p3_ckm_pmns_mixing.tex:322 PDF p.50	$ J_{\mathrm{vac}} ^2 = 4$ is now a theorem from DET- 7+ $N(J) = 1$ (AX2 eliminated, D575), making $7/16$ a corollary of that theorem	LOAD_BEARING	The internal mismatch identity 7/16 as a corollary of $ J_{\mathrm{vac}} ^2 = 4$
H9	p3_ckm_pmns_mixing.tex:362-375 PDF p.50	Proof uses only $\varphi^2 + \varphi^{-2} = 3$ and $\angle J_{\mathrm{vac}}, J_{\mathrm{vac}}^{\#} = 3$ (both forced by AX2). Consequently $n_{23} = 7$ is derived	STATED	Theorem 3.2 (DET-7 / Moire derivation): det Gram = 7 = n_{23}
H10	p3_ckm_pmns_mixing.tex:707-709 PDF p.59	$ J_{\mathrm{vac}} ^2 = 4$ is a theorem from DET-7 $+N(J) = 1$, which eliminated AX2 (D575) and makes $7/16$ a corollary of that theorem	LOAD_BEARING	The internal mismatch identity 7/16 (retier section)
H11	p5_neutrino_cp_violation.tex:267 PDF p.84	is proved exactly from the DET-7 ratio, Frobenius	LOAD_BEARING	C1 theorem: the weight $c = 1/2$ in T_{half}

#	locator	quote (verbatim, TeX source)	role	argument
		norm, and Peirce orthogonality		
H12	p5_neutrino_cp_violation.tex:283 PDF p.84-85	the internal F_4 mismatch theorem ($J_{\rm vac}^2=4$ from $\text{DET-7}+N(J)=1$, AX2 eliminated) is attacked only if that attachment is independently derived	MENTIONED	DUNE-era falsification table: the theta23 row

House reading notes:

- p0_framework_foundations.tex:621 — WORDING CHECK (REV32.8 candidate): the same sentence ends "not a free parameter or an externally carried assumption", while Appendix E types DET-7 as a structural postulate (LIB2-018). Not assessed past the print.
- p2_mass_hierarchy_resolvent_quintics.tex:368-370 — CONSIDERED, NOT PROPOSED: LIB2-130 ($m_b = (7/3)m_\tau$) and LIB2-131 ($m_c = (7/3)m_{s^{\text{const}}}$) use this ratio, but appendix_x_zero_parameter_input_ledger.tex:96 prints an independent vacuum-free route to the same 7/3 ($\dim \text{Im}(O_s) / \text{rank } J_3, A641/Q2A$), so neither bridge holds ONLY given DET-7 (R78-a). The house first drafted this as a proposal and withdrew it on reading App X:96; A1634 FINDINGS reached the same point.
- p2_mass_hierarchy_resolvent_quintics.tex:413-414 — See the row at line 368: no edge proposed (vacuum-free 7/3 route, App X:96).
- p2_mass_hierarchy_resolvent_quintics.tex:533-536 — No Registrar record carries this identity (searched by statement and title).
- p3_ckm_pmns_mixing.tex:362-375 — WORDING CHECK (REV32.8 candidate): Theorem 3.2 prints $n_{23} = 7$ as "derived" from $\phi^2 + \phi^{-2} = 3$ "(both forced by AX2)", while Appendix E types DET-7 as a structural postulate and this paper prints AX2 as eliminated by DET-7 (lines 322, 708). Its input $\phi^2 + \phi^{-2} = 3$ is the DET-7 equation at $\rho = \phi$, so the house does not read this as a discharge.
- p5_neutrino_cp_violation.tex:267 — Edge declared S327i (R76, from A1634).

Hit lines that are not this premise:

- p3_ckm_pmns_mixing.tex:437 — A % source comment about theorem numbering; it is not printed.
- p3_ckm_pmns_mixing.tex:439 — A % source comment about theorem numbering; it is not printed.

Arguments that rest on it

LIB2-018 — DISPUTE. This record states how DET-7 is classified and used; it does not assume the equality to prove a mathematical conclusion. A record ABOUT the premise should retain that association rather than automatically receiving a rests_on_premise proof edge. Step locator: appendix_e_vacuum_selector.tex:98 (STATED).

LIB2-019 — CONFIRM. H2 is explicitly among the positive-diagonal symmetry-form theorem hypotheses. This is conditional spectrum selection, not a derivation of the necessity of DET-7. Step locator: appendix_e_vacuum_selector.tex:79 (CONDITIONAL).

LIB2-020 — CONFIRM. The arithmetic theorem explicitly invokes H2 after its golden-field/unit assumptions. Confirm this route-specific equality input, not the CKM Route-B convention. Step locator: appendix_e_vacuum_selector.tex:117 (CONDITIONAL).

LIB2-356 — CONFIRM. The source derives the normalization from DET-7 plus $N(J)=1$ for the internal mismatch. It separately leaves physical atmospheric registration loaded. Step locator: p3_ckm_pmns_mixing.tex:582 (LOAD_BEARING).

LIB2-001 — ADD. The printed gap classification is performed with $F=16$ supplied by H2 through the Gram lemma. The record is that arithmetic classification, not an independent CKM construction. Step locator: appendix_e_vacuum_selector.tex:121 (LOAD_BEARING).

LIB2-051 — ADD. The coefficient ledger explicitly gives DET-7, Frobenius norm and Peirce orthogonality as sources of the exact C1 weight carried by this record. Step locator: appendix_x_zero_parameter_input_ledger.tex:65 (LOAD_BEARING).

LIB2-066 — ADD. The retained formula's seven is explicitly attributed to DET-7. Its atmospheric readout and integer nine remain separately loaded; this edge does not derive either. Step locator: `appendix_x_zero_parameter_input_ledger.tex:73` (LOAD_BEARING).

LIB2-046 — ADD. The selected-spectrum identity is proved here by the Route-A theorem. This proposal records that printed selector-route provenance; it is not a claim that every proof of a golden-number identity must assume DET-7. Step locator: `appendix_e_vacuum_selector.tex:164` (CONDITIONAL).

What breaks without it

LIB2-019, LIB2-020 and LIB2-001: the displayed proof sets the Gram determinant to seven to obtain the product normalization sixteen (`appendix_e_vacuum_selector.tex:65,121–123`). Removing H2 removes that specified step; no replacement selector is printed.

LIB2-356 and LIB2-051: their displayed normalization/coefficient provenance explicitly includes DET-7 (`p3_ckm_pmns_mixing.tex:582`; `appendix_x_zero_parameter_input_ledger.tex:65`). NOT ASSESSED — replacement values without H2 are not supplied.

LIB2-066: the printed seven-source is DET-7, but atmospheric registration and integer nine remain loaded (`appendix_x_zero_parameter_input_ledger.tex:73`). NOT ASSESSED — no alternate quark readout is evaluated.

LIB2-046: the printed selected-spectrum proof cites Route A (`appendix_e_vacuum_selector.tex:164`); no universal necessity claim about all proofs is made.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master `0e1418ad6501767d`). Declared today: LIB2-019, LIB2-020, LIB2-051, LIB2-066, LIB2-356. Declared at S327i from A1634 after the house read each passage (R76): LIB2-051, LIB2-066. Retired, each recorded in full in the record's version history: LIB2-018 (R78-a) — The record states the status of DET-7 (it is ABOUT the premise); its result does not assume it. Proposed ADDs not declared: LIB2-001 — declined under R78-a — the classification finds where the DET-7 equation holds; it is about the premise, and its result does not assume it; LIB2-046 — refused by the house — $\varphi^2 + \varphi^{-2} = 3$ is unconditional arithmetic about φ ; only its use as a selector is premised. The R78-c reading found no further record whose result assumes this premise. The lane's lines below describe the master as it was supplied to the lane (`d0aa26db154ff43f`), before these changes.

Declared today in the supplied material, Registrar master `d0aa26db154ff43f`: LIB2-018, LIB2-019, LIB2-020, LIB2-356. Supplied transitive-only closure: LIB2-002, LIB2-065, LIB2-066, LIB2-067. It is not itself a new direct-edge declaration. Draft dispositions — ADD: LIB2-001, LIB2-051, LIB2-066, LIB2-046; CONFIRM: LIB2-019, LIB2-020, LIB2-356; DISPUTE: LIB2-018. LIB2-018 describes premise status; the disputed edge is not a disputed quotation. LIB2-336 and LIB2-337 have no record predicate and cannot carry a proposed argument. LIB2-002 and LIB2-065/067 concern physical registrations or inherited readouts. They are not automatically direct DET-7 edges. The bare 7/3 dimension route is explicitly vacuum-free at `appendix_x_zero_parameter_input_ledger.tex:96`; no unavoidable DET-7 dependence is inferred for that alternative.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: `appendix_b_independent_verification.tex:131`; `appendix_e_vacuum_selector.tex:106`;
`appendix_e_vacuum_selector.tex:111`; `appendix_e_vacuum_selector.tex:117`; `appendix_e_vacuum_selector.tex:121`;
`appendix_e_vacuum_selector.tex:144`; `appendix_e_vacuum_selector.tex:164`; `appendix_e_vacuum_selector.tex:34`;
`appendix_e_vacuum_selector.tex:44`; `appendix_e_vacuum_selector.tex:509`; `appendix_e_vacuum_selector.tex:513`;
`appendix_e_vacuum_selector.tex:65`; `appendix_e_vacuum_selector.tex:79`; `appendix_e_vacuum_selector.tex:94`;
`appendix_e_vacuum_selector.tex:98`; `appendix_x_zero_parameter_input_ledger.tex:63`;
`appendix_x_zero_parameter_input_ledger.tex:64`; `appendix_x_zero_parameter_input_ledger.tex:65`;

appendix_x_zero_parameter_input_ledger.tex:69; appendix_x_zero_parameter_input_ledger.tex:73;
appendix_x_zero_parameter_input_ledger.tex:96; p0_framework_foundations.tex:701;
p2_mass_hierarchy_resolvent_quintics.tex:517; p3_ckm_pmns_mixing.tex:576; p3_ckm_pmns_mixing.tex:582.
Registrar: LIB2-001, LIB2-002, LIB2-018, LIB2-019, LIB2-020, LIB2-046, LIB2-051, LIB2-065, LIB2-066,
LIB2-067, LIB2-336, LIB2-337, LIB2-356. Premise: PRM-013. Suite-cited kernels: s501.

PRM-014 · Finite regulator

Premise

Register corrected — R81 (D11, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Statement now (PRM-014/r2, appendix_t_cartan_observation.tex:366-371, quality EXTRACTION_VERBATIM): A normalized reflection-positive state exists at the finite Cartan regulator tier: ... The OS Hilbert space and a positive transfer operator exist at finite regulator.. The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register's history (R29: nothing is overwritten).

Register kind: **CONVENTION**. Located suite statement:

A normalized reflection-positive state exists at the finite Cartan regulator tier:

Appendix T · The state and the measure · PDF p.305 · appendix_t_cartan_observation.tex:366.

The registered excerpt and/or kind needs the scope clarification below; the registry itself is not edited.

What kind of premise this is

CONVENTION is the register kind. Here finite regulator is a domain/scope condition on the state and measure constructions, not a measured cutoff value or a proof of a continuum limit. The suite specifies a heat-kernel times Haar product and separately a nonlinear simplicity measure. Their existence at that tier leaves Einstein universality as a named further object. Source status words: at finite regulator (appendix_t_cartan_observation.tex:365).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	appendix_t_cartan_observation.tex:366 Appendix T · The state and the measure · PDF p.305	A normalized reflection-positive state exists at the finite Cartan regulator tier:	CONDITIONAL	Finite Cartan state existence
2	appendix_t_cartan_observation.tex:371 Appendix T · The state and the measure · PDF p.305	The OS Hilbert space and a positive transfer operator exist at finite regulator.	CONDITIONAL	OS Hilbert space and transfer
3	appendix_t_cartan_observation.tex:517 Appendix T · No linear projector for simplicity · PDF p.307	A positive nonlinear simplicity measure (fixed-norm Pfaffian variety, coercive quartic, RP by paired multiplication operators) \emph{does} exist at finite regulator.	CONDITIONAL	Nonlinear simplicity measure
4	appendix_t_cartan_observation.tex:520 Appendix T · No linear projector for simplicity · PDF p.307	\textbf{Einstein universality} - -- the AdS linearized spectrum of the sourced heat-kernel action --- is the remaining named object.	MENTIONED	Finite measure versus Einstein universality
5	appendix_t_cartan_observation.tex:31 Appendix T · Title synopsis · PDF p.299	a reflection-positive state was constructed at finite regulator	MENTIONED	State-existence synopsis
6	p0_framework_foundations.tex:294 Paper 0 · Geometry/state update · PDF p.5	\emph{A reflection-positive state exists at finite regulator}	MENTIONED	Programme state/measure synopsis
7	appendix_y_laboratory_notebook.tex:304 Appendix Y · Rev28 round ledger · PDF p.365	\textbf{a reflection-positive state exists at finite regulator}	MENTIONED	Recorded state-construction round
8	appendix_y_laboratory_notebook.tex:677 Appendix Y · Theorem index · PDF p.381	the reflection-positive state at finite regulator & A1442	MENTIONED	State theorem-index pointer

Arguments that rest on it

LIB2-170 — ADD. The state, OS Hilbert space and positive transfer operator are stated only at finite Cartan regulator. The record carries that regulated existence theorem, not a continuum-limit statement. Step locator: `appendix_t_cartan_observation.tex:366` (CONDITIONAL).

LIB2-192 — ADD. The measure existence statement is explicitly at finite regulator with the named fixed-norm/coercive construction. The record is that scoped measure theorem. Step locator: `appendix_t_cartan_observation.tex:517` (CONDITIONAL).

What breaks without it

LIB2-170 and LIB2-192: the source supplies the existence statements only at finite regulator (`appendix_t_cartan_observation.tex:366–372,517–521`). NOT ASSESSED — it does not establish what happens after removing the regulator, taking a limit, or exchanging the relevant limits. No continuum failure or success is inferred.

The remaining Einstein-universality object is explicitly stated at lines 519–521; finite positivity must not be advertised as closing that separate question.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: LIB2-170, LIB2-192. Declared at S327i from A1634 after the house read each passage (R76): LIB2-170, LIB2-192. The lane's lines below describe the master as it was supplied to the lane (d0aa26db154ff43f), before these changes.

Declared today in the supplied material, Registrar master **d0aa26db154ff43f: none** (UNKNOWN, not INDEPENDENT). Draft dispositions — ADD: LIB2-170, LIB2-192. Both supplied candidate predicates are scoped regulated existence arguments, not merely uses of the phrase finite regulator. They merit explicit proposed edges. Other regulator mentions without a carrying argument are not new edges.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: `appendix_t_cartan_observation.tex:31`; `appendix_t_cartan_observation.tex:365`;
`appendix_t_cartan_observation.tex:366`; `appendix_t_cartan_observation.tex:366–372`;
`appendix_t_cartan_observation.tex:371`; `appendix_t_cartan_observation.tex:517`;
`appendix_t_cartan_observation.tex:520`; `appendix_y_laboratory_notebook.tex:304`;
`appendix_y_laboratory_notebook.tex:677`; `p0_framework_foundations.tex:294`. Registrar: LIB2-170, LIB2-192.
Premise: PRM-014. Suite-cited kernels: s920, s922.

PRM-015 · Module-naturality premise

Premise

Register corrected — R81 (D12, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Kind now OPEN_REQUIREMENT (was ADOPTED_PREMISE). Open head wall: required by the suite, not yet derived; discharge route printed at App X:921. The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register's history (R29: nothing is overwritten).

Register kind: **ADOPTED_PREMISE**. Located suite statement:

Module-naturality premise (\textbf{the promotion gate}) & \textsc{open head wall} & Derive from the microscopic parent action that the physical \$D_F\$ is recovery-fixed and commutes with the exact Fibonacci parent module action.

Appendix X · Open head walls · PDF p.344 · appendix_x_zero_parameter_input_ledger.tex:921.

The registered excerpt and/or kind needs the scope clarification below; the registry itself is not edited.

What kind of premise this is

The register kind is ADOPTED_PREMISE, but the source row labels the condition an open head wall and phrases it as something to derive. It is the recovery-fixed and module-commuting property required of the physical finite Dirac operator. The nearby conditional family-attachment row repeats the parent-action derivation and physical-readout requirement. This note does not convert an open condition into a banked assumption that has already been realized. Source status words: \textsc{open head wall} (appendix_x_zero_parameter_input_ledger.tex:921).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	appendix_x_zero_parameter_input_ledger.tex:921 Appendix X · Open head walls · PDF p.344	Module-naturality premise (\textbf{the promotion gate}) & \textsc{open head wall}	STATED	Module-naturality head wall
2	appendix_x_zero_parameter_input_ledger.tex:921 Appendix X · Open head walls · PDF p.344	the physical \$D_F\$ is recovery-fixed and commutes with the exact Fibonacci parent module action.	STATED	Required module-compatible physical operator
3	appendix_x_zero_parameter_input_ledger.tex:944 Appendix X · Conditional — true given a named premise · PDF p.345	Physical family attachment of the three polar characters & \textsc{conditional}	CONDITIONAL	Physical attachment of polar characters
4	appendix_x_zero_parameter_input_ledger.tex:944 Appendix X · Conditional — true given a named premise · PDF p.345	Prove module naturality from the parent action	CONDITIONAL	Physical family readout discharge target

Arguments that rest on it

NO RECORD — physical family attachment of three polar characters, appendix_x_zero_parameter_input_ledger.tex:944. Its discharge target requires module naturality and an interacting finite Dirac/two-point readout of the record projectors as families. No carrying record is identified in this material, so no graph ADD is submitted.

What breaks without it

The print leaves physical family attachment conditional and specifically requires module naturality from the parent action (appendix_x_zero_parameter_input_ledger.tex:944). NOT ASSESSED — it gives no replacement physical family identification on removing that requirement. The exact three-projector structure is not reinterpreted as the missing physical attachment.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: none (UNKNOWN, not INDEPENDENT). The lane's lines below describe the master as it was supplied to the lane (d0aa26db154ff43f), before these changes.

Declared today in the supplied material, Registrar master **d0aa26db154ff43f: none** (UNKNOWN, not INDEPENDENT). Draft dispositions — no ADD, CONFIRM or DISPUTE row; there is no declared edge to adjudicate. Unbound NO RECORD arguments are not graph ADDs. No declared or candidate record is supplied. The heading promotion gate names the required derivation; it is not evidence that every nearby spectrum theorem assumes an already-selected physical operator.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: appendix_x_zero_parameter_input_ledger.tex:921; appendix_x_zero_parameter_input_ledger.tex:944.
Registrar: no carrying record identified in the supplied material. Premise: PRM-015.

PRM-016 · Parity pattern is not a spin structure

Premise

Register corrected — R81 (D13, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Kind now FENCE (was ADOPTED_PREMISE). The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register's history (R29: nothing is overwritten).

Register kind: **ADOPTED_PREMISE**. Located suite statement:

what is exhibited is the \emph{parity pattern} a spin structure would produce, not a spin structure.

Appendix P · The signed trace reproduces the NS/R parity pattern · PDF p.269 · appendix_p_fifth_direction.tex:96.

The registered excerpt and/or kind needs the scope clarification below; the registry itself is not edited.

What kind of premise this is

The register kind is ADOPTED_PREMISE. The suite calls this a fence: it limits the interpretation of a signed-trace calculation. The calculation reproduces NS/R parity patterns and gives the Freudenthal bit a holonomy-sign role; it does not construct a manifold, principal bundle or lifted frame bundle. Withdrawal of the literal spin-structure identification is not withdrawal of the pattern result. Source status words: \emph{Fence (F03, \emph{Rev29})} (appendix_p_fifth_direction.tex:96).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	appendix_p_fifth_direction.tex:96 Appendix P · The signed trace reproduces the NS/R parity pattern · PDF p.269	what is exhibited is the \emph{parity pattern} a spin structure would produce, not a spin structure.	STATED	Parity-pattern scope
2	appendix_p_fifth_direction.tex:97 Appendix P · The signed trace reproduces the NS/R parity pattern · PDF p.269	\textbf{No Spin-bundle map is constructed}	MENTIONED	Missing geometric spin realization
3	appendix_p_fifth_direction.tex:99 Appendix P · The signed trace reproduces the NS/R parity pattern · PDF p.269	``the flicker \emph{is} the NS spin structure'' is withdrawn.	DISCHARGED	Literal spin-structure identification

Arguments that rest on it

NO RECORD — the restrictive spin-structure interpretation itself, appendix_p_fifth_direction.tex:96–100. It is not a proof assumption. LIB2-084 carries the positive parity-pattern theorem; no rests_on_premise edge is proposed from that theorem to this disclaimer.

What breaks without it

NOT ASSESSED — no mathematical theorem is printed as derived from assuming this disclaimer. The precise missing construction is named at appendix_p_fifth_direction.tex:97–100. Deleting the warning would not supply a Spin-bundle map, and this note does not claim a new impossibility theorem.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: none (UNKNOWN, not INDEPENDENT). The lane's lines below describe the master as it was supplied to the lane

(d0aa26db154ff43f), before these changes.

Declared today in the supplied material, Registrar master **d0aa26db154ff43f: none** (UNKNOWN, not INDEPENDENT). Draft dispositions — no ADD, CONFIRM or DISPUTE row; there is no declared edge to adjudicate. Unbound NO RECORD arguments are not graph ADDs. LIB2-084 is ABOUT the same parity result, but its calculation is not stated to depend on the later negative scope sentence. Keep a contextual association, not an inferred dependency.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: appendix_p_fifth_direction.tex:96; appendix_p_fifth_direction.tex:96–100;
appendix_p_fifth_direction.tex:97; appendix_p_fifth_direction.tex:97–100; appendix_p_fifth_direction.tex:99.
Registrar: LIB2-084. Premise: PRM-016. Suite-cited kernels: s734.

PRM-017 · CKM first-row Route B (selected against kaon data)

Premise

Register corrected — R81 (D14, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Statement now (PRM-017/r2, p3_ckm_pmns_mixing.tex:155, quality EXTRACTION_VERBATIM): The first row is Loaded: Route B was selected after comparison with kaon data.. Kind now LOADED_CORRESPONDENCE (was CONVENTION). Name now *CKM first-row Route B (selected against kaon data)* (was *Route B selector*). Not Appendix E's Route B (the golden-unit route, PRM-024) and not Appendix I's grading-potential route. The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register's history (R29: nothing is overwritten).

Register kind: **CONVENTION**. Located suite statement:

The first row is \textsc{Loaded}: Route-B was selected after comparison with kaon data.

Paper 3 · First-row comparison · PDF p.47 · p3_ckm_pmns_mixing.tex:155.

What kind of premise this is

CONVENTION is the register kind. The located CKM statement calls the first row Loaded and states how the route was chosen: comparison with kaon data. Its Peirce-weight identity is evaluated given that route. This is not Appendix E's arithmetic Route B, and it is not the grading-potential Route B mentioned in Appendix I. Those are distinct arguments sharing a letter label. Source status words: \textsc{Loaded} (p3_ckm_pmns_mixing.tex:155).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	p0_framework_foundations.tex:79 Paper 0 · Declared inputs · PDF p.1	Route-B selection, normal ordering, and a Dirac-neutrino assumption	STATED	CKM-route input inventory
2	appendix_x_zero_parameter_input_ledger.tex:72 Appendix X · Fit-free-interior ledger — Cabibbo entry · PDF p.320	$ \mathcal{V}_{us} = \sin\theta_{12} \sqrt{PMNS}/\sqrt{6}$	CONDITIONAL	Canonical CKM first-row readout
3	p3_ckm_pmns_mixing.tex:155 Paper 3 · First-row comparison · PDF p.47	The first row is \textsc{Loaded}: Route-B was selected after comparison with kaon data.	STATED	Data-selected CKM route
4	appendix_x_zero_parameter_input_ledger.tex:74 Appendix X · Fit-free-interior ledger — Quark 1–3 entry · PDF p.320	\textsc{Loaded-correspondence} (inherits the first row)	LOAD_BEARING	Inherited quark 1–3 loading
5	p3_ckm_pmns_mixing.tex:153 Paper 3 · First-row comparison · PDF p.47	the first-row \textsc{Loaded} typing (\S\ref{sec:p3-retier}) applies.	LOAD_BEARING	Inherited first-row unitarity readout
6	appendix_b_independent_verification.tex:198 Appendix B · B.6 CKM sector · PDF p.154	Paper-3 selected Route-B over Route-A by comparing both to kaon data	MENTIONED	Repeated CKM route provenance
7	appendix_b_independent_verification.tex:212 Appendix B · G7 candidate construction · PDF p.154	over the Route-B rank-5 complement.	MENTIONED	Separate named phase-readout axiom
8	appendix_b_independent_verification.tex:292 Appendix B · CKM conclusion · PDF p.156	No fitted CKM coefficient appears inside the selected Route-B map, but this is not a	MENTIONED	Internal map versus physical theorem

#	locator	quote (verbatim, ≤ 30 words)	role	argument
		parameter-free theorem of the physical matrix		

House additions – R78-c (S327i)

The house read the rest of the suite for this premise. The material sent to the drafting lane showed at most twelve passages per premise, so A1634 FINDINGS §7 lists 22 hit lines for PRM-017 that the lane never saw. Under R78-c the house read all 22 in the full suite TeX: 15 passages are added below (4 further hit lines fall inside them), 3 are not this premise. Every quote was matched against the TeX at its locator. With the lane's table above, every hit of this premise's search keys is now accounted for.

#	locator	quote (verbatim, TeX source)	role	argument
H1	p0_framework_foundations.tex:168-172 PDF p.3	no fitted mixing coefficients inside the loaded Route-B correspondence	CONDITIONAL	Paper 0 abstract: the mixing sector has no fitted coefficients inside the loaded Route-B correspondence
H2	p1_peirce_gauge_group.tex:154 PDF p.26	the current bundle treats Route-A as dead and uses the theorem-level Route-B normalization in the mixing paper	MENTIONED	Paper 1 gauge provenance: no legacy Route A flavour mechanism is invoked
H3	p3_ckm_pmns_mixing.tex:49-54 PDF p.45	completion map all live downstream of the loaded Route-B correspondence	CONDITIONAL	The Rev29 mixing ledger is readout-conditioned, downstream of loaded Route B
H4	p3_ckm_pmns_mixing.tex:81-82 PDF p.45	because this paper selected Route-B over Route-A by comparing both to kaon data	STATED	Re-tiering: the CKM first row is Loaded because Route B was selected against kaon data
H5	p3_ckm_pmns_mixing.tex:126-129 PDF p.46	The CKM first row is canonically fixed by the Peirce J_{12} block through Route-B:	LOAD_BEARING	CKM first row: $ V_{us} = \sin \theta_{12} / \sqrt{6}$ through Route B
H6	p3_ckm_pmns_mixing.tex:192-195 PDF p.47	object delivered by the loaded Route-B correspondence	CONDITIONAL	The printed CKM matrix is a readout-layer object of the loaded Route-B correspondence
H7	p3_ckm_pmns_mixing.tex:566-568 PDF p.54	Peirce J_{12} block (Route-B: $ \text{V}_{us} = \sin \theta_{12} / \sqrt{6}$) & \status{Loaded}	CONDITIONAL	Status ledger row V_{us} : the Route-B formula, typed Loaded
H8	p3_ckm_pmns_mixing.tex:640-643 PDF p.58	$ V_{ub} $ & Algebraic & \textsc{loaded} & inherits $ V_{us} $ & inherits the route bit	CONDITIONAL	Re-tier table: $ V_{ub} $, $ V_{ud} $ and first-row unitarity inherit the route bit
H9	p3_ckm_pmns_mixing.tex:674-677 PDF p.59	Route-B is the canonical first-row prediction because it reduces the tension with direct kaon data to 0.62σ .	STATED	Red box 1: the CKM first row is route-selected, in

#	locator	quote (verbatim, TeX source)	role	argument
				Paper 3's own words
H10	p3_ckm_pmns_mixing.tex:893-896 PDF p.63	The route A654 used inherits the loaded Route-B correspondence, whose six formulae are readout-conditioned	CONDITIONAL	The A654 zero-free-parameter type withdrawn: its route inherits loaded Route B
H11	p5_neutrino_cp_violation.tex:267 PDF p.84	were marked Proved-tier ($\star 100$) within the Route-B map pre-Rev29	MENTIONED	Paper 5 status paragraph: the CKM magnitudes were Proved-tier within Route B before Rev29
H12	p5_neutrino_cp_violation.tex:292 PDF p.85	The CKM magnitudes were marked $\textsc{Proved}$ -tier within Route-B pre-Rev29	MENTIONED	Paper 5 conclusion: the same history, first row now Loaded
H13	p6_rg_thresholds.tex:1193-1196 PDF p.104	follow from the $J_3(\mathbb{0}_s)$ Route-B map and agree with PDG within 1σ	MENTIONED	Paper 6 historical CKM marking (the box labels it superseded)
H14	p6_rg_thresholds.tex:1208-1210 PDF p.104	Sessions-22-23 marked the CKM magnitudes $\textsc{Proved}$ -tier within Route-B --- a marking	MENTIONED	Paper 6 CKM RGE section: the superseded Proved-tier marking
H15	p6_rg_thresholds.tex:1263-1269 PDF p.105	No fitted mixing coefficients enter the Route-B map, but $\textbf{no}$ row may be cited as zero-parameter}.	MENTIONED	Paper 6 CKM status: no row may be cited as zero-parameter

House reading notes:

- p1_peirce_gauge_group.tex:154 — STALE TIER WORDING (REV32.8 candidate): "theorem-level Route~B normalization" against Paper 3's Loaded first row, selected against kaon data (p3_ckm_pmns_mixing.tex:81, 675).
- p3_ckm_pmns_mixing.tex:640-643 — Both edges declared S327i (R76). LIB2-071 (CKM unitarity by construction) is not proposed: its result holds by the parametrisation, not by the route.

Hit lines that are not this premise:

- appendix_k_yukawa_coefficient_negative.tex:243 — Key Route[-]?B matched "route but" (case-insensitive): "not a single missed route but a closed family".
- p0_framework_foundations.tex:250 — Appendix E's Route B (the golden-unit route, PRM-024), not Paper 3's CKM route: "the Appendix~E Route-B monotonicity proof". R78-b separated the two.
- p0_framework_foundations.tex:1049 — Appendix E's Route B (PRM-024): "Appendix~E gives two explicit proofs --- Route~A ... and Route~B".

Arguments that rest on it

LIB2-063 — CONFIRM. This is the CKM Route-B readout named in the input inventory and selected after comparing kaon data. The record carries this exact loaded first-row relation. Step locator: appendix_x_zero_parameter_input_ledger.tex:72 (CONDITIONAL).

LIB2-020 — DISPUTE. The declared premise here is the CKM route choice in Paper 0, not the golden-field arithmetic hypothesis. LIB2-020 is Appendix E's arithmetic vacuum theorem and belongs with PRM-024 (already declared there). Shared Route-B wording is not a proof dependency. Step locator: p3_ckm_pmns_mixing.tex:155 (STATED).

LIB2-067 — ADD. The source explicitly says the retained quark 1–3 relation inherits first-row loading. This is a direct textual use of the CKM choice; it does not merely flatten the existing transitive closure. Step locator: `appendix_x_zero_parameter_input_ledger.tex:74` (LOAD_BEARING).

LIB2-065 — ADD. The Vud comparison passage explicitly applies the first-row Loaded typing to its unitarity readout. Record the inherited CKM route at this stated step without treating unitarity itself as an empirical axiom. Step locator: `p3_ckm_pmns_mixing.tex:153` (LOAD_BEARING).

What breaks without it

LIB2-063: `appendix_x_zero_parameter_input_ledger.tex:72` calls the identity exact given the route. Removing the choice removes that declared physical readout source; NOT ASSESSED — no unique replacement CKM route is derived here.

LIB2-065 and LIB2-067 explicitly inherit first-row loading (`p3_ckm_pmns_mixing.tex:153–155`; `appendix_x_zero_parameter_input_ledger.tex:74`). NOT ASSESSED — the passages do not quantify alternative values after deleting the route.

LIB2-020 is a mapping dispute; no failure of its arithmetic proof is asserted.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master `0e1418ad6501767d`). Declared today: LIB2-063, LIB2-065, LIB2-067. Declared at S327i from A1634 after the house read each passage (R76): LIB2-065, LIB2-067. Retired, each recorded in full in the record's version history: LIB2-020 (R78-b) — Two different "Route B"s in print joined by name: Appendix E's arithmetic route (golden-field hypothesis, PRM-024, still declared on this record) and Paper 3's CKM route selected against kaon data (PRM-017). The R78-c reading found no further record whose result assumes this premise. The lane's lines below describe the master as it was supplied to the lane (`d0aa26db154ff43f`), before these changes.

Declared today in the supplied material, Registrar master `d0aa26db154ff43f`: LIB2-020, LIB2-063. Supplied transitive-only closure: LIB2-065, LIB2-067. It is not itself a new direct-edge declaration. Draft dispositions — ADD: LIB2-067, LIB2-065; CONFIRM: LIB2-063; DISPUTE: LIB2-020. LIB2-020, LIB2-001 and LIB2-018 concern the arithmetic selector/DET-7, not this CKM premise. LIB2-190 concerns a heat-kernel path. LIB2-237/239 are earlier or deprecated Cabibbo accounts; LIB2-293/294/295 are archived proposed corrections, not the current route's proof. LIB2-065/067 were already in closure; their direct ADDs cite explicit inherited-loading sentences, not closure membership alone.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: `appendix_b_independent_verification.tex:198`; `appendix_b_independent_verification.tex:212`; `appendix_b_independent_verification.tex:292`; `appendix_x_zero_parameter_input_ledger.tex:72`; `appendix_x_zero_parameter_input_ledger.tex:74`; `p0_framework_foundations.tex:79`; `p3_ckm_pmns_mixing.tex:153`; `p3_ckm_pmns_mixing.tex:153–155`; `p3_ckm_pmns_mixing.tex:155`. Registrar: LIB2-001, LIB2-018, LIB2-020, LIB2-063, LIB2-065, LIB2-067, LIB2-190, LIB2-237, LIB2-239, LIB2-293, LIB2-294, LIB2-295. Premise: PRM-017. Suite-cited kernels: s1162.

PRM-018 · $X_{\text{vac}} = \text{diag}(\varphi^2, 1, 0)$ — legacy vacuum normalization (house file)

Premise

Register corrected — R81 (D15, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Name now $X_{\text{vac}} = \text{diag}(\varphi^2, 1, 0)$ — *legacy vacuum normalization (house file)* (was $X_{\text{vac}} = \text{diag}(\phi^2, 1, 0) / AX1$). Located status HISTORICAL_HOUSE_FILE. AX1, which this row also named until R81, is registered separately as PRM-025. The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register's history (R29: nothing is overwritten).

This premise is registered from a HOUSE FILE, Coalition/library/L-AssumptionStack_five_level_hierarchy.md, not from a suite-first locator. **IN SUITE — historical normalization explicitly superseded at appendix_i_dynamics_bounce.tex:502–504 (Appendix I, cubic protection remark; saved PDF page checked in the invocation table). AX1 is separately still an input at p0_framework_foundations.tex:521.**

Register kind: **POSTULATE**. The following is the supplied register's transcription of the house statement, not an authenticated quotation from the unprovided house file:

Level 1 - THE VACUUM: $X_{\text{vac}} = \text{diag}(\varphi^2, 1, 0)$. NOT derived from minimization. The single most important open problem. Must emerge from cubic + quadratic invariant interplay.

House-file SHA-256 named in the register: 1a11009b68531c7b2de1d2408ee8259b6219ba9d009e57916c4edf88cc06f638. That named hash was not independently checked against the house file's bytes.

What kind of premise this is

POSTULATE is the register kind for the house-file item. The suite does mention the singular diagonal, but explicitly as a superseded legacy normalization. The present positive spectrum is selected conditionally in Appendix E. Separately, AX1 remains a named golden-unit input in Paper 0. A title joining the old diagonal and AX1 must not be read as evidence that both remain active or that both have been retired. Source status words: superseded by the current (appendix_i_dynamics_bounce.tex:503).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	appendix_i_dynamics_bounce.tex:502 Appendix I · Cubic protection remark · PDF p.209	the legacy vacuum normalization $\text{diag}(\phi^2, 1, 0)$ is superseded by the current $\text{diag}(\phi, 1, \phi^{-1})$ frame	DISCHARGED	Historical singular vacuum normalization
2	p0_framework_foundations.tex:521 Paper 0 · Assumption/status ledger · PDF p.10	AX1 $\rho^2 - \rho - 1 = 0$ (the golden unit) & $\text{status}\{\text{Input}\}$ (named axiom)	MENTIONED	Distinct surviving golden-unit axiom
3	appendix_e_vacuum_selector.tex:79 Appendix E · Route A: symmetry + DET-7 · PDF p.164	A real positive diagonal $\text{vac}\text{in}\mathcal{J}$ satisfying $\text{emph}\{(H0) \text{--} (H2)\}$ is unique up to permutation:	MENTIONED	Current conditional vacuum selector

House additions – R78-c (S327i), moved by R81

The house read the rest of the suite for this premise. The material sent to the drafting lane showed at most twelve passages per premise, so A1634 FINDINGS §7 lists 19 hit lines for PRM-018 that the lane never saw. Under R78-c the house read all 19 in the full suite TeX: 14 passages are moved to the PRM-025 note (5 further hit lines fall inside them). Every quote was matched against the TeX at its locator. With the lane's table above, every hit of this premise's search keys is now accounted for. **All 14 passages concern AX1, the golden unit $\rho^2 - \rho - 1 = 0$, which R81-D15 registered on its own as PRM-025.** The PRM-025 note prints them, with every further line of the suite that names AX1, read at S327j.

Arguments that rest on it

NO RECORD — no live argument consuming this historical diagonal is identified in the supplied candidates. LIB2-296, supplied with PRM-024, describes the archived vanishing-determinant/eigenvalue chain and is historical context, not a live proof to be reactivated by ADD.

What breaks without it

The suite’s explicit disposition is supersession of the old normalization with structural statements unaffected (appendix_i_dynamics_bounce.tex:502–504). NOT ASSESSED — the house-file claim about minimization is not supplied as a current suite theorem or a current failure calculation. AX1’s separate active status at p0_framework_foundations.tex:521 is not discharged by that supersession.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: none (UNKNOWN, not INDEPENDENT). The R78-c reading found no further record whose result assumes this premise. The lane's lines below describe the master as it was supplied to the lane (d0aa26db154ff43f), before these changes.

Declared today in the supplied material, Registrar master **d0aa26db154ff43f: none** (UNKNOWN, not INDEPENDENT). Draft dispositions — no ADD, CONFIRM or DISPUTE row; there is no declared edge to adjudicate. Unbound NO RECORD arguments are not graph ADDs. No edge is declared for this house item. LIB2-296 is an archived assumption record, not evidence for live singular-vacuum dependence. The current conditional selector uses the hypotheses named in Appendix E, not this singular diagonal.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: appendix_e_vacuum_selector.tex:79; appendix_i_dynamics_bounce.tex:502; appendix_i_dynamics_bounce.tex:502–504; appendix_i_dynamics_bounce.tex:503; p0_framework_foundations.tex:521. Registrar: LIB2-296. Premise: PRM-018.

PRM-019 · m_tau as registered input

Premise

Register corrected — R81 (D16, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Statement now (PRM-019/r2, appendix_x_zero_parameter_input_ledger.tex:85, quality EXTRACTION_VERBATIM): Mass anchor $m_\tau = 1776.93(9)$ MeV. The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register's history (R29: nothing is overwritten).

Register kind: **MEASURED_INPUT**. Located suite statement:

Mass anchor & $m_\tau=1776.93(9)\,\mathrm{MeV}$ (PDG; CODATA-2022 lists $1776.86(12)$) & Measured

Appendix X · Fit-free-interior ledger — Mass anchor · PDF p.322 · appendix_x_zero_parameter_input_ledger.tex:85.

The registered excerpt and/or kind needs the scope clarification below; the registry itself is not edited.

What kind of premise this is

MEASURED_INPUT is the register kind, and the actual tau row is marked Measured. It is consumed as an external mass anchor, not inferred from the muon or bottom agreement. The registered first quotation instead describes ratios to string tension in Paper 9; it does not state the tau value. The one-class/two-calibrations/three-anchors accounting is a separate registered-identification convention, not permission to silently equate all input passages. Source status words: Measured (appendix_x_zero_parameter_input_ledger.tex:85).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	appendix_x_zero_parameter_input_ledger.tex:85 Appendix X · Fit-free-interior ledger — Mass anchor · PDF p.322	Mass anchor & $m_\tau=1776.93(9)\,\mathrm{MeV}$	STATED	Measured tau anchor
2	appendix_x_zero_parameter_input_ledger.tex:85 Appendix X · Fit-free-interior ledger — Mass anchor · PDF p.322	Single external anchor; gives $m_\mu=106.05\,\mathrm{MeV}$ via $m_\mu/m_\tau=(\phi/\sqrt{5})^{8/3}\times\sqrt{2}/10$	LOAD_BEARING	Muon tree estimate
3	p2_mass_hierarchy_resolvent_quintics.tex:240 Paper 2 · Koide branch note · PDF p.34	Two positive roots satisfy $K=2/3$ for the $\{m_\tau, m_\mu, m_e\}$ system.	CONDITIONAL	Tau–muon–electron Koide closure
4	appendix_x_zero_parameter_input_ledger.tex:96 Appendix X · Fit-free-interior ledger — 7/3 unification ratio · PDF p.324	$m_b=(7/3)m_\tau=4146\,\mathrm{MeV}$	LOAD_BEARING	Bottom mass bridge
5	p0_framework_foundations.tex:73 Paper 0 · Declared inputs · PDF p.1	Given two measured scales (m_τ and v_{EW}), one hadronic anchor (Λ_{G_2})	STATED	Named anchor inventory
6	appendix_o_restmass_program.tex:499 Appendix O · Dimensionless anchor identities · PDF p.266	$v_{\mathrm{EW}}/m_\tau=\phi^{105/8}/4$, which the registered inputs reproduce	MENTIONED	Registered scale-identification comparison

Arguments that rest on it

LIB2-125 — CONFIRM. The measured tau value multiplies the retained muon-to-tau ratio to produce the tree mass. This is explicitly the external anchor step, not a derivation of an absolute mass from the algebra alone. Step locator: appendix_x_zero_parameter_input_ledger.tex:85 (LOAD_BEARING).

LIB2-127 — CONFIRM. The light Koide root is selected in the tau/muon/electron system; the tau is the measured anchor and the muon is QED matched. Confirm the anchor dependency without deriving the external Koide rule or its branch choice. Step locator: `p2_mass_hierarchy_resolvent Quintics.tex:240` (CONDITIONAL).

LIB2-130 — CONFIRM. The printed bottom bridge explicitly multiplies `m_tau` by 7/3. Its cross-scheme comparator and numerical offset do not eliminate the measured-anchor input. Step locator: `appendix_x_zero_parameter_input_ledger.tex:96` (LOAD_BEARING).

What breaks without it

LIB2-125 and LIB2-130: their displayed absolute estimates take the tau anchor as a factor (`appendix_x_zero_parameter_input_ledger.tex:85,96`). Without that supplied factor, this print provides a ratio/bridge but not those numerical MeV values.

LIB2-127: the source states a Koide system containing the tau and selects the light root (`p2_mass_hierarchy_resolvent Quintics.tex:240–243`). NOT ASSESSED — it gives no replacement electron-root determination after removing the measured tau. The external Koide rule remains a distinct input.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: LIB2-125, LIB2-127, LIB2-130. The lane's lines below describe the master as it was supplied to the lane (`d0aa26db154ff43f`), before these changes.

Declared today in the supplied material, Registrar master `d0aa26db154ff43f`: LIB2-125, LIB2-127, LIB2-130. Supplied transitive-only closure: LIB2-126. It is not itself a new direct-edge declaration. Draft dispositions — CONFIRM: LIB2-125, LIB2-127, LIB2-130. LIB2-126 is already transitive through the anchored tree muon. LIB2-299 is a question about relating anchors, not a completed mass derivation. The Paper 9 string-tension passage at `p9_nuclear_cluster_tier.tex:27` and generic registered-input hits in hadronic/clock discussions do not, by themselves, invoke a measured tau.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: `appendix_o_restmass_program.tex:499`; `appendix_x_zero_parameter_input_ledger.tex:85`;
`appendix_x_zero_parameter_input_ledger.tex:96`; `p0_framework_foundations.tex:73`;
`p2_mass_hierarchy_resolvent Quintics.tex:240`; `p2_mass_hierarchy_resolvent Quintics.tex:240–243`;
`p9_nuclear_cluster_tier.tex:27`. Registrar: LIB2-125, LIB2-126, LIB2-127, LIB2-130, LIB2-299. Premise: PRM-019.

PRM-020 · Cascade prescription

Premise

Register corrected — R81 (D17, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Located status HOUSE_FILE_ONLY. The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register's history (R29: nothing is overwritten).

This premise is registered from a HOUSE FILE, Coalition/library/L-AssumptionStack_five_level_hierarchy.md, not from a suite-first locator. **NOT IN SUITE — the exact registered difference-of-powers prescription was not located in the supplied TeX passages or supplemental read text. This is a located-evidence result, not an authenticated exhaustive absence claim for Papers/current/tex.**

Register kind: **POSTULATE**. The following is the supplied register’s transcription of the house statement, not an authenticated quotation from the unprovided house file:

Level 2 - THE CASCADE PRESCRIPTION: $m_i \propto h_i^n - h_{i-1}^n$. Motivated by nested Peirce decomposition. Sequential symmetry breaking generates masses from orthogonal complements. Motivated but NOT proved.

House-file SHA-256 named in the register: 1a11009b68531c7b2de1d2408ee8259b6219ba9d009e57916c4edf88cc06f638. That named hash was not independently checked against the house file’s bytes.

What kind of premise this is

The register kind is POSTULATE. The registered house transcription calls the difference-of-powers prescription motivated but not proved. No read suite passage states this exact formula as the current mass law. Generic uses of cascade describe other constructions or matching steps. Their presence cannot convert the house transcription into a suite premise, and absence from the excerpts alone cannot prove absence from the full source tree. The status descriptions here belong to the supplied HOUSE FILE transcription, not to a located suite declaration.

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
		No matching invocation of the exact registered premise was located in the read suite passages. Unrelated keyword hits are excluded rather than assigned a role.		

Arguments that rest on it

NO RECORD — the exact difference-of-powers mass prescription is not located in the accessible suite passages. No scoped argument can be assigned and no ADD is submitted.

What breaks without it

NOT ASSESSED — no suite argument using the exact registered formula has been located, so there is no source-defined failure-on-removal statement to quote. No mathematical replacement or derivation is supplied here.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: none (UNKNOWN, not INDEPENDENT). The lane's lines below describe the master as it was supplied to the lane (d0aa26db154ff43f), before these changes.

Declared today in the supplied material, Registrar master **d0aa26db154ff43f: none** (UNKNOWN, not INDEPENDENT). Draft dispositions — no ADD, CONFIRM or DISPUTE row; there is no declared edge to

adjudicate. Unbound NO RECORD arguments are not graph ADDs. No edge is declared. LIB2-341 has no predicate in the supplied material and cannot carry an argument. The low-energy matching cascade at `p6_rg_thresholds.tex:1099` is an electroweak-threshold contribution, not the mass difference-of-powers prescription. Generic cascade hits in the carrier/KK discussion are likewise not this formula.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: `p6_rg_thresholds.tex:1099`. Registrar: LIB2-341. Premise: PRM-020.

PRM-021 · Power assignment n = 4, 5

Premise

Register corrected — R81 (D18, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Located status HOUSE_FILE_ONLY. The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register's history (R29: nothing is overwritten).

This premise is registered from a HOUSE FILE, Coalition/library/L-AssumptionStack_five_level_hierarchy.md, not from a suite-first locator. **NOT IN SUITE — the exact mass-sector assignment n = 2,3,4,5 for neutrino/lepton/down/up was not located in the available TeX. The supplied material reports no matching TeX hits; exhaustive full-tree absence is not authenticated.**

Register kind: **POSTULATE**. The following is the supplied register's transcription of the house statement, not an authenticated quotation from the unprovided house file:

Level 3 - THE POWER ASSIGNMENT: n = 2,3,4,5 for v,l,d,u. n=3 derived (cubic degree of Freudenthal det). n=2 plausible (seesaw). n=4,5 from associator counting (structural but hand-wavy).

House-file SHA-256 named in the register: 1a11009b68531c7b2de1d2408ee8259b6219ba9d009e57916c4edf88cc06f638. That named hash was not independently checked against the house file's bytes.

What kind of premise this is

POSTULATE is the register kind. The house transcription distinguishes its power assignments and gives differing claimed justifications; those claims are not independently supplied as suite derivations in this material. In particular, the mass-sector tuple is not the archived CKM power ansatz. The exact dimension-ratio exponent in the current mass ledger is also a different statement, explicitly carrying a loaded physical interpretation. The status descriptions here belong to the supplied HOUSE FILE transcription, not to a located suite declaration.

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
		No matching invocation of the exact registered premise was located in the read suite passages. Unrelated keyword hits are excluded rather than assigned a role.		

Arguments that rest on it

NO RECORD — no located suite argument uses the registered neutrino/lepton/down/up power tuple as stated. No ADD is submitted.

What breaks without it

NOT ASSESSED — the supplied print does not expose a theorem consuming this tuple or a counterfactual with the assignments removed. The house-level words about cubic degree, seesaw and associator counting are not completed here from general knowledge.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: none (UNKNOWN, not INDEPENDENT). The lane's lines below describe the master as it was supplied to the lane (d0aa26db154ff43f), before these changes.

Declared today in the supplied material, Registrar master **d0aa26db154ff43f: none** (UNKNOWN, not INDEPENDENT). Draft dispositions — no ADD, CONFIRM or DISPUTE row; there is no declared edge to adjudicate. Unbound NO RECORD arguments are not graph ADDs. No edge is declared. LIB2-285 concerns an archived assignment of CKM magnitudes using a common mixing parameter, not the mass-sector tuple. The separate mass-exponent row at appendix_x_zero_parameter_input_ledger.tex:87 is not a source for this tuple; it explicitly distinguishes an exact dimension ratio from its physical mass-exponent identification.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: appendix_x_zero_parameter_input_ledger.tex:87. Registrar: LIB2-285. Premise: PRM-021.

PRM-022 · DSE / Faddeev closure

Premise

Register corrected — R81 (D19, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Statement now (PRM-022/r1, L-AssumptionStack_five_level_hierarchy.md, quality HOUSE_TRIMMED): Level 4 - DSE/FADDEEV CLOSURE: $K_B = 3\phi 2m32/(4A)$, $A=144$, GMOR proxy, T-matrix residue. Each is a specific technical choice.. Located status PARTLY_IN_SUITE. Appendix I:541: the $A=144$ values were computed in the legacy ambient-27 parametrization and predate the current frame. The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register's history (R29: nothing is overwritten).

This premise is registered from a HOUSE FILE, Coalition/library/L-AssumptionStack_five_level_hierarchy.md, not from a suite-first locator. **PARTLY IN SUITE — the legacy Faddeev model and $A=144$ occur at p8_junkyard.tex:270–276; the old numerical ratio is explicitly retired at lines 281–286. NOT IN SUITE — the full registered closure/proxy/residue package has not been located in the accessible TeX; exhaustive absence is unverified.**

Register kind: **POSTULATE**. The following is the supplied register’s transcription of the house statement, not an authenticated quotation from the unprovided house file:

Level 4 - DSE/FADDEEV CLOSURE: $K_B = 3\phi 2m32/(4A)$, $A=144$, GMOR proxy, T-matrix residue. Each is a specific technical choice.

House-file SHA-256 named in the register: 1a11009b68531c7b2de1d2408ee8259b6219ba9d009e57916c4edf88cc06f638. That named hash was not independently checked against the house file’s bytes.

What kind of premise this is

POSTULATE is the register kind for the house technical package. The suite contains a historical Faddeev model with the same $A=144$ normalization, but the full listed closure formula, proxy and residue prescription have not been located together in the supplied TeX. Paper 8 explicitly retires the old numerical ratio and separately retains cubic-channel structural content. A structural survivor is not a reinstatement of the retired numerical closure. Source status words: `\textbf{retired}` (p8_junkyard.tex:281).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	p8_junkyard.tex:270 Paper 8 · Hadronic over-reach: the baryon/meson ratio · PDF p.121	A self-consistent Faddeev-pole gap equation produced a baryon/meson mass ratio	MENTIONED	Historical Faddeev numerical model
2	p8_junkyard.tex:275 Paper 8 · Hadronic over-reach: the baryon/meson ratio · PDF p.121	legacy ambient- $\$27\$$ Hessian parametrization (spectral trace $\$A=144\$$, Morse index $\$17/27\$$)	MENTIONED	Historical $A=144$ normalization
3	p8_junkyard.tex:281 Paper 8 · Hadronic over-reach: the baryon/meson ratio · PDF p.121	<code>\textbf{retired}</code> --- a legacy null-cone artifact superseded by the current frame, not a parked candidate.	DISCHARGED	Legacy numerical ratio
4	p8_junkyard.tex:283 Paper 8 · Hadronic over-reach: the baryon/meson ratio · PDF p.121	the baryonic (cubic) channel survives the quadratic one-loop cancellation that kills the mesonic channel	MENTIONED	Retained structural channel statement

Arguments that rest on it

NO RECORD — the full registered house closure package is not located as a current suite argument. LIB2-246 reports the earlier ambient-Hessian ratio; it is a historical record, not a live result to reactivate through an ADD. No new dependency is proposed.

What breaks without it

The source retires the legacy null-cone numerical result and distinguishes the retained cubic-channel statement (p8_junkyard.tex:281–286). NOT ASSESSED — it does not provide a current failure calculation after deleting the entire house package, nor derive replacement GMOR/residue prescriptions.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: none (UNKNOWN, not INDEPENDENT). The lane's lines below describe the master as it was supplied to the lane (d0aa26db154ff43f), before these changes.

Declared today in the supplied material, Registrar master **d0aa26db154ff43f: none** (UNKNOWN, not INDEPENDENT). Draft dispositions — no ADD, CONFIRM or DISPUTE row; there is no declared edge to adjudicate. Unbound NO RECORD arguments are not graph ADDs. No edge is declared. LIB2-246 is historical numerical context. LIB2-352 has no predicate in the supplied material and is not an argument carrier. The Faddeev-evasion proposition at appendix_i_dynamics_bounce.tex:466–475 concerns cubic versus quadratic tensor structure; it is not the complete A=144 numerical closure package.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: appendix_i_dynamics_bounce.tex:466–475; p8_junkyard.tex:270; p8_junkyard.tex:275; p8_junkyard.tex:281; p8_junkyard.tex:281–286; p8_junkyard.tex:283. Registrar: LIB2-246, LIB2-352. Premise: PRM-022.

PRM-023 · Route A inversion symmetry (palindromic spectrum)

Premise

Register kind: **ADOPTED_PREMISE**. Located suite statement:

```
\textbf{Inversion symmetry (palindromic spectrum):} the characteristic polynomial of  $\varphi$  is palindromic, i.e.  $\varphi$  is isospectral to its Jordan adjoint  $\varphi^{\#}$ .
```

Appendix E · Setup and hypotheses — H1 · PDF p.163 · appendix_e_vacuum_selector.tex:43.

What kind of premise this is

ADOPTED_PREMISE is the register kind. Appendix E calls H1 a structural hypothesis and states its isospectral meaning. Under unit determinant the Jordan adjoint equals the inverse. This is the residual assumption of the field-free Route A, not a physical CKM route selection. The arithmetic Route B uses a different residual field hypothesis. The note preserves the source’s palindromic terminology without substituting a textbook convention. Source status words: structural hypotheses (appendix_e_vacuum_selector.tex:94).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	appendix_e_vacuum_selector.tex:43 Appendix E · Setup and hypotheses — H1 · PDF p.163	$\textbf{Inversion symmetry (palindromic spectrum):}$ the characteristic polynomial of φ is palindromic	STATED	Inversion-symmetric vacuum spectrum
2	appendix_e_vacuum_selector.tex:43 Appendix E · Setup and hypotheses — H1 · PDF p.163	φ is isospectral to its Jordan adjoint $\varphi^{\#}$	STATED	Meaning of inversion symmetry
3	appendix_e_vacuum_selector.tex:71 Appendix E · Route A: symmetry + DET-7 · PDF p.164	Under (H0), condition (H1) holds iff $e_1=e_2$, and then the spectrum is $\{\rho, 1, \rho^{-1}\}$	LOAD-BEARING	Reciprocal-pair spectral reduction
4	appendix_e_vacuum_selector.tex:94 Appendix E · Route A: symmetry + DET-7 · PDF p.164	The only structural hypotheses are (H1) inversion symmetry and (H2) DET-7; (H0) is the normalization.	CONDITIONAL	Field-free conditional selector
5	appendix_e_vacuum_selector.tex:509 Appendix E · Status · PDF p.172	The <i>ordered</i> physical Peirce frame remains loaded	MENTIONED	Spectral orbit versus physical ordering
6	appendix_e_vacuum_selector.tex:34 Appendix E · Abstract · PDF p.163	invariance of the vacuum spectrum under Jordan inversion (the ‘palindromic’ condition)	CONDITIONAL	Route-A abstract synopsis
7	appendix_e_vacuum_selector.tex:111 Appendix E · Origin of phi remark · PDF p.165	unit determinant φ inversion/palindromic symmetry φ DET-7	MENTIONED	Field-free origin synopsis
8	appendix_e_vacuum_selector.tex:144 Appendix E · Route-B residual-input remark · PDF p.165	Route-A’s residual input is the inversion symmetry (H1)	MENTIONED	Named residual assumption
9	appendix_i_dynamics_bounce.tex:593 Appendix I · Route A — invariant selector · PDF p.211	Restrict to the inversion family $J(r)=\text{diag}(r, 1, 1/r)$	CONDITIONAL	Invariant selector on the inversion family
10	appendix_i_dynamics_bounce.tex:637 Appendix I · Two invariant routes · PDF p.211	Route-A uses the cubic/Freudenthal invariants and imposes inversion	MENTIONED	Invariant route versus grading/unit-coupling route

The house read the rest of the suite for this premise. The material sent to the drafting lane showed at most twelve passages per premise, so A1634 FINDINGS §7 lists 9 hit lines for PRM-023 that the lane never saw. Under R78-c the house read all 9 in the full suite TeX: 2 passages are added below, 7 are not this premise. Every quote was matched against the TeX at its locator. With the lane's table above, every hit of this premise's search keys is now accounted for.

#	locator	quote (verbatim, TeX source)	role	argument
H1	appendix_i_dynamics_bounce.tex:1009-1011 PDF p.219	only the three- constraint Route~A and the σ -odd defect work.	MENTIONED	Do-not-reopen list: only the three-constraint Route A and the sigma-odd defect select phi
H2	p0_framework_foundations.tex:1049 PDF p.20	Route~A (printed and valid at the conditional-selector tier)	MENTIONED	Known gaps: the vacuum theorem carried; Route A valid at the conditional- selector tier

Hit lines that are not this premise:

- appendix_m_order5_clock_occupation.tex:383 — Key Route[-]?A matched "route above" (case-insensitive).
- appendix_x_zero_parameter_input_ledger.tex:587 — Key Route[-]?A matched "route are" (case-insensitive): "the KV-flow route are dead".
- p1_peirce_gauge_group.tex:154 — The legacy CKM/flavour Route A (the pair PRM-017 belongs to), not Appendix E's inversion-symmetry route.
- p3_ckm_pmns_mixing.tex:81 — Paper 3's CKM first-row Route A (compared with kaon data), not Appendix E's Route A.
- p3_ckm_pmns_mixing.tex:676 — Paper 3's CKM first-row Route A ("Route~A gave 0.22749").
- p3_ckm_pmns_mixing.tex:893 — Key Route[-]?A matched "route A654" (an assessment serial).
- p8_junkyard.tex:70 — Key Route[-]?A matched "route and" (case-insensitive).

Arguments that rest on it

LIB2-019 — CONFIRM. The field-free theorem explicitly takes H1 with H0 and DET-7; its lemma uses H1 to reduce the spectrum to a reciprocal pair and a unit eigenvalue. It selects the multiset, not an ordered physical frame. Step locator: appendix_e_vacuum_selector.tex:94 (CONDITIONAL).

NO RECORD — the separate invariant-selector presentation on the inversion family, appendix_i_dynamics_bounce.tex:593–595. No further record beyond the supplied symmetry-form selector is identified for a new graph edge.

What breaks without it

LIB2-019: the lemma explicitly uses H1 to reach the reciprocal-pair spectrum before DET-7 fixes its positive parameter (appendix_e_vacuum_selector.tex:71,94). Without H1, this printed Route-A reduction has no stated source. NOT ASSESSED — no replacement field-free reduction is supplied. Appendix I likewise restricts to the inversion family before evaluating the invariant (lines 593–595); no unrestricted replacement is supplied.

The conclusion is a spectral orbit: the ordered physical Peirce frame remains loaded (appendix_e_vacuum_selector.tex:509). The existence of the alternative arithmetic route is not a derivation or discharge of H1 within Route A.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: LIB2-019. The R78-c reading found no further record whose result assumes this premise. The lane's lines below describe the master as it was supplied to the lane (d0aa26db154ff43f), before these changes.

Declared today in the supplied material, Registrar master **d0aa26db154ff43f**: LIB2-019. Draft dispositions — CONFIRM: LIB2-019. LIB2-020 uses the different arithmetic hypothesis, not H1 as an explicit premise. LIB2-239 is a deprecated Cabibbo-route account; a shared Route-A label is insufficient.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: `appendix_e_vacuum_selector.tex:111`; `appendix_e_vacuum_selector.tex:144`;
`appendix_e_vacuum_selector.tex:34`; `appendix_e_vacuum_selector.tex:43`; `appendix_e_vacuum_selector.tex:509`;
`appendix_e_vacuum_selector.tex:71`; `appendix_e_vacuum_selector.tex:94`; `appendix_i_dynamics_bounce.tex:593`;
`appendix_i_dynamics_bounce.tex:593–595`; `appendix_i_dynamics_bounce.tex:637`. Registrar: LIB2-019, LIB2-020,
LIB2-239. Premise: PRM-023. Suite-cited kernels: s978, s981.

PRM-024 · Route B golden-unit restriction (positive algebraic integers in $\mathbb{Q}(\sqrt{5})$, $abc = 1$)

Premise

Register corrected — R81 (D20, S327j). The PI ruled this correction to the register row (Trackers/RULING_R81_S327_PREMISE_REGISTER.md). Statement now (PRM-024/r1, appendix_e_vacuum_selector.tex:117, quality HOUSE_TRANSCRIBED): Let $J_{vac} = \text{diag}(a, b, c)$ with $a, b, c > 0$ algebraic integers in $\mathbb{Q}(\sqrt{5})$ and $abc = 1$. Paper 2:521-527 restates the restriction without "positive"; App E:117 controls. The register row the drafting lane quotes below is the row as it was supplied to the lane, before R81; it is kept in the register's history (R29: nothing is overwritten).

Register kind: **ADOPTED_PREMISE**. Located suite statement:

Let $J_{vac} = \text{diag}(a, b, c)$ with $a, b, c > 0$ algebraic integers in $\mathbb{Q}(\sqrt{5})$ and $abc = 1$.

Appendix E · Route B: golden-field units + DET-7 · PDF p.165 · appendix_e_vacuum_selector.tex:117.

What kind of premise this is

ADOPTED_PREMISE is the register kind. Appendix E calls the golden-field hypothesis Route B's residual input. Algebraic integrality, positivity and unit product are all retained: the proof uses them to express the three entries as powers of the positive fundamental unit with zero total exponent. H2 remains a separate equality input. No assertion of total positivity in both field embeddings is added to the source. Source status words: Route-B's residual input is the golden-field hypothesis (appendix_e_vacuum_selector.tex:144).

Where the suite invokes it

Located invocations in the read excerpts, not an exhaustive full-source-tree census. Pages refer to saved Rev32.7 page-delimited text, not PDF-image authentication.

#	locator	quote (verbatim, ≤ 30 words)	role	argument
1	appendix_e_vacuum_selector.tex:117 Appendix E · Route B: golden-field units + DET-7 · PDF p.165	Let $J_{vac} = \text{diag}(a, b, c)$ with $a, b, c > 0$ algebraic integers in $\mathbb{Q}(\sqrt{5})$ and $abc = 1$.	STATED	Golden-field arithmetic domain
2	appendix_e_vacuum_selector.tex:121 Appendix E · Route B: arithmetic proof · PDF p.165	From $abc = 1$ each of a, b, c is invertible in $\mathbb{Z}[\phi]$, hence a unit	LOAD_BEARING	Reduction to golden-unit powers
3	appendix_e_vacuum_selector.tex:121 Appendix E · Route B: arithmetic proof · PDF p.165	positivity removes the sign, so $a = \phi^{n_1}$, $b = \phi^{n_2}$, $c = \phi^{n_3}$	LOAD_BEARING	Integer exponent classification domain
4	appendix_e_vacuum_selector.tex:117 Appendix E · Route B: golden-field units + DET-7 · PDF p.165	Then H2 forces $J_{vac} = \text{diag}(\phi, 1, \phi^{-1})$ up to permutation.	CONDITIONAL	Arithmetic vacuum selector
5	appendix_e_vacuum_selector.tex:144 Appendix E · Route B: residual-input remark · PDF p.165	Route-B's residual input is the golden-field hypothesis $a, b, c \in \mathbb{Z}[\phi]$.	MENTIONED	Named residual field input
6	appendix_e_vacuum_selector.tex:509 Appendix E · Status · PDF p.172	The ordered physical Peirce frame remains loaded	MENTIONED	Physical frame still loaded
7	p2_mass_hierarchy_resolvernt Quintics.tex:524 Paper 2 · Uniqueness of the golden vacuum · PDF p.39	with $\text{algebraic-integer entries over } \mathbb{Q}(\sqrt{5})$ and $abc = 1$	CONDITIONAL	Mass-paper arithmetic-selector restatement

Arguments that rest on it

LIB2-020 — CONFIRM. The theorem’s stated domain is positive algebraic integers in $\mathbb{Q}(\sqrt{5})$, with $abc=1$; H2 is then separately imposed. Confirm this arithmetic restriction, not the CKM convention. Step locator: `appendix_e_vacuum_selector.tex:117` (CONDITIONAL).

LIB2-001 — ADD. The gap-pair classification uses exponent triples obtained from this positive golden-unit domain. Its zero-sum exponent condition comes from $abc=1$; the field restriction supplies the unit-power reduction. Step locator: `appendix_e_vacuum_selector.tex:121` (LOAD_BEARING).

What breaks without it

LIB2-020 and LIB2-001: the proof uses invertibility in the stated integer ring and positivity to obtain the exponent triple (`appendix_e_vacuum_selector.tex:121`); the classification then works in that domain. Removing the domain removes that printed reduction. NOT ASSESSED — no general classification for an unrestricted field is supplied.

The field-free Route A is a different sufficient route, not a discharge of Route B’s field hypothesis. Ordered physical frame selection remains loaded (`appendix_e_vacuum_selector.tex:509`).

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: LIB2-001, LIB2-020. Declared at S327i from A1634 after the house read each passage (R76): LIB2-001. The lane’s lines below describe the master as it was supplied to the lane (d0aa26db154ff43f), before these changes.

Declared today in the supplied material, Registrar master **d0aa26db154ff43f**: LIB2-020. Draft dispositions — ADD: LIB2-001; CONFIRM: LIB2-020. LIB2-047 is the determinant identity at the working vacuum; its unit product is not proof of dependence on the golden-field restriction. LIB2-296 concerns the superseded singular-vacuum chain, not this positive unit triple. The golden-unit holonomy statement at `appendix_x_zero_parameter_input_ledger.tex:958` concerns a different recipient/holonomy argument. Its supersession does not retire this arithmetic hypothesis. Paper 2:521–527 omits the positivity word in its shorter restatement; the complete positive domain at Appendix E:117 controls this note.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. An ADD remains a proposal until house verification under R76; a DISPUTE goes to the PI. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown.

Sources

TeX: `appendix_e_vacuum_selector.tex:117`; `appendix_e_vacuum_selector.tex:121`; `appendix_e_vacuum_selector.tex:144`; `appendix_e_vacuum_selector.tex:509`; `appendix_x_zero_parameter_input_ledger.tex:958`; `p2_mass_hierarchy_resolvent_quintics.tex:524`. Registrar: LIB2-001, LIB2-020, LIB2-047, LIB2-296. Premise: PRM-024.

PRM-025 · AX1 — golden unit

Premise

House-drafted note (R81-D15, S327j). R81 registered this premise, splitting it out of PRM-018. No drafting lane wrote this note: the house drafted it from its own reading of the suite TeX — the fourteen AX1 passages it read at R78-c for PRM-018, and every further line of the suite that names AX1, read at S327j. Every quote was matched against the TeX at its locator. No lane has reviewed this note.

Registered from the suite: `p0_framework_foundations.tex:521` (PDF p.10), register quality `HOUSE_TRANSCRIBED` (a house transcription of the TeX, not the PDF's extraction text):

AX1 $p^2-p-1 = 0$ (the golden unit) – Input (named axiom) – assumed, not derived from nothing.

The TeX at that line: AX1 $\rho^2-\rho-1=0$ (the golden unit) & `\status{Input}` (named axiom) & assumed, not derived from nothing.

What kind of premise this is

Register kind: **POSTULATE**. Paper 0 lists AX1 among its declared inputs with the status `\status{Input}` (named axiom) (`p0_framework_foundations.tex:521`) and prints it as one of the active operational inputs (`p0_framework_foundations.tex:635`). Appendix I derives the *selection* of the golden vacuum modulo this unit: the direction of the defect source and its completion are derived, and the unit magnitude $\gamma = 1$ is equivalent to AX1 and is not derived there (`appendix_i_dynamics_bounce.tex:94-96`). Source status words: the unit magnitude is AX1, not derived from nothing (`appendix_i_dynamics_bounce.tex:1042-1043`).

Where the suite invokes it

A house census, not a lane draft: every line of the suite TeX that names AX1 (TeX comment lines excluded) falls inside one of the 30 passages below — **CONDITIONAL** 12, **LOAD BEARING** 1, **MENTIONED** 8, **STATED** 9. Pages refer to the sealed Rev32.7 page-delimited text. Rows marked “read R78-c” were read at S327i for PRM-018 and moved here by R81-D15; rows marked “read S327j” were read for this note.

#	locator	quote (verbatim, TeX source)	role	argument
1	<code>p0_framework_foundations.tex:210-215</code> PDF p.3 · read R78-c	Selection is derived modulo AX1; full stabilization is not yet closed	CONDITIONAL	Paper 0 abstract: selection derived modulo AX1
2	<code>p0_framework_foundations.tex:514-515</code> PDF p.10 · read R78-c	Derived modulo the AX1 unit	CONDITIONAL	Paper 0 status table: rows I.3/I.4 derived modulo the AX1 unit
3	<code>p0_framework_foundations.tex:521</code> PDF p.10 · read S327j	AX1 $\rho^2-\rho-1=0$ (the golden unit) & <code>\status{Input}</code> (named axiom) & assumed, not derived from nothing.	STATED	Paper 0 declared inputs: AX1 is an Input (named axiom), assumed
4	<code>p0_framework_foundations.tex:536-537</code> PDF p.10 · read S327j	the σ -odd defect selection is derived $\emph{modulo the AX1 unit}$	CONDITIONAL	Paper 0 status box: σ -odd defect selection derived modulo the AX1 unit
5	<code>p0_framework_foundations.tex:538-540</code> PDF p.10 · read R78-c	AX1 is named, not hidden	MENTIONED	Paper 0 status box: AX1 named
6	<code>p0_framework_foundations.tex:621</code> PDF p.12 · read R78-c	The vacuum ratio ϕ is therefore an algebraically forced structural feature (modulo the AX1 unit)	CONDITIONAL	Paper 0 framework: the vacuum ratio ϕ is forced

#	locator	quote (verbatim, TeX source)	role	argument
				modulo the AX1 unit
7	p0_framework_foundations.tex:635 PDF p.12 · read S327j	AX1, AX3, and AX4 remain active operational inputs.	STATED	Paper 0 current reading (Rev29): AX1 remains an active operational input
8	p4_higgs_ewsb.tex:278 PDF p.71 · read R78-c	The Yukawa coupling $y^2=2/h^{\vee}(F_4)=2/9$ is derived from AX1	LOAD_BEARING	Natural Yukawa: $y^2 = 2/h(F_4) = 2/9$ derived from AX1
9	p7_precision_tests_falsification.tex:145 PDF p.112 · read R78-c	does <code>\emph{not}</code> by itself attack AX1/AX2/AX3 or the angle theorems	MENTIONED	Falsification map: a <code>delta_CP</code> miss does not by itself attack AX1/AX2/AX3
10	p8_junkyard.tex:303-305 PDF p.122 · read R78-c	$\cosh(2\ln\varphi)=3/2\equiv\text{trm}\{AX1\}$	MENTIONED	Junkyard aside: the golden ray read as a relativistic boost
11	appendix_h_time_bridge.tex:418-433 PDF p.196 · read S327j	$\varphi^2+\varphi^{-2}=3$; $\varphi\equiv\text{trm}\{AX1\}$	MENTIONED	Appendix H boost reading of the golden vacuum: no new constant enters, φ is AX1
12	appendix_h_time_bridge.tex:550-551 PDF p.199 · read S327j	AX1 identity $\varphi^2+\varphi^{-2}=3$ that Appendix-E derives from the vacuum selector	MENTIONED	Braid grammar: the $\sqrt{5}$ is the discriminant of the trace-3 identity, labelled AX1
13	appendix_i_dynamics_bounce.tex:33 PDF p.201 · read S327j	selection (modulo the AX1 unit); Coleman--Weinberg cannot uniquely select golden	CONDITIONAL	Appendix I subtitle: selection derived modulo the AX1 unit
14	appendix_i_dynamics_bounce.tex:60-61 PDF p.201 · read S327j	<code>\emph{identical}</code> to the golden axiom AX1 $\rho^2-\rho-1=0$	STATED	Appendix I abstract: the sigma-odd defect equation $F(\rho) = 1$ is identical to AX1
15	appendix_i_dynamics_bounce.tex:66-67 PDF p.201 · read S327j	so selection is derived <code>\emph{modulo the AX1 unit}</code> (the framework's core axiom)	CONDITIONAL	Appendix I abstract: the unit magnitude is not independently BPS-forced; selection derived modulo AX1
16	appendix_i_dynamics_bounce.tex:94-96 PDF p.202 · read S327j	the <code>\emph{unit magnitude}</code> $\gamma=1$ is equivalent to AX1	CONDITIONAL	Appendix I introduction: direction and completion derived; the unit magnitude is AX1, not derived there

#	locator	quote (verbatim, TeX source)	role	argument
17	appendix_i_dynamics_bounce.tex:179-180 PDF p.203 · read S327j	the stable vacuum fixes the $\text{\emph{modulus}}$ φ (via the AX1 self-duality	MENTIONED	Appendix I alpha fence: the stable vacuum fixes the modulus ϕ via AX1, not the $U(1)_{EM}$ fibre coupling
18	appendix_i_dynamics_bounce.tex:198-200 PDF p.203 · read S327j	$R_d=1/(\phi^{2d}-1)$ therefore reduces to the single irreducible axiom AX1, hosted	STATED	Golden depth R_d reduces to the single irreducible axiom AX1, hosted (not derived) by the scaffold
19	appendix_i_dynamics_bounce.tex:281-293 PDF p.205 · read S327j	$\rho^2-\rho-1=0$, i.e. $\rho=\phi$ AX1, with positive root $\rho=\phi$	STATED	Lemma (the sigma-odd defect pins golden iff AX1); the defect selects golden exactly when AX1 holds
20	appendix_i_dynamics_bounce.tex:300 PDF p.206 · read S327j	derived defect direction, completion, and radial mode --- modulo the AX1 unit	CONDITIONAL	BPS / source- completion theorem, heading: derived modulo the AX1 unit
21	appendix_i_dynamics_bounce.tex:318-320 PDF p.206 · read R78-c	$\gamma=1$ is the unique value for which $\rho_{\star}=\phi$, i.e. $\gamma=1 \Leftrightarrow$ $F=1 \Leftrightarrow$ AX1.	STATED	BPS / source- completion theorem: the unit magnitude is equivalent to AX1
22	appendix_i_dynamics_bounce.tex:332-335 PDF p.206 · read R78-c	$\text{\emph{Golden selection is a derived}}$ $\text{\emph{$\sigma$-odd-defect mechanism modulo the}}$ AX1 unit}	CONDITIONAL	Golden selection is derived modulo the AX1 unit (the unit magnitude is not derived)
23	appendix_i_dynamics_bounce.tex:406-407 PDF p.208 · read R78-c	$\text{\emph{Selected --- yes}}$ (derived σ - odd defect mechanism modulo the AX1 unit	CONDITIONAL	Honest stabilization summary: selected modulo the AX1 unit
24	appendix_i_dynamics_bounce.tex:637-641 PDF p.211 · read S327j	($\det G=7$, or $\gamma=1 \Leftrightarrow$ AX1, $\text{\ref{sec:bps}}$)	MENTIONED	Two independent routes each reduce ϕ to one named structural condition: DET-7, or $\gamma = 1$ iff AX1
25	appendix_i_dynamics_bounce.tex:939-943 PDF p.217 · read R78-c	The unit magnitude is equivalent to AX1 $\rho^2-\rho-1=0$ ($\text{\ref{sec:bps}}$); whether AX1 itself is forced by the octonion/Peirce self-similarity	STATED	Open question: is $\gamma = 1$ forced beyond AX1? (AX1 printed as $\rho^2 - \rho - 1$ $= 0$)

#	locator	quote (verbatim, TeX source)	role	argument
26	appendix_i_dynamics_bounce.tex:1022-1027 PDF p.220 · read R78-c	σ -odd unit defect the sole selector with $F=1 \rightarrow$ AX1	CONDITIONAL	Appendix I summary: the σ -odd unit defect is the sole selector, $F=1$ iff AX1
27	appendix_i_dynamics_bounce.tex:1032-1034 PDF p.220 · read R78-c	Golden vacuum $\{selection\}$ is a $\{derived\}$ σ -odd-defect mechanism $\{modulo\}$ the AX1 unit	CONDITIONAL	Honest end-state: selection derived modulo the AX1 unit
28	appendix_i_dynamics_bounce.tex:1042-1043 PDF p.220 · read R78-c	the unit magnitude is AX1, not derived from nothing	STATED	Fences: the unit magnitude is AX1
29	appendix_n_selector_fences.tex:115-116 PDF p.253 · read S327j	single golden axiom (AX1); α is not derived from it.	MENTIONED	Appendix N α fence: ϕ remains the single golden axiom; α is not derived from it
30	appendix_x_zero_parameter_input_ledger.tex:62 PDF p.319 · read S327j	Mathematical constant & AX1; no fit to particle data.	STATED	Input ledger, golden-ratio row: $\phi = (1 + \sqrt{5})/2$ is AX1; no fit to particle data

House reading notes:

- p0_framework_foundations.tex:521 — The registered statement (PRM-025 PRIMARY). The drafting lane quoted this line in the PRM-018 note (row 2) as the distinct surviving axiom.
- p0_framework_foundations.tex:621 — See the PRM-013 row at this line for the wording check.
- p4_higgs_ewsb.tex:278 — No Registrar record carries this derivation (searched).
- p7_precision_tests_falsification.tex:145 — WORDING CHECK (REV32.8 candidate, minor): the row names AX2, which p3_ckm_pmns_mixing.tex:708 prints as eliminated (D575).
- p8_junkyard.tex:303-305 — LABEL CHECK (register curation): $\cosh(2 \ln \phi) = 3/2$ is $\phi^2 + \phi^{-2} = 3$, the equation Appendix E names the DET-7 condition; here it is labelled AX1.
- appendix_h_time_bridge.tex:418-433 — LABEL CHECK (register curation), as at p8_junkyard.tex:303-305: the equation labelled AX1 here is $\phi^2 + \phi^{-2} = 3$, which Appendix E names the DET-7 condition (PRM-013). For $\rho > 1$ it holds exactly when $\rho^2 - \rho - 1 = 0$, so the label states an equivalence, not the printed form of AX1.
- appendix_h_time_bridge.tex:550-551 — LABEL CHECK: as the row above.
- appendix_i_dynamics_bounce.tex:198-200 — No Registrar record carries this reduction (searched for R_d and golden depth).
- appendix_i_dynamics_bounce.tex:318-320 — No Registrar record carries the Appendix I selection results.
- appendix_i_dynamics_bounce.tex:637-641 — The Route B of this passage is Appendix I's grading route (direction K, unit coupling): not the CKM Route B of PRM-017 and not Appendix E's Route B (PRM-024). R81-D14 records the homonyms.

Arguments that rest on it

NO RECORD declared. Under R82-d the PI ruled no edges for PRM-025: no Registrar record carries a result that assumes AX1 — a coverage gap, recorded, not a finding of independence. The suite results above that print a dependence on AX1 and have no Registrar record include the Appendix I selection theorem (derived modulo the AX1 unit), the reduction of the golden depth R_d to AX1, and the natural Yukawa $y^2 = 2/9$ of Paper 4. A search of the master for AX1 finds it in one record, and only in a lane note (LIB2-047, whose note says the source row's AX1 wording is not used at that record's locators).

What breaks without it

What the suite prints: without AX1 the golden selection of Appendix I is derived only up to the unit magnitude — the sole viable selector selects golden exactly when the golden axiom holds (appendix_i_dynamics_bounce.tex:281-293) — and whether AX1 is itself forced is printed as an open question (appendix_i_dynamics_bounce.tex:939-943). Paper 4 prints the natural Yukawa as derived from AX1 (p4_higgs_ewsb.tex:278). NOT ASSESSED — the house has not computed what fails in each of these results without AX1; this note records what the suite prints.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: none (UNKNOWN, not INDEPENDENT). R82-d (PI, S327j): no edges for this premise. The R78-c reading found no further record whose result assumes this premise.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. The roles above are house readings, not a lane's and not the PI's. No record or premise is upgraded, downgraded, or edited. Unlocated dependencies remain unknown. Two lines of Appendix H and one of Paper 8 print $\varphi^2 + \varphi^{-2} = 3$ under the label AX1; the label checks are recorded for register curation, not ruled.

Sources

TeX: p0_framework_foundations.tex:210-215; p0_framework_foundations.tex:514-515;
p0_framework_foundations.tex:521; p0_framework_foundations.tex:536-537; p0_framework_foundations.tex:538-540; p0_framework_foundations.tex:621; p0_framework_foundations.tex:635; p4_higgs_ewsb.tex:278;
p7_precision_tests_falsification.tex:145; p8_junkyard.tex:303-305; appendix_h_time_bridge.tex:418-433;
appendix_h_time_bridge.tex:550-551; appendix_i_dynamics_bounce.tex:33; appendix_i_dynamics_bounce.tex:60-61; appendix_i_dynamics_bounce.tex:66-67; appendix_i_dynamics_bounce.tex:94-96;
appendix_i_dynamics_bounce.tex:179-180; appendix_i_dynamics_bounce.tex:198-200;
appendix_i_dynamics_bounce.tex:281-293; appendix_i_dynamics_bounce.tex:300;
appendix_i_dynamics_bounce.tex:318-320; appendix_i_dynamics_bounce.tex:332-335;
appendix_i_dynamics_bounce.tex:406-407; appendix_i_dynamics_bounce.tex:637-641;
appendix_i_dynamics_bounce.tex:939-943; appendix_i_dynamics_bounce.tex:1022-1027;
appendix_i_dynamics_bounce.tex:1032-1034; appendix_i_dynamics_bounce.tex:1042-1043;
appendix_n_selector_fences.tex:115-116; appendix_x_zero_parameter_input_ledger.tex:62.

Register: PRM_REGISTER_S312.jsonl row PRM-025 (R81-D15). Ruling:

Trackers/RULING_R81_S327_PREMISE_REGISTER.md. R78-c sheet: Trackers/R78C_HOUSE_READ_75_S327.tsv.

PRM-026 · Det² selector object (historical; retired as a selector of AX6_pol)

Premise

House-drafted note (R81-D5, S327j). R81 registered this historical row so that the two objects printed under the one label AX6 stay distinct: PRM-006 is AX6_pol; this row is the Det² object. No drafting lane wrote this note: the house drafted it from its reading of every line of the suite TeX that names the Det² object, at S327j. Every quote was matched against the TeX at its locator. No lane has reviewed this note.

Registered from the suite: p4_higgs_ewsb.tex:353-355 (PDF p.73), register quality HOUSE_TRANSCRIBED, located status HISTORICAL:

The Det² object is the degree-six selector $\cos(6\psi) = \frac{1}{2}$ with its 50° branch

The TeX at those lines: The `\textbf{Det$^2$ object}` is the degree-six selector `$\cos(6\psi)=\tfrac{1}{2}$ with its  $50^\circ$  branch`

What kind of premise this is

Register kind: **POSTULATE**, located status **HISTORICAL**. In print the object is a retired selector, not a live premise: Paper 4 retires it as a selector of AX6_pol (p4_higgs_ewsb.tex:356-358), and the Appendix X input ledger lists it as a distinct object, retired (appendix_x_zero_parameter_input_ledger.tex:90). It is registered so that an earlier statement of "AX6" as $\cos 6\psi = \frac{1}{2}$ is read as this object and not as AX6_pol (p4_higgs_ewsb.tex:366-369). Source status words: a distinct, retired selector (Rev32.2) (p7_precision_tests_falsification.tex:54).

Where the suite invokes it

A house census, not a lane draft: every line of the suite TeX that names `Det$^2$` or `Det^2` (TeX comment lines excluded) falls inside one of the 9 passages below (DISCHARGED 4, MENTIONED 1, STATED 4), except appendix_a_lagrangian_derivation.tex:295 — the term λ_6 Det² of the potential V: the square of the cubic norm, not the selector object; appendix_a_lagrangian_derivation.tex:297 — the same potential term, with an external Z_2 imposed: not the selector object. Pages refer to the sealed Rev32.7 page-delimited text.

#	locator	quote (verbatim, TeX source)	role	argument
1	p1_peirce_gauge_group.tex:51 PDF p.23	the degree-six <code>Det\$^2\$ object</code> <code> \$\cos(6\psi)=\tfrac{1}{2}\$ once</code> printed under the same name is a distinct, retired selector	DISCHARGED	Paper 1: the object once printed under the name AX6 is a distinct, retired selector
2	p4_higgs_ewsb.tex:353-354 PDF p.73	The <code>\textbf{Det\$^2\$ object}</code> is the degree-six selector <code> \$\cos(6\psi)=\tfrac{1}{2}\$ with its</code> <code> 50° branch</code>	STATED	Paper 4 (Rev32.2): the Det- squared object named and defined
3	p4_higgs_ewsb.tex:354-355 PDF p.73	it is <code>\emph{not}</code> a solution of <code>AX6\$_{\rm pol}\$</code> <code> ($\tan^2 50^\circ=1.4203\neq 2.1771$)</code>	STATED	Not a solution of AX6_pol; gives 0.3099 under the weak-angle readout
4	p4_higgs_ewsb.tex:356 PDF p.73	is the sole object of A667's degree-three Galois argument	STATED	A667's degree-three Galois argument

#	locator	quote (verbatim, TeX source)	role	argument
				applies to this object only
5	p4_higgs_ewsb.tex:356-358 PDF p.73	The Det ² object is therefore $\texttt{\textbackslash textbf{retired as a selector of AX6_{\rm pol}}}$	DISCHARGED	Retired as a selector of AX6_pol; A667 remains correct for the 50 degree object only
6	p4_higgs_ewsb.tex:366-369 PDF p.73	Any earlier statement of ``AX6'' as $\cos(6\psi_\star)=\tfrac{1}{2}$ with $\psi_\star=50^\circ$ refers to the Det ² object.	STATED	Binding vocabulary (footnote): an earlier AX6 printed as $\cos 6\psi^* = 1/2$ refers to this object
7	p7_precision_tests_falsification.tex:54 PDF p.110	the Det ² object $\cos(6\psi)=\tfrac{1}{2}$ is a distinct, retired selector (Rev32.2)	DISCHARGED	Falsification map, AX6_pol row: the Det-squared object is a distinct, retired selector
8	appendix_a_lagrangian_derivation.tex:373 PDF p.143	the Det ² selector $\cos(6\psi)=\tfrac{1}{2}$ is a different object	MENTIONED	Appendix A ψ_pol frontier: the Det-squared selector is a different object from AX6_pol
9	appendix_x_zero_parameter_input_ledger.tex:90 PDF p.323	The Det ² object $\cos(6\psi)=\tfrac{1}{2}$ (50°) is a distinct object, retired as a selector of AX6 _{pol}	DISCHARGED	Input ledger, weak-angle selector row: a distinct object, retired; A667's degree argument applies to it only

House reading notes:

- p4_higgs_ewsb.tex:353-354 — The registered statement (PRM-026 PRIMARY).
- p4_higgs_ewsb.tex:356-358 — The registered DISCHARGED occurrence (PRM-026 SECONDARY).

Arguments that rest on it

NO RECORD declared. Under R82-d the PI ruled no edges for PRM-026: LIB2-249 (retired) is about this object, and its result does not rest on it.

What breaks without it

Nothing current, in print: the object is retired as a selector, and A667's degree-three argument applies to it only, so A667 does not constrain AX6_pol (p4_higgs_ewsb.tex:356-358). What the separate row protects is the reading: with

one row for both objects, an argument about this object could be read as an argument about AX6_pol. NOT ASSESSED beyond the printed disposition.

Registrar sync

Registrar state after R76, R78 and R82 (S327j, master 0e1418ad6501767d). Declared today: none (UNKNOWN, not INDEPENDENT). R82-d (PI, S327j): no edges for this premise.

Tier and what this does not show

A premise is not a result, and invocation count is not importance. A historical row is registered for the record, not as a live input. The roles above are house readings. No record or premise is upgraded, downgraded, or edited.

Sources

TeX: p1_peirce_gauge_group.tex:51; p4_higgs_ewsb.tex:353-354; p4_higgs_ewsb.tex:354-355;
p4_higgs_ewsb.tex:356; p4_higgs_ewsb.tex:356-358; p4_higgs_ewsb.tex:366-369;
p7_precision_tests_falsification.tex:54; appendix_a_lagrangian_derivation.tex:373;
appendix_x_zero_parameter_input_ledger.tex:90.

Register: PRM_REGISTER_S312.jsonl row PRM-026 (R81-D5). Ruling:
Trackers/RULING_R81_S327_PREMISE_REGISTER.md.