Apeiron Publication Gap Report

Version 2.0 · 15 September 2026 · Audited scientific endpoint 060

1. Publication boundary

SCIENTIFIC FEASIBILITY GO = TRUE; AP1_GO = FALSE. The corrected non-flat θ-source Ward test is PASS in its k = 1 scope. Complete quantitative response remains RAW_RESPONSE_EVALUATOR_METHOD_LIMIT. This release can report the bounded inherited result without pretending that the stronger scientific obligations are closed. [E01-E05, E09]

This report uses explicit statuses instead of inheriting the older ORANGE workstream label. OPEN means not established at the cutoff. METHOD_LIMIT identifies the demonstrated limitation of the connected evaluator route. Neither means a newly demonstrated physical NONPASS.

2. Closed results that remain closed

ID	Inherited result	Scope and boundary	Evidence
C01	Local physical feasibility	$\eta \in [-1/125,0]$, $k \in [5/8,5/4]$, existing compatible scalar/TT class and cold M1 pilot	E09, E03 §6
C02	Own source/state binding	Whole O049 covariance, transferred results only through full O049 = O047 identity	E10, E11
C03	First correlated portal initial-log cancellation	Compatible paired-data response, same regulator before limit and norm	E16
C04	Six-row θ history/profile error map	Existing separate source and N1 error coefficients; no complete production error PASS	E16, E29-E31
C05	Corrected θ-source Ward PASS	$\eta \in [-1/125,0]$, $k = 1$, designated once-Duhamel-corrected expression	E17, E18
C06	Finite Vi/AK parameter intervals	Existing partial input; full numerical use and width propagation still required	E19
C07	Single-time retarded-action identity	Algebraic 6 × 6 equality at common finite regulator and complete common inputs	E05 §2, E03 §3

C07 is not an additional completed AP1_GO gate. The later reviews preserve the previous closed-gate list. This report does not schedule new computations to re-establish those results.

3. Open scientific obligations

G01. Complete quantitative raw/paired-data response

Status: RAW_RESPONSE_EVALUATOR_METHOD_LIMIT. Priority: immediate scientific bottleneck.

The required full O049 evaluator has not been implemented and executed in the reviewed path. The six total response fields and the response decision are null. The limitation comprises one connected acceptance problem, not a set of already runnable small jobs. [E01-E06]

Subrequirement	Available input	Missing acceptance evidence
G01a Common history/state	Exact state name, own prefix moments, local maps and bounds	Complete certified histories, covariance and both mode transports at all required queries
G01b DC1	Fixed correction and its norm bounds	Entire E_D(s)−E_D(0), bound transports, six corrected raw pairings and errors
G01c Renormalized assembly	Fixed source, prefix, contact and boundary allocation	Complete numerical finite sum, with shared UV/regulator control
G01d N1	DO1-DO7 affine output contract	Numerical functionals/basis plus uniform weighted operator radii
G01e Error budget	Stored history, prefix, N1 and finite-parameter evidence	Complete input, evaluation, rounding, quadrature, contact, DC1 and operator account
G01f Production resolution	Authority to fix justified technical budgets before production	Concrete tolerances supported by the full account; Ward budgets cannot stand in
G01g Reference and convergence	Original obligations and bounded partial checks	Independent full-object reference and fixed refinements with controlled residuals
G01h Full scope and propagation	Six-row θ contract and algebraic 36-block formulas	All required blocks/domains plus the needed GI/constraint error propagation
G01i Cost/decision guarantee	Structural operation counts	Finite runtime, memory, precision and repetition bounds for a decision-capable run

Individual R_i values are not mandatory for operator acceptance: the permitted affine output is sufficient if its numerical functional errors are controlled. A physical tangent is needed only for individual total response numbers. Existing Vi/AK intervals are not missing physical parameters. A correlated interval evaluator may suffice; sharp central values for every small term are not an unconditional requirement. [E03, E05, E20]

A production timeout alone establishes a bounded interruption, not a guaranteed scientific decision. Numerical uncertainty or failure to evaluate an input must not be recoded as physical NONPASS.

G02. Stability beyond the local minimum

Status: OPEN. The inherited finite local GI/source/standard-response bound does not provide small amplification, complete coupled finite-frequency/parametric control or longer-time stability. The remaining stability obligation must be assessed in its own specified physical scope after the necessary response information is available. A new stability threshold is not invented by this release. [E03 §6, E09, E15]

G03. Full physical M1 early-to-present connection

Status: OPEN. The cold local pilot, a conformal time interval and an internal reference event do not amount to a complete physical early/present cosmological connection. The full mapping and required physical inputs remain to be established for the same witness. A full astronomical fit is not introduced as a new immediate prerequisite for the local feasibility statement. [E01-E03, E14, E15]

G04. Quantitative predictions and empirical tests

Status: NOT RELEASED / NOT TESTED. Quantitative prediction release follows the necessary physical connection and model acceptance. No new expansion, growth, lensing, filament or gravitational-wave template is delivered here. The appendix states conditional targets and the freeze requirements for a later test. No empirical PASS, significance, best fit or model preference is supplied. [E01-E03, B01]

G03 and G04 are bundled into one register item in the reviewed 058-060 open-gate list. Separating them here is editorial clarification, not an additional scientific gate.

4. Exactly one next reopening condition

Keep the O049 single-time route frozen until one complete executable O049 response package demonstrates uniform evaluation/reference guarantees and a finite cost bound for the quantitative gate. [E03 §6, E05 §6]

That package must actually connect the inputs, state/transports, DC1/contact composition, N1 functionals and error/reference plan. It must justify why the bounded planned computation can decide its registered acceptance conditions. Another document that merely renames those missing pieces does not satisfy the condition.

This release makes no production run request and supplies no conjectural runtime. The immediate condition does not imply that G02-G04 would then automatically be satisfied.

5. Historical and separate-branch limits

Historical item	Treatment	What does not follow
ORANGE/G32 summaries	Superseded current-status text; original bytes archived	No current reversion to an early program status
R195-specific modes/results	Historical state-specific evidence	No transfer to O049 without a full identity
Non-flat fixed-rho NONPASS	Retained historical result for its contract	No retroactive PASS from compatible initial response
AP1_GO-078/077 scope declarations	Superseded for this selected publication endpoint	No formal AP1_GO at 060
v7.13 map and partial independent reproduction	Frozen independent numerical history	No completion of O049 response or continuum reproduction

Historical item	Treatment	What does not follow
Black-hole reconversion branch GO	Archived separate-branch statement	No additional GO imported into the 060 publication basis

The archival file names and internal statuses remain unchanged. Their preservation is not an endorsement as current publication claims.

6. Editorial and administrative status

Item	Release treatment
Unified main manuscript	New v2.0 text with a single scientific endpoint
Claims, model contract, appendix and statement	Aligned to 060 and linked to evidence IDs
Historical record	Both complete input ZIPs preserved; file-by-file migration ledger supplied
Website	Four-language replacement copy and route/migration instructions prepared
Live deployment	Not performed by this release
Provenance	Source index, version/status matrix, manifest and hashes supplied
Independent physics reproduction	Not performed; inherited review limits disclosed
Priority	Versioned content record; no verified first public-disclosure date inferred
Venue, license and author declarations	No new choice or declaration invented
DOI, deposit, submission and peer review	No new completion claimed

The source package is sufficient for this bounded editorial consolidation. It is not advertised as the whole ancestral research library or a self-contained full-response simulator. Original reports may refer to external project files; the source index distinguishes bundled evidence from such references.

7. Final status

The publication gap caused by inconsistent current-facing language is addressed by the new release documents. The scientific evaluator gap remains explicitly open. SCIENTIFIC FEASIBILITY GO = TRUE and AP1_GO = FALSE are both required parts of the release statement; neither cancels the other.