

# CQE – Frontpage Explainer

CQE – Commit, Quantize, Explain

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What CQE is

- A disciplined reasoning+execution loop that turns messy work into reproducible receipts.
- Spine: Stand-ins → DNA-10 → Octet overlays (8 views) → Palindromic Mirror test → Δ-lift (local repair) → Strict ratchet → 4-bit commit → Receipts.
- Geometry is governance: we use 4/8/64 “wrapping” themes and parity (mirror) to prevent form is fixed, meaning is provisional until it passes.

Why it works

- 1) Coverage without bloat: the Octet forces 8 materially independent views, not just A/B/C.
- 2) Bias deletion: forward $\leftrightarrow$ inverse≈identity (mirror) must hold within set tolerances.
- 3) Safe repair:  $\Delta$ -lifts are small, monotone fixes; if they regress other views, they’re rejected.
- 4) Maturity by numbers: strict thresholds only tighten after a pass—no backsliding.
- 5) Receipts over vibes: every pass yields a tiny 4-bit code + hashes + debt/vote tallies.

The 4/8/64 pattern (at a glance)

- 4 bits → minimal receipt for a job; 4 gates in the “hinge” ( $n=4$ ) that force an octet
- 8 views → the Octet overlay (H1...H8) you must pass; generates stable geometry (E8 slices)
- 64 lanes → sidecars (domain mini-labs) you can light up as needed; each runs the same

What you actually do (the 7 Gates, G0 $\rightarrow$ G6)

- G0 Tokens – Write stand-in tokens for quantities (units, guards, ranges). No semantics.
- G1 DNA-10 – Save state: [timing, polarity, scale, pose, domain, conditioning, units, precision, cost, seed].
- G2 Octet – Lay 8 views (methods/slices/regimes). Aim for independence, not repeats.
- G3 Mirror – Run forward $\leftrightarrow$ inverse or swapped-order replay; demand palindromic rest.
- G4  $\Delta$ -lift – Apply at most one local, monotone repair per failing view; rerun non-regressed.
- G5 Strict – Tighten thresholds only after success; record the new bound.
- G6 Receipt – Log OPE/FCE “debt,” mirror/ view votes, tiny 4-bit code, page/Merkle hash.

What goes into the Ledger

- Form pack: construction (e.g., Code+Glue), automorphism ID (M24/Monster-class), octet thresholds, DNA-10.
- Meaning pack: the current token set (domain semantics). This stays provisional until
- Commit pack: four-bit code + receipts; enough to replay the job 1:1 anywhere.

Sidecars (examples; turn on what matters)

OPTICS, THERMAL, POLAR, EM\_FIELD, SPINTRONICS\_Q, BIO\_COHERENCE, CHEM\_KINETICS, GEO\_FLUIDS, FIN\_RISK, ROBOT\_KIN, MATH/UNITS, CONTROL, PLASMA, ACOUSTICS, COSMOS, INFO/THERMO ... up to

Color/Marks (paper kit)

Gray = rest box; 8 hues = views; Red =  $\Delta$ -lift; Gold = strict; Blue = receipts. Four little squares = 4-bit.

### How to start (15-minute quickstart)

- 1) Pick a problem; write 6–12 stand-in tokens with units/guards.
- 2) Draft an Octet of views; avoid near-duplicates.
- 3) Define a mirror test (forward↔inverse, or train↔eval swap).
- 4) Run; apply at most one  $\Delta$ -lift; tighten strict; log a 4-bit receipt.
- 5) If something fails, annihilate the path (log a breadcrumb) and try a different  $\Delta$ -lift.

### Safety & redaction

- Bind meaning only after commit; redact field-specific sensitive steps; keep receipts
- “Some results redacted for safety” is acceptable—receipts still prove the pass.

### Tagline

Code → Lattice → Overlay → Mirror → Commit. Form is fixed; meaning earns its place.