

The Game — Extended (CQE Ledgering with Cards)

1. Components

- Decks: 4 standard 52-card decks, each with 2 Jokers (1 red, 1 black). Total: 216 cards.
- Stations: 4 playfields (S1–S4), each using 1 deck at a time.
- Grid: Each station uses a 4×4 cell grid as base coordinates.
- Tower: A vertical stack at grid center for faces (A, J, Q, K).

2. Operators and Encoding

- Suits → Geometry
- ♦ Diamonds = Alena lines (direct projection)
- ♣ Clubs = triad arrows (directional braids)
- ♥ Hearts = ϕ -intersections (dual witness points)
- ♠ Spades = apex of triads (closure tips)
- Colors → Parity
- Red (♦, ♥) = positive channel
- Black (♣, ♠) = negative channel
- Ranks → Ledger Tokens
- 1–10 = numeric ledger steps
- J = witness parity
- Q = quantitative mass
- K = binary reflection
- A = root rest (1/11 superposed)
- Jokers → Glue Operators
- 2 per deck (1 red, 1 black).
- Each usable once per deck.
- Authorize flips only when building Outward Mirrored Parity Set (OMPS).
- Sit at centroid of OMPS, binding geometry.
- Record origin braid trace when consumed.

3. Placement Rules

- ϕ -Rotation Order: Place cards sequentially at angle $\theta_{\blacksquare} = \theta_{\blacksquare} + k \cdot 137.507^\circ \pmod{360}$. Select nearest empty grid cell.
- Ring Completion: After 16 placements (full ring), stack a face card in tower: A→J→Q→K, alternating red/black by ring parity.

- Contradiction → Snap: If red/black conflict occurs, attempt snap. Flip-Gate: no flip allowed unless OMPS is complete with a matching Joker. Jokers are consumed at $r \equiv 0 \pmod{8}$ only.

4. OMPS (Oblong Mirror Parity Set)

- Defined for card c :
- Mirror mate $M(c)$ = center reflection, color/suit dual, rank $v' = 11-v$.
- Axis-flipped copies of c and $M(c)$.
- Forms an oblong of 4 cards.
- Joker sits at centroid, binding geometry.
- Special case: Ace/10 complements → two “1!!1” bonds flagged in ledger.

5. Ledgering

- Every placement recorded as: $k, r, (x,y), \theta, \text{suit}, \text{color}, \text{rank}, \text{snap}, \text{flip}, \text{joker}, \text{omps_hash}, \text{superpos_1!!1}$
- Jokers add: $\text{joker: true}, \text{joker_color: red|black}, \text{deck_id}, \text{origin_braid_id}, \text{omps_pose_hash}$

6. Cross-Station Protocol

- Seeds: $S1 \theta = 0^\circ, S2=45^\circ, S3=90^\circ, S4=135^\circ$.
- Ledger requirement: run 24 rings per station.
- Alignment: after play, compare stations. A single rotation (Procrustes fit) must align placements between stations with $\text{RMS} < 0.05$ cells and edge-direction $\text{KL} < 0.1$.
- Mirrors: if only a mirror alignment works, classify as mirrored pose.

7. Space Extension (3D/10D)

- If 2D grid fills: Extend to 3D, tower height = z-axis.
- Pose equivalence: any local slice that aligns (single rotation) to known pose is valid.
- Jokers can act as placeholders to witness unexpanded slices.
- 10D encoding (for harness testing): $(x,y,z) + \text{suit simplex} + \text{color parity} + \text{rank normalized} + \text{deck/back ID} + \text{ring phase}$.

8. Validation Gates

- ϕ -gap tolerance $\leq 7^\circ$ (freehand) or $\leq 3^\circ$ (stenciled).
- Energy monotone: $E_{\blacksquare\blacksquare\blacksquare} \leq E_{\blacksquare}$.
- Joker use: max 1 red + 1 black per deck.
- OMPS must be pose-consistent before flip.
- All 24-ring runs align into 8 invariant pose classes by single rotation.

9. Falsifiers

- Flip attempted without Joker → illegal.
- Joker reused → illegal.
- OMPS not mirror-consistent → fail.
- 1!!1 flagged without Ace/10 complement → invalid.
- Station fails alignment with all 8 pose classes → system incomplete.

10. End Condition

- A station completes 24 rings with all Jokers consumed.
- Alignment verified across all stations.
- Ledger satisfies 1–64–1 cycle.
- At this point, the game produces a material slice consistent with an E8/24D lattice by method, not identity.