

# The Game — Rules Wall

*Objects • Encodings • Operators • Rings • CRT*

## Objects and Encodings

- Decks:  $4 \times (52 + 2 \text{ Jokers}) = 216$  cards
- Stations: four  $4 \times 4$  grids ( $\theta \blacksquare = 0^\circ, 45^\circ, 90^\circ, 135^\circ$ )
- Suits:  $\diamond$  invariant,  $\clubsuit$  triad,  $\heartsuit$   $\phi$ -intersection,  $\spadesuit$  apex
- Colors: red(+), black(−) parity
- Ranks: 2–10 tokens; A/J/Q/K operators

## Operators

$P\phi$	Place by golden-angle neighborhood
S	Snap contradiction; energy nonincreasing
F	Flip only with OMPS + Joker
G	Joker glue; single-use per deck-color; idempotent
M	Mirror: center reflect; color flip; $r \rightarrow 11 - r$
T	Tower: $A \rightarrow J \rightarrow Q \rightarrow K$ at ring end

## Rings and CRT

$24 = \text{lcm}(2, 3, 4, 6, 8) = 3 \times 8$  with  $\text{gcd}(3, 8) = 1$ . (mod 3, mod 8) addresses each ring exactly once; Joker gates at  $r=8, 16, 24$ .

Ring	Suit	Parity	m2	m3	m4	m6	m8
1	$\diamond$	Red(+)	1	1	1	1	1
2	$\diamond$	Black(−)	0	2	2	2	2
3	$\diamond$	Red(+)	1	0	3	3	3
4	$\diamond$	Black(−)	0	1	0	4	4
5	$\diamond$	Red(+)	1	2	1	5	5

6	♦	Black(-)	0	0	2	0	6
7	♣	Red(+)	1	1	3	1	7
8	♣	Black(-)	0	2	0	2	0
9	♣	Red(+)	1	0	1	3	1
10	♣	Black(-)	0	1	2	4	2
11	♣	Red(+)	1	2	3	5	3
12	♣	Black(-)	0	0	0	0	4
13	♥	Red(+)	1	1	1	1	5
14	♥	Black(-)	0	2	2	2	6
15	♥	Red(+)	1	0	3	3	7
16	♥	Black(-)	0	1	0	4	0
17	♥	Red(+)	1	2	1	5	1
18	♥	Black(-)	0	0	2	0	2
19	♠	Red(+)	1	1	3	1	3
20	♠	Black(-)	0	2	0	2	4
21	♠	Red(+)	1	0	1	3	5
22	♠	Black(-)	0	1	2	4	6
23	♠	Red(+)	1	2	3	5	7
24	♠	Black(-)	0	0	0	0	0