

Consciousness Modality (CM)

Operational Definition v2.1

1. Core Axioms

Definition 1.1 (CM-Axiom 1). *A system exhibits CM iff $\exists \gamma \in [0, 1]$ such that modulating γ produces measurable integration changes.*

Definition 1.2 (CM-Axiom 2). *CM onset: transition from $F1_IG \leq 0$ to $F1_IG > 0$.*

2. Claim Definitions

CLAIM_A: crossing \wedge max_onset $\geq P_PASS \wedge \min_inadeq \leq 0.10$

CLAIM_B: CLAIM_A $\wedge \exists \gamma: robust_pass$

CLAIM_B+: CLAIM_A $\wedge \exists \gamma: robust_pass_strong$

CLAIM_C: CLAIM_B satisfied \wedge selective_all exists

3. Parameters

| Parameter | Value | Role |
|-----------------|-------|---------------------|
| θ_{lead} | 0.0 | Meta-lead threshold |
| θ_{rec} | 0.0 | Recovery threshold |
| P_{PASS} | 0.30 | Onset pass |
| R_{PASS} | 0.15 | Robust pass |
| R_{STRONG} | 0.05 | Strong pass |

4. Falsifiability

CM claims are falsifiable when:

1. No crossing detected
2. Onset rate below P_FAIL
3. LCB below thresholds
4. Non-selective collapse