

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: $\text{crossing} \wedge \text{max_onset} \geq \text{P_PASS} \wedge \text{min_inadeq} \leq 0.10$

CLAIM_B: $\text{CLAIM_A} \wedge \exists \gamma: \text{robust_pass}$

CLAIM_B+: $\text{CLAIM_A} \wedge \exists \gamma: \text{robust_pass_strong}$

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