SAP GLOSSARY

-Canonical Definitions of SAP Primitives and Terms

Layer (L)

The structural altitude at which a problem exists. Three categories: **substrate**, **representation**, **abstraction**. Determines the correct reasoning mode and architectural match.

Layer Correctness (LC)

Verification that the problem is framed at the correct structural layer. If incorrect, SAP halts until corrected.

Invariant (I)

A generative constraint that defines the structure of the problem. Must be identifiable without math or formalism. Determines the problem's true shape.

Cognitive Architecture (A)

The researcher's internal reasoning structure. Evaluated for coherence, stability, and layer compatibility.

Alignment (A ≅ (L, I))

A state in which the researcher's cognitive architecture matches the problem's layer and invariants. Required for continued engagement.

Misalignment (A ≇ (L, I))

A mismatch between architecture, layer, or invariants. Triggers exit conditions.

Drift (Δ)

Deviation from correct structure. Forms: layer drift, invariant drift, formalism drift, narrative drift, altitude drift.

Exit Condition (X)

Structural trigger for removal from the problem. Activated by failure of any gate or long-term non-movement.

Structural Lead (SL)

The invariant-sensitive architect responsible for executing SAP. Determines layer correctness, evaluates invariants, assesses architecture, and triggers exit.

Invariant Gate (G_1)

First gate. Researcher must identify generative invariants without math. Failure → immediate exit.

Layer Gate (G_2)

Second gate. Architecture must match the problem's layer. Failure → exit.

Architecture Gate (G_3)

Third gate. Architecture must be coherent and stable across layers. Failure → exit.

Drift Gate (G_4)

Fourth gate. Researcher must not induce drift. Failure → exit.

Aligned

A researcher who passes all four gates. Forms part of the self-solving system.

Self-Solving System

A state in which all remaining researchers are aligned, invariants stabilize, drift collapses, and the problem resolves through structural coherence rather than management.

Orbit (T)

Long-term non-movement window (5–10 years). Exceeding this duration triggers exit.

SAP Sequence

Ordered execution of LC → G_1 → G_2 → G_3 → G_4 → Alignment → Stabilization.

SAP Membrane

The boundary that protects the protocol from drift, misinterpretation, and altitude collapse. Maintained by the Structural Lead.