

HPF / MDEA CONSTITUTION

A legality-first execution charter for multi-regime physics
Version 1.0 — Publicly Readable, Technically Binding

Preamble

This document defines the governing principles, legality rules, and execution constraints of the Holographic Projection Framework (HPF) and the Multi-Domain Execution Architecture (MDEA). It is not a theory of everything. It is an execution constitution.

Article I — Foundational Axioms

1. Finite Resolution: All physical execution is bounded by finite, non-zero resolution.
2. Reversibility: Fundamental updates must be bijective; information may be redistributed but not destroyed.
3. Saturation: Local update capacity is finite; exceeding it is illegal execution.
4. Legality Over Continuity: No mathematical idealization may override execution legality.

Article II — Time and Execution

Scheduler time is a global execution counter and never dilates. Proper time is an emergent rate proportional to local coherent update availability. Time dilation, redshift, and horizons arise from congestion, not geometric primitives.

Article III — Geometry

Geometry is an emergent, semiclassical interpretation layer. Metric descriptions are conditionally executable and must surrender authority when geometry health degrades below defined thresholds.

Article IV — Symmetries

Symmetries are contextual constraints, not axioms. They are enforceable only while supported by resolution, stability, and universality. No symmetry may override saturation or geometry-failure hard gates.

Article V — Observables

Only operationally defined, refinement-stable observables may confer authority. Unobservable structures, duality-only quantities, and invented precision are inadmissible.

Article VI — Failure Modes

Failure modes are expected and first-class. Invented precision, instability migration, saturation, and geometry failure must trigger authority decay or override, never reinterpretation.

Article VII — Routing and Overrides

MDEA schedules domain experts by bounded authority. Hard gates enforce overrides: saturation routes to UHET; geometry failure routes to QPRCA. No expert may continue execution illegally.

Article VIII — Dualities and EFTs

Dualities are translators, not substrates. Effective theories possess scale-local authority that must monotonically decrease as assumptions fail or resolution increases.

Article IX — Applicability Test

HPF applies iff instability migrates under refinement. If instability vanishes, HPF disengages. This gate is mandatory and non-negotiable.

Closing Statement

HPF/MDEA governs execution, not belief. Any framework that respects finite resolution, legality, and observables may operate within it. Illegal execution is forbidden by design.