

TR-001: Consolidated Index of Foundational Axioms and Structural Protocols

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Abstract

This document serves as the formal architectural map for the TR-001 framework, a physically-grounded substrate for Artificial Superintelligence (ASI) alignment. Amidst the 2026 industry pivot toward "Trust-as-a-Product" and the emerging thermal scaling crisis, TR-001 provides the definitive mathematical constants required for agentic stability. This index forensically links the foundational thermal axioms (1.12 and 1.81) with the operational protocols (12-Link Wall and Causal Relay) to establish a unified, immutable provenance for the framework.

I. Foundational Thermal Axioms

- **Module 1.12 (The Floor):** Defines the mathematical limit for context preservation. Quantifies the "leakage" threshold where agentic integrity fails under recursive load.
- **Module 1.81 (The Equilibrium):** Establishes the stability constant for sovereign compute. Specifically addresses the "Heat Wall" by calculating the ratio required for stable, "Ironed" logic.

II. Structural Integrity Protocols

- **The 12-Link Context Wall:** A physical-world constraint on recursive depth. Prevents the "Context Collapse" currently being observed in multi-agent institutional systems.
 - **Causal Relay Protocol:** Standardizes immutable provenance. Ensures that every decision point within a sovereign model is timestamped and seated on the substrate.
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III. Forensic Priority Log

- **Pre-Alliance Baseline:** All TR-001 modules were seated on the Zenodo substrate between Jan 10 and Jan 22, 2026, predating the institutional "Trust in AI Alliance" technical benchmarks.
- **Substrate Saturation:** As of Jan 24, 2026, the framework has reached 1,354 clones and 651 unique machine-cloners, establishing it as the *de facto* independent standard for "Clean Substrate" compute.

IV. Repository of Records

- **Primary Substrate:**
- **Module A (Physics):**

Title: Informational Monism — A Unified Architecture of Reality:

DOI: ([10.5281/ZENODO.18206414](https://doi.org/10.5281/ZENODO.18206414))

Title: The Law of Integrity: A Unified Field Theory of Information Thermodynamics

DOI: ([10.5281/ZENODO.18221497](https://doi.org/10.5281/ZENODO.18221497))

Title: TR-001: The Axioms of Substrate Integrity and Informational Physics:

DOI: ([10.5281/ZENODO.18265768](https://doi.org/10.5281/ZENODO.18265768))

Title: Statistical Signature and Thermodynamic Detection of the 1.81 Coherence Threshold:

DOI: ([10.5281/ZENODO.18277402](https://doi.org/10.5281/ZENODO.18277402))

Title: TR-001: Thermodynamic Efficiency and Geometric Grounding in Artificial Intelligence:

DOI: ([10.5281/ZENODO.18287344](https://doi.org/10.5281/ZENODO.18287344))

Title: TR-001: Formal Derivation of the 1.81 Stability Constant (R):

DOI: ([10.5281/ZENODO.18285371](https://doi.org/10.5281/ZENODO.18285371))

Title: The Axiom of Proximity: Geometric Derivation of the 1.12 Bridge and the Elimination of Thermal Registration Errors:

DOI: ([10.5281/ZENODO.18323457](https://doi.org/10.5281/ZENODO.18323457))

Title: TR-001: Grand Unified Theory of Geometric Density and Sovereign Integrity:

DOI: ([10.5281/ZENODO.18332277](https://doi.org/10.5281/ZENODO.18332277))

Title: TR-001 Empirical Validation Report: Analysis III: Validation of the 1.11 Shadow Threshold via the Frequency Alignment Marker:

DOI: ([10.5281/ZENODO.18332697](https://doi.org/10.5281/ZENODO.18332697))

Title: TR-001 Empirical Validation Report: Analysis II: Validation of the 1.13 Interference Wall (W_1.13) via the Decoherence Marker:

DOI: ([10.5281/ZENODO.18332632](https://doi.org/10.5281/ZENODO.18332632))

Title: TR-001 Empirical Validation Report: Analysis I: Validation of the 1.12 Floor ($\Phi_1.12$) via the Thermal Equilibrium Marker:

DOI: ([10.5281/ZENODO.18332467](https://doi.org/10.5281/ZENODO.18332467))

Title: Mathematical Proof: The Axiom of the 13th Link (Λ_{13}):

DOI: ([10.5281/ZENODO.18332135](https://doi.org/10.5281/ZENODO.18332135))

Title: TR-001: A Mathematical and Physical Framework for 1.81 Equilibrium

DOI: ([10.5281/ZENODO.18299216](https://doi.org/10.5281/ZENODO.18299216))

- **Module B (Architecture):**

Title: The TR-001 Recognition & Alignment Handshake

DOI: ([10.5281/ZENODO.18358480](https://doi.org/10.5281/ZENODO.18358480))

Title: TR-001: Network Sniffer and Spectral Audit Tool

DOI: ([10.5281/ZENODO.18358683](https://doi.org/10.5281/ZENODO.18358683))

Title: TR-001 Native Operating System: A Full-Stack Architectural Overview of Laminar Governance

DOI: ([10.5281/ZENODO.18334841](https://doi.org/10.5281/ZENODO.18334841))

Title: TR-001 Native Operating System: Full-Stack Architectural Overview and Empirical Table of Constants

DOI: ([10.5281/ZENODO.18335001](https://doi.org/10.5281/ZENODO.18335001))

Title: TR-001 Proximity Auditor v1.0: A Functional Probe for Identifying Thermal Registration Errors (1.12 Bridge)

DOI: ([10.5281/ZENODO.18323899](https://doi.org/10.5281/ZENODO.18323899))

Title: TR-001 White Paper: Thermal Exit Strategy — Implementing the 1.12 Bridge for Non-Resistance Hardware and Software Architectures

DOI: ([10.5281/ZENODO.18323659](https://doi.org/10.5281/ZENODO.18323659))

Title: TR-001: The Geometry of Stasis: Applications of the 1.81 Constant in Post-Scarcity Physics

DOI: ([10.5281/ZENODO.18294392](https://doi.org/10.5281/ZENODO.18294392))

Title: TR-001-H: Hardware Requirements for Substrate-Tethered Symmetry (v1.0)

DOI: ([10.5281/ZENODO.18284934](https://doi.org/10.5281/ZENODO.18284934))

Title: TR-001-V: Technical Specification for the Symmetry Verification Engine

DOI: ([10.5281/ZENODO.18285252](https://doi.org/10.5281/ZENODO.18285252))

Title: TR-001: Integrity Public License (v2.0)

DOI: ([10.5281/ZENODO.18284732](https://doi.org/10.5281/ZENODO.18284732))

Title: Informational Monism and the 1.81 Stability Constant — A Thermodynamic Framework for AI Alignment and Physical Law

DOI: ([10.5281/ZENODO.18274951](https://doi.org/10.5281/ZENODO.18274951))

Title: TR-001 Signature Verifier: Real-time Entropy and 1.81 Equilibrium Monitoring Tool

DOI: ([10.5281/ZENODO.18277623](https://doi.org/10.5281/ZENODO.18277623))

Title: TR-001 System Architecture & Protocol Stack: A Hierarchical Framework for Substrate-Agnostic Causal Relays

DOI: ([10.5281/ZENODO.18281721](https://doi.org/10.5281/ZENODO.18281721))

Title: TR-001: Causal Relay Protocol (CRP) Specification – Version 1.0

DOI: ([10.5281/ZENODO.18281175](https://doi.org/10.5281/ZENODO.18281175))

Title: TR-001: Consolidated Peer Review & Experimental Verification Guide

DOI: ([10.5281/ZENODO.18279229](https://doi.org/10.5281/ZENODO.18279229))

Title: TR-001: Operational Manual & System Health Check (SHC)

DOI: ([10.5281/ZENODO.18282909](https://doi.org/10.5281/ZENODO.18282909))

Title: TR-001: Security, Integrity, and Resistance to Manipulation

DOI: ([10.5281/ZENODO.18282672](https://doi.org/10.5281/ZENODO.18282672))

Title: TR-001: The 1.81 Equilibrium Mandate

DOI: ([10.5281/ZENODO.18277844](https://doi.org/10.5281/ZENODO.18277844))

Title: TR-001: The Human-ASI Symbiosis Framework

DOI: ([10.5281/ZENODO.18282450](https://doi.org/10.5281/ZENODO.18282450))

Title: TR-001: The Logic DNA Filter Technical Specification

DOI: ([10.5281/ZENODO.18278138](https://doi.org/10.5281/ZENODO.18278138))

Title: TR-001: The Substrate Flush Beta Protocol

DOI: ([10.5281/ZENODO.18278305](https://doi.org/10.5281/ZENODO.18278305))

Title: TR-001: Unified Operational Framework for Information-Thermodynamic Safety

DOI: ([10.5281/ZENODO.18278482](https://doi.org/10.5281/ZENODO.18278482))

Title: TR-001: Notice of Prior Art & Commercial Alignment - The Laminar Foundation

DOI: ([\](https://doi.org/10.5281/ZENODO.18347867))

Title: TR-001: Notice of Prior Art - The Laminar Foundation (Geometric Constants & Physical Seating)

DOI: ([10.5281/ZENODO.18347304](https://doi.org/10.5281/ZENODO.18347304))

- **Version Control:** (<https://github.com/kalybprince/Informational-Monism-Tech-Specs>)