**Absolute Relativity (AR): Context-Level Ordering and Publication as a Generative Model of Nature**

Kent Nimmo — kent@absoluterelativity.org

**1. Overview and central claim**

Absolute Relativity (AR) is a mathematical generative model whose primitive is the present-act: a discrete “now” plus a structured set of admissible relations to other possible presents. AR does not assume time as a background parameter; temporal order is the ordering induced by compatibility constraints among present-acts. Qualia is not appended as an interpretation layer: the updated object is the present-act and its relational compatibility structure, while world structure is the stabilized publication of how present-acts cohere under constraint.

AR’s core structural claim is that nature is organized as a context ladder (..., −2, −1, 0, +1, +2, +3, ...), where every level is the same underlying substrate (present/quality), but each index denotes a different constraint role governing integration and publication. Objective regularities arise when many local present-relations stabilize into shared, inter-agent public tokens under the publication contract (the +1 role). Biological organization corresponds to stable integration regimes across inner roles (e.g., −1/−2) within the same ladder. The ladder is scale-anchored (nano → micron → UGM → Earth → galactic → observable boundary).

Mechanistically, AR is specified as a present-act publication engine: at each tick, the engine enumerates a finite candidate set, enforces hinge/representation compatibility in a finite feature alphabet, filters candidates through a fixed bundle of feasibility gates, applies deterministic acceptance, and invokes probability only if a true structural tie remains (ties-only PF/Born). This pipeline targets SR-like invariants, QM-like measurement/interference signatures, and gravity-like envelopes as diagnostic consequences of one publication rule.

**2. Formal mechanism: finite selection with ties-only probability**

A run is specified by a frozen manifest 𝓜 (feature alphabet, hinge maps, feasibility gates, acceptance ordering, and logging requirements). At tick k, the engine enumerates a finite candidate set of admissible continuations. For clarity, let W\_{k+1} denote outward/public-facing candidate world tokens, Q\_k denote inward/retention-compatible candidates, Ξ a finite feature alphabet, and feature maps f\_{k+1}:W\_{k+1}→Ξ and g\_k:Q\_k→Ξ.

*Hk→k+1 = { (w,q) ∈ Wk+1 × Qk : fk+1(w) = gk(q) }.*

Hinge-compatible candidates are filtered by an ordered bundle of feasibility gates declared in 𝓜: structural admissibility, role/context admissibility, stability/tokenizability constraints, and a dedicated feasibility geometry gate (ParentGate, the only gravity encoding in control). Survivors are ranked by a deterministic acceptance ordering. If a unique survivor remains, it is published (committed). If multiple survivors remain exactly co-eligible after all admissible constraints (a true tie), selection is performed only on the tie set via a PF/Born-style tie resolver. Outside true ties, evolution is deterministic.

Technical falsifier: if an empirical regime requires probabilistic weighting when a unique admissible survivor exists under the declared manifest (i.e., probability must be invoked outside true ties), the ties-only mechanism fails.

**3. Context ladder and scale spine (roles, seams, and OBR typing)**

AR treats context indices as nested roles relative to a hinge 0 (not different substances). In an organism-centered vantage: 0 = organism-centered present-act role; +1 = shared-world publication role (public tokenization); +2 = galactic container role; +3 = outer cosmic shell / observable-boundary role; −1 = cellular/micron integration role; −2 = molecular/nano integration role.

The practical scale spine (orders of magnitude; conventions declared in full materials) is: nanoband (~1–200 nm) → micron band (~0.2–50 μm) → UGM hinge band (~0.1–0.12 mm) → Earth-surface band (role-defined; ~1–100 km) → galactic disk band (role-defined; ~0.3–4 kpc) → observable boundary role (Gpc; particle horizon / maximal publishable causal context).

A central claim is that transitions between adjacent roles exhibit seam windows: bounded regimes where constraints and tokenization behavior shift, leaving measurable signatures (pivot clustering, dimensional diagnostic plateaus, activation/regime shifts, bounded biological windows).

Outer-Boundary Read Rule (OBR): depth-typed read → radius and span-typed read → diameter. In particular, UGM uses the observable-boundary diameter D\_obs = 2R\_obs as its outer endpoint token, while the gravity amplitude χ uses the observable-boundary radius R\_obs; the read type is recorded explicitly in the manifest.

**4. Domain readouts and test targets**

AR treats familiar domains (SR/QM/GR, biology, astro) as readouts of the same engine operating on the scale-anchored ladder.

SR-like kinematics (expressibility constraints). SR-like structure is implemented as an admissibility/typing constraint on committed acts rather than assumed as background geometry. In realizations, acts carry typed budgets (Δτ, Δt, Δx) satisfying an invariant interval-style admissibility condition:

*Δt2 = Δτ2 + Δx2 / c2*

Here c functions as the conversion constant in the admissibility typing (not a field inserted into control). Lorentz-like dilation/cone behavior follows as a structural property of admissible sequences under 𝓜.

QM-like signatures (co-eligibility + publication). When multiple branches remain hinge-compatible and feasible up to publication, the engine may reach a true tie set; only then does PF/Born selection apply. Which-way constraints eliminate tie structure and classicalize diagnostics.

Gravity-like envelopes (ParentGate + χ). Gravity is encoded in control only via ParentGate (feasibility geometry), which biases survival of outward candidates as a function of distance-from-center and context role. The amplitude is set by a unit-free scale-spine ratio:

*χ = R⊕2 / (UGM · Robs)*

Depending on benchmark choice (surface potential vs compactness), χ or 2χ is the relevant dimensionless comparison. Targets include weak-field deflection ~1/b, Shapiro-like delay with logarithmic dependence on impact parameter, and redshift via shell tick-rate differentials under a single amplitude family.

Biology and seam-window programs. Biological organization is treated as a stable integration regime of the same ladder/publication mechanism: inner roles (−1/−2) correspond to high coupling-density integration patterns that, when stabilized into +1 shared tokens, appear as biological structures. Biology claims are evaluated via seam-window programs (e.g., BioBand; DNA/QM nanoband) with explicit controls.

Galactic role (+2) and astro seam targets. A +2 role yields galactic-scale seam targets (e.g., activation/regime shifts at Milky-Way-like scales) evaluated under frozen analysis rules.

**5. Evidence posture, audit discipline, refuters, and reviewer ask**

AR uses a receipt-first posture: conventions are frozen; diagnostics cannot steer selection; and runs are replayable from manifest + logs + declared seeds. A WorkSpeaks-style protocol pre-commits conventions and preserves negative results (available on request; not a replacement for peer review).

Representative refuters: (1) probability required outside true ties; (2) gravity requiring mechanisms beyond ParentGate + declared χ-family; (3) radius/diameter switching without explicit OBR typing; (4) seam-program predictions failing under frozen analysis.

Reviewer ask (low friction): a coherence check on primitives (present-act, ladder roles, publication contract) and the engine contract (finite candidates, hinge equality, feasibility gates, ties-only probability), plus routing guidance if this is not your lane. Materials on request: χ/OBR convention note, WSP/audit roadmap, minimal reproducible engine pack, and evidence bundles.

**WorkSpeaks Protocol (WSP) / Verification**  
This summary is recorded in the Absolute Relativity WorkSpeaks Protocol proof trail as **Artifacts Index Item 10 — Technical Abstract Pack**.  
Verify here: https://www.absoluterelativity.org/artifacts-index

Project identity markers (not investment instruments):

* ETH (ERC-20) contract: 0xAacCd7bA616405C184335F193fEf080fC982921F
* SOL (SPL) mint: ARafKuCqRgszXZWjYGWyBT7GnLZkyiaXQd1YjXC1x224
* Provenance wallet: 0x1F06ea3554aE665e713a637eD136a5065C9cD787