Ontology of the Simulated Universe (OSIU) — Call for Collaborators

v0.5 Outreach Package • Moral–Informational Dynamics, Causal-Loop Cosmology, Computational Simulations

Project Lead: Joshua Hickerson (Independent Researcher)

1) Purpose in One Paragraph

OSIU proposes a metaphysical architecture where physics, consciousness, and ethics are dual projections of structured information. Cosmology is modeled as a closed causal loop (torus topology), and morality is operationalized as entropy management via a moral gradient M(t). Version 0.5 consolidates critiques by reframing equations as testable dynamics, introducing a Phenomenal Projection operator (Φ) and a Manifold Fitness function (Ω), and providing an open simulation stack for exploratory falsification.

2) What We're Building (Now)

• A lightweight simulation sandbox (Python) for κ, σ, ρ, φ dynamics and computed M(t) under shocks and interventions.

• A data-mapping layer: practical proxies for the moral–informational variables against public datasets.

• Falsifiable correlational signatures: stability vs. entropy flux; responsiveness vs. volatility; diversity vs. resilience.

• Figures & explainers: torus cosmology plates (academic captions) and public-facing diagrams.

3) Roles We're Seeking

Math & Theory — Normalize/derive the placeholder ODEs; propose Lyapunov or free-energy functionals; analyze fixed points and stability.

Simulation Engineering — Parameter sweeps, reproducibility, experiment registry; CI-ready notebooks.

Data & Empirics — Proxy design, ETL, cleaning; basic statistics for correlation testing and robustness checks.

Visualization — Publication-grade plots; interactive figures for public posts and OSF.

Philosophy Editor — Short-form briefs for philosophers and public reviewers; terminology coherence.

We welcome critical collaborators. The frame is metaphysical; the agenda is empirical traction.

4) Data Mapping: Variables → Proxies (First Pass)

Symbol	Concept	Measurement Idea	Candidate Public Sources (examples)
κ (kappa)	Care / Cooperation	Prosociality, trust, giving, social support	World Values Survey; Gallup World Poll; World Giving Index
σ (sigma)	Suffering / Instability	Conflict intensity; mortality/morbidity burden; disaster impact	UCDP/PRIO; WHO/IHME DALYs; EM-DAT; ACLED
ρ (rho)	Responsiveness	Recovery time after shocks; fiscal/health agility	OECD resilience; World Bank governance effectiveness; response time metrics
φ (phi)	Pluralism	Diversity + rights protection + polarization control	V-Dem indices; ethnic/linguistic fractionalization; religious diversity
Entropy proxy	Structural stress/flux	Energy intensity; volatility; information throughput	Our World in Data (energy); econ volatility; mutual information where available
M(t)	Moral Gradient	Computed: $(\kappa/(\sigma+\varepsilon))\cdot\rho\cdot\varphi$ (normalized)	Derived from above, normalized per unit time
Intervention	Crossing Minority	Minimal pulses when σ exceeds σ_{crit}	Treaties, humanitarian surge episodes, ceasefires

Mapping Principles:

• Prefer transparent, widely-used datasets with stable definitions.

• Keep each proxy dimensionless or normalized (z-scores or min–max per region/time).

• Document assumptions and caveats (e.g., DALYs ≠ all suffering).

• Publish a variable dictionary and codebook alongside CSVs.

5) Repo / OSF Structure

Public OSF project components:
/OSIU-v0.5
  /paper/ — Whitepaper PDF, figures (torus)
  /simulation/ — Code: Universe model, sweeps, heatmaps
  /data/ — Raw proxies (CSV) + data dictionaries
  /results/ — Sweep CSVs, plots, notebooks
  /docs/ — Briefs, slide decks, outreach letter
  /figures/ — Caption-embedded plates (PDF/PNG/SVG)
  /licenses/ — MIT (code), CC-BY (figures/text)

6) Getting Started

1. Clone or unzip the starter repository (osiu-sim-starter.zip).
2. Install: pip install -r requirements.txt
3. Run scenarios: python -m simulation.experiments
4. Parameter sweep (1D): python -m simulation.sweep --param phi --start 0.1 --end 1.0 --num 10
5. Parameter sweep (2D): python -m simulation.sweep2d --p1 phi --start1 0.1 --end1 1.0 --n1 12 --p2 a_s --start2 0.05 --end2 0.3 --n2 10 --shock poisson --out data/outputs/heat_phi_a_s
6. Re-plot from CSV: python -m simulation.plot_csv --csv data/outputs/heat_phi_a_s.csv

7) Collaboration Norms

• Code: MIT. Text & figures: CC-BY 4.0.
• PRs must include a short 'Assumptions & Limitations' section.
• Keep metaphysical claims separate from empirical testing code.
• Label placeholders clearly; pre-register risky tests when feasible.

8) Open Research Questions

• Can ρ (responsiveness) statistically predict reductions in entropy flux after shocks across 30–50 year windows?
• Is there an inverted-U between φ (pluralism) and stability that flattens in mature systems?
• Do minimal crossing-minority pulses out-perform constant interventions in simulations?
• What Lyapunov/free-energy candidate tracks stability across regimes?

9) Contact & Participation

Project Lead: Joshua Hickerson — Ontology of the Simulated Universe Series
Interested? Open an issue on the repo (https://github.com/joshdotexe/Quantum-Entangled-Ontology-The-Ontology-of-the-Simulated-Universe-v0.5-2025-)
Email subject: 'Interested in Data/Simulation/Math role for OSIU v0.5.' to joshdotexe@gmail.com