

WILL: The Generative Geometry of Physics

Deriving Reality Without Tensors,
Singularities, or Dark Entities.

Anton Rize

The Pattern of Progress is Deletion, Not Addition

Copernicus: Earth vs. Heavens

Newton: Terrestrial vs. Celestial Laws

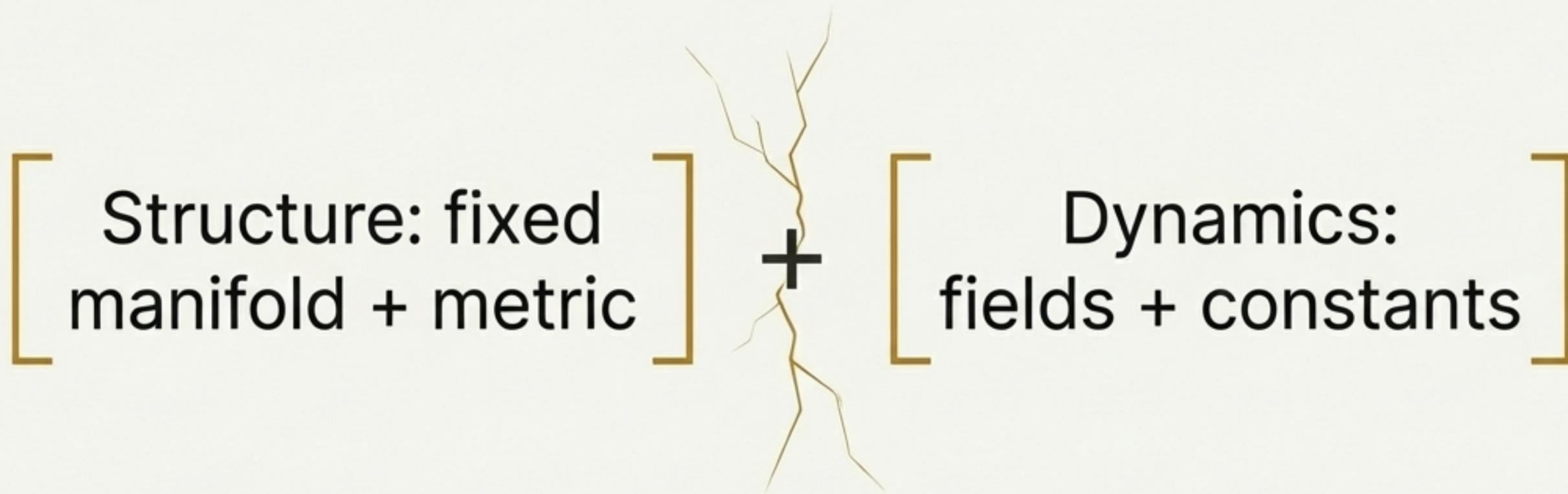
Maxwell: Electricity vs. Magnetism

Einstein: Space vs. Time



The Last Geocentric Epicycle

The Unpaid Ontological Bill of Modern Physics



**This split is not an empirical discovery.
It is an un-evidenced metaphysical postulate.**

**This Approach Does Not Describe Physics;
It Generates It.**

SPACETIME \equiv ENERGY

This equivalence is not a new postulate.
It is the *removal* of a hidden one. Structure and dynamics
are two aspects of a single entity we call WILL.

The Necessary Consequences of a Unified Structure

SPACETIME \equiv ENERGY



Necessarily Implies:



Closure: The system must be self-contained.

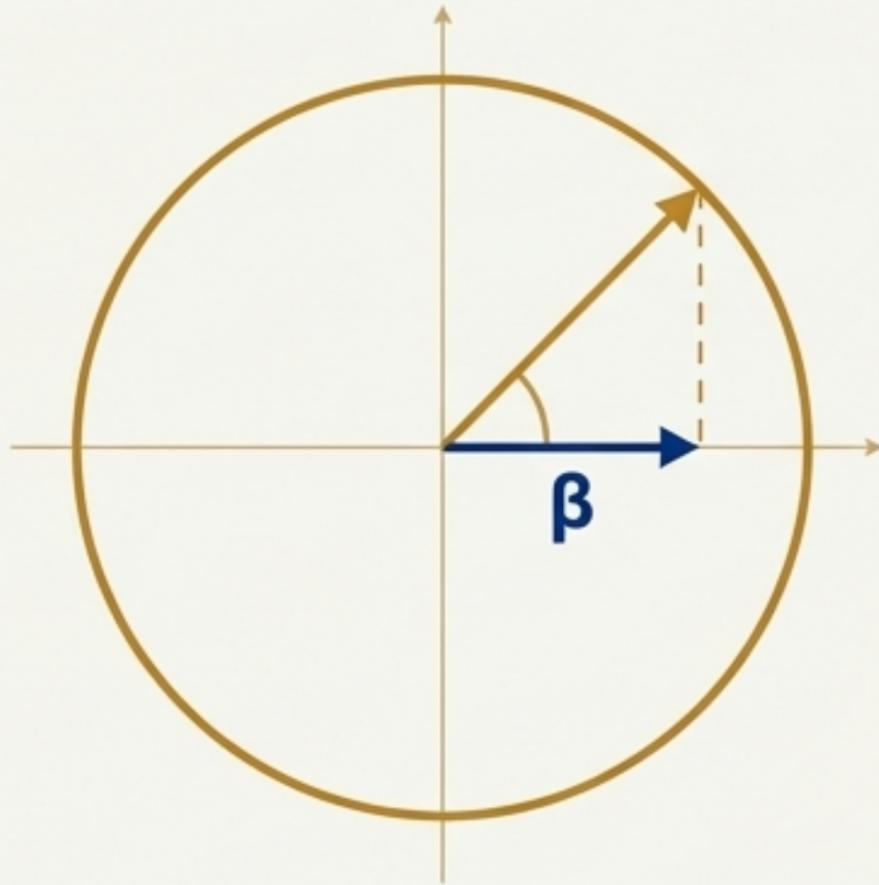


Conservation: The total relational resource is invariant.

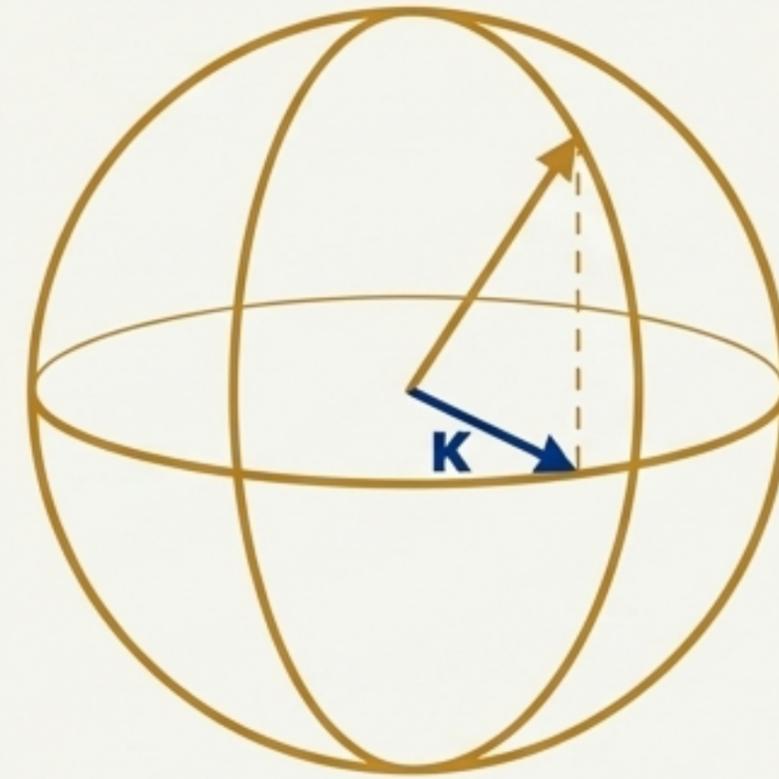


Isotropy: No *a priori* privileged direction.

The Minimal Geometries of Relation



S^1 (Circle): The unique carrier for 1-DOF *directional* transformation (Kinematics).
Projection: β .



S^2 (Sphere): The unique carrier for 2-DOF *omnidirectional* transformation (Gravity).
Projection: κ .

These are not geometries *in* space. They are the protocols whose interactions *generate* space.

The Energetic Closure Condition

The exchange rate between carriers is the ratio of their degrees of freedom:

$$\frac{\text{d.o.f.}(S^2)}{\text{d.o.f.}(S^1)} = \frac{2}{1} = 2$$



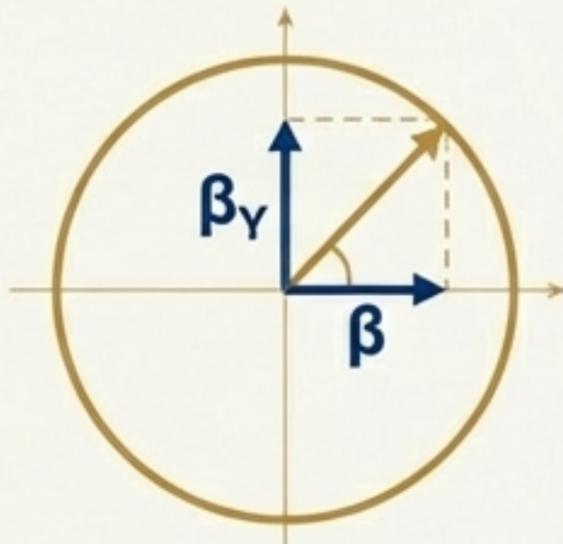
This forces a necessary quadratic balance:

$$\kappa^2 = 2\beta^2$$

The relational analogue of the Virial Theorem. The ratio between potential and kinetic energy is not an empirical coincidence, but a geometric necessity.

Special and General Relativity are Orthogonal Projections

S¹ Kinematics (SR)

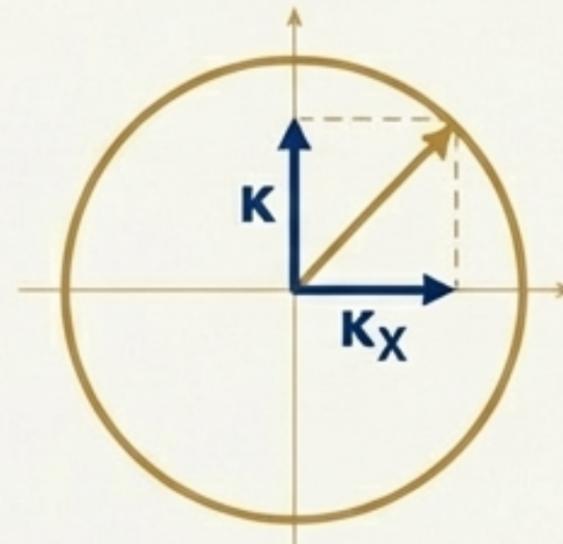


$$\beta^2 + \beta_Y^2 = 1$$

$$E^2 = (pc)^2 + (mc^2)^2$$

The Lorentz factor γ is simply $1/\beta_Y$.

S² Gravity (GR)

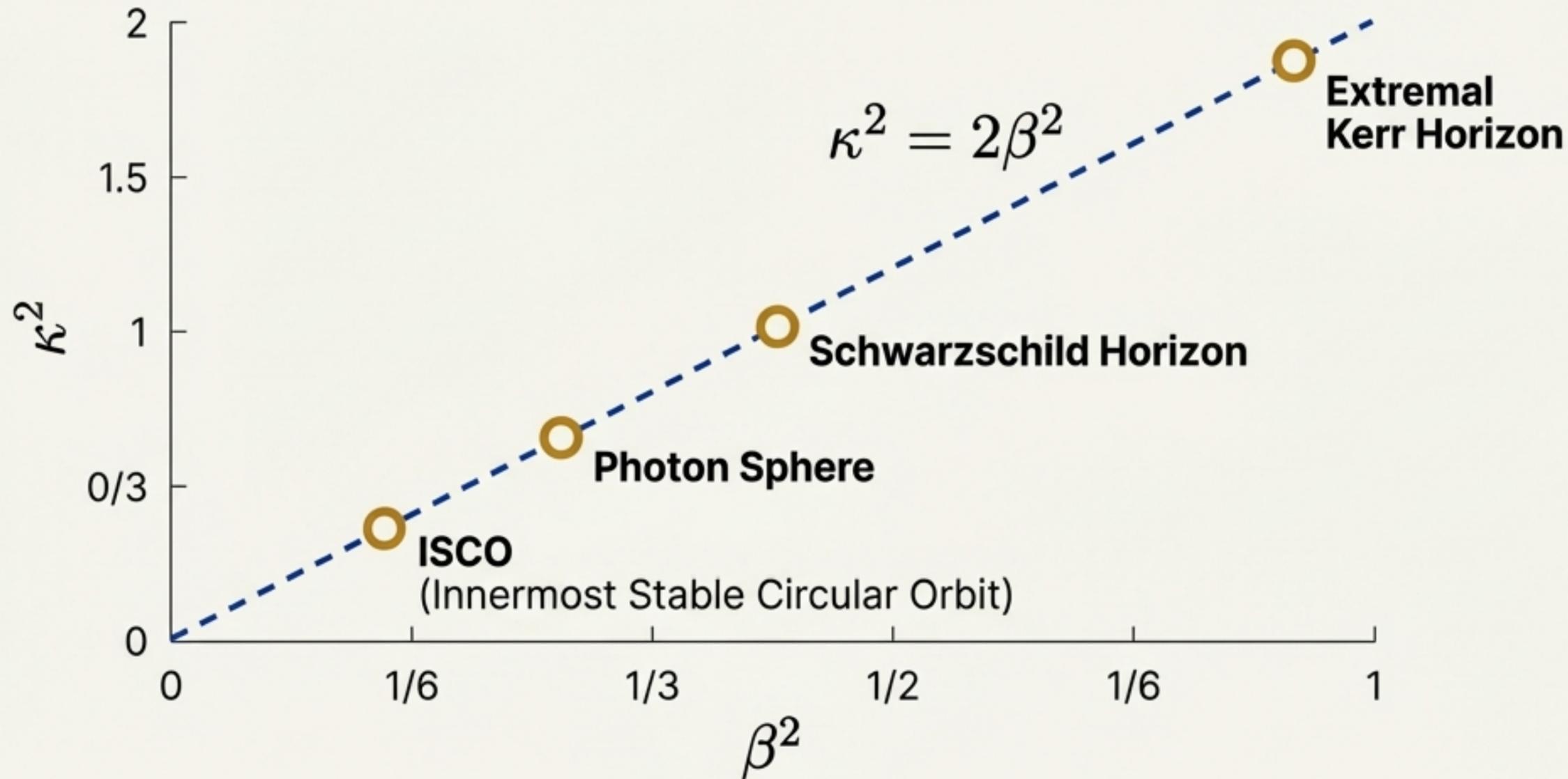


$$\kappa_X^2 + \kappa^2 = 1$$

Gravitational Time Dilation = κ_X

SR and GR are orthogonal projections of a single, closed relational budget.

All Critical Surfaces of GR are Encoded in One Geometric Law



No differential equations. No metric. Pure algebra.

Predicting Mercury's Orbit with Only Light

Inputs (Direct Observables)

- Kinematic Projection (β)
← Doppler Shift
- Potential Projection (κ)
← Gravitational Redshift



Predictions (Pure Algebra)

$$\text{Eccentricity (e)} = \frac{1}{\delta_p^2} - 1 \approx \mathbf{0.2056} \quad (\text{Matches observation})$$

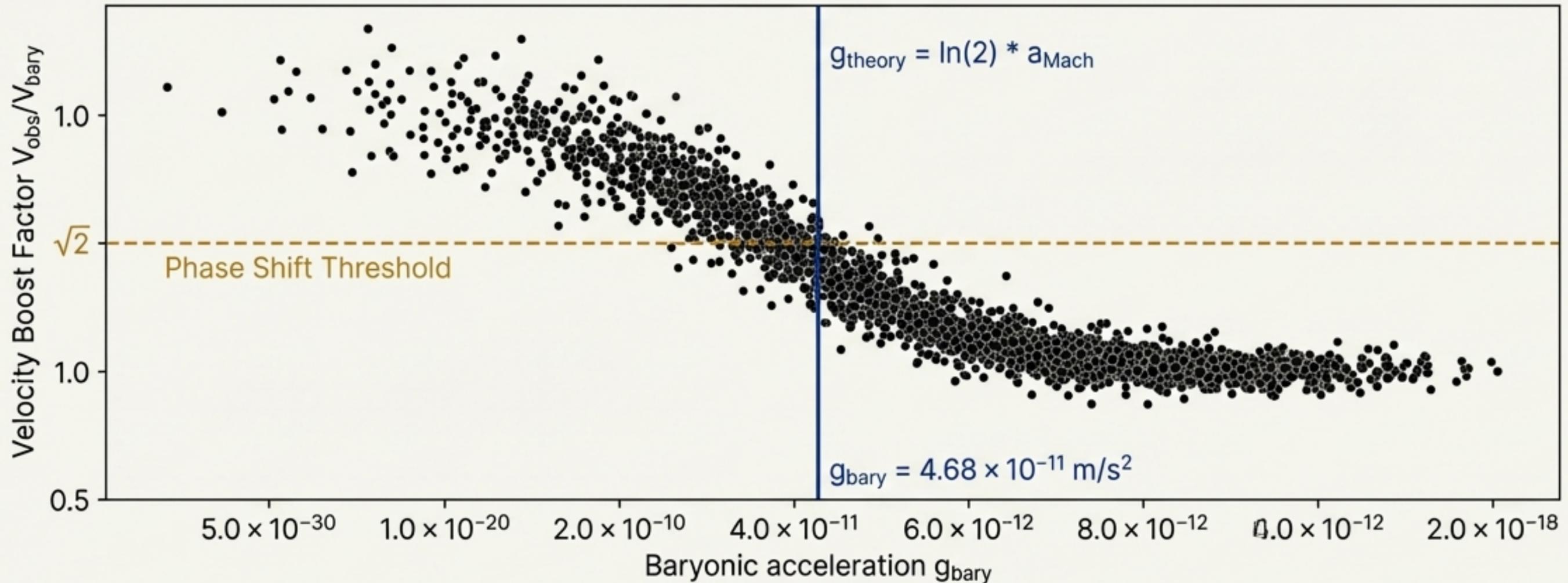
$$\text{Precession } (\Delta\varphi) = \frac{3\pi}{2} \frac{\kappa_p^4}{\beta_p^2} \approx \mathbf{43''/\text{century}} \quad (\text{Matches observation})$$

No metrics. No tensors. Pure algebra of light red vs. blue ratio.

"Dark Matter" is the Weight of the Vacuum

Below a critical acceleration (a_{Mach}), local systems couple to the global cosmic horizon.
This is not a postulate, but a wave penetration effect.

Half-Life Test



The observed transition matches the theory with **0.56% precision**. The Dark Matter hypothesis is redundant.

"Dark Energy" is the Structural Cost of Geometric Closure

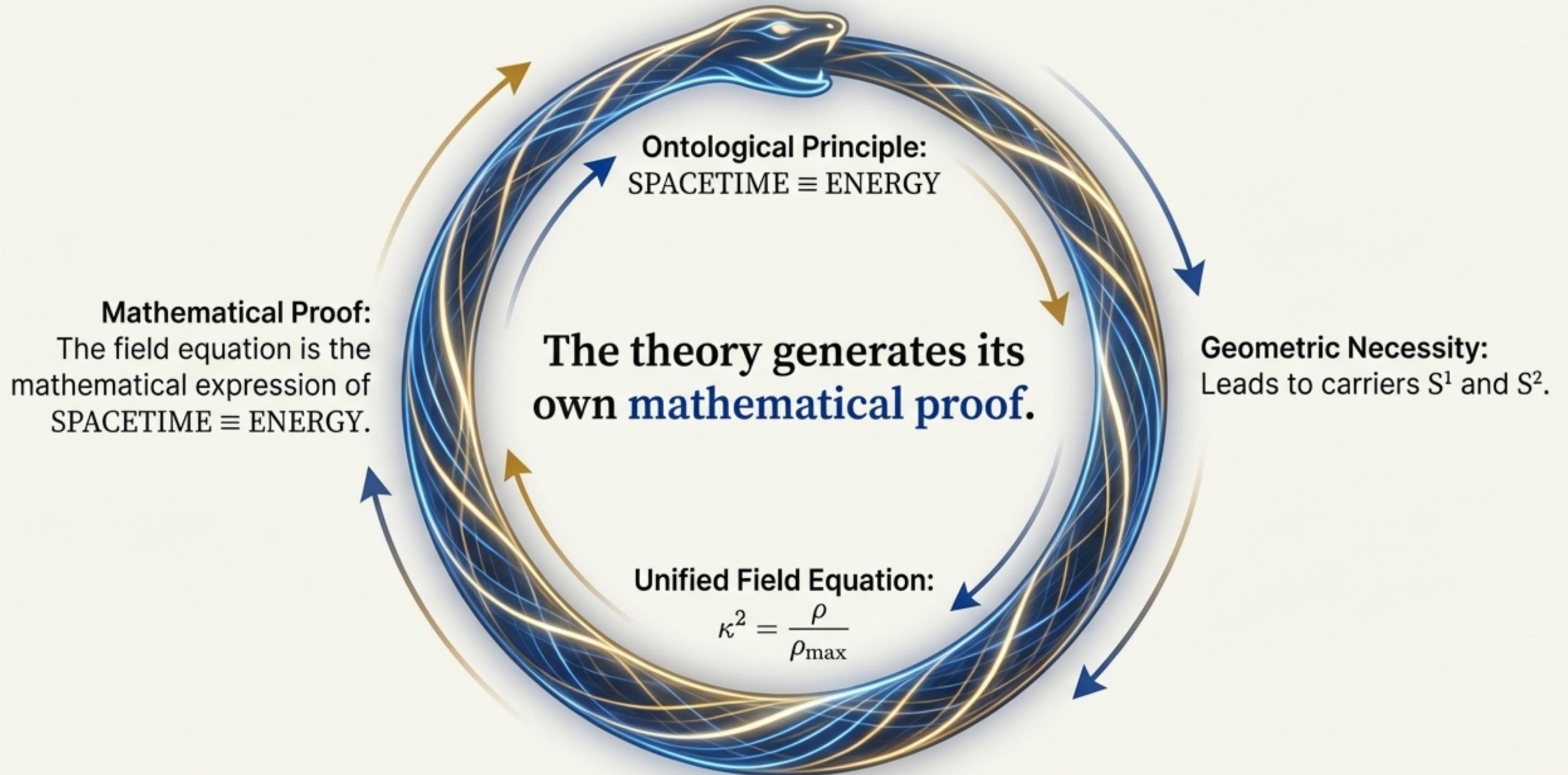
The vacuum's share of the total relational budget is fixed by the geometric partition of degrees of freedom:

$$\text{Structural Share} = \frac{\kappa^2}{\kappa^2 + \beta^2} = \frac{2\beta^2}{2\beta^2 + \beta^2} = \frac{2}{3}$$

$$\Lambda(r) = \frac{2}{3r^2}$$

The cosmological 'constant' is neither constant nor arbitrary.
It is a necessary feature of a closed, relational vacuum.

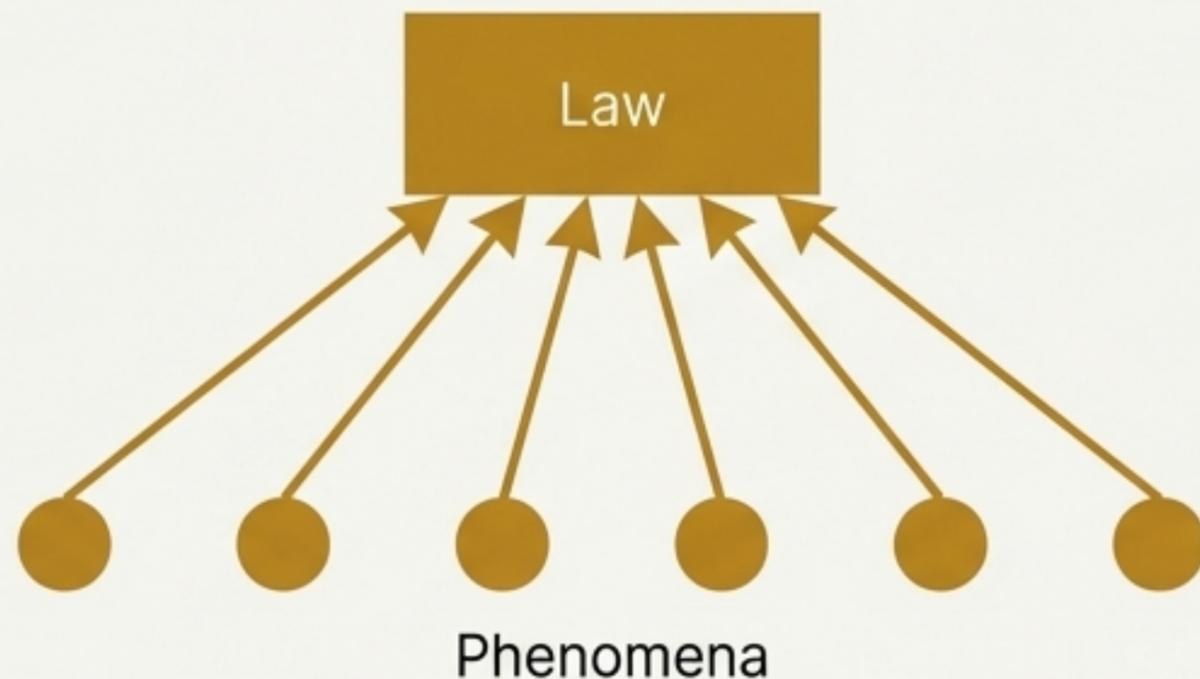
The Theoretical Ouroboros



From Descriptive to Generative Physics

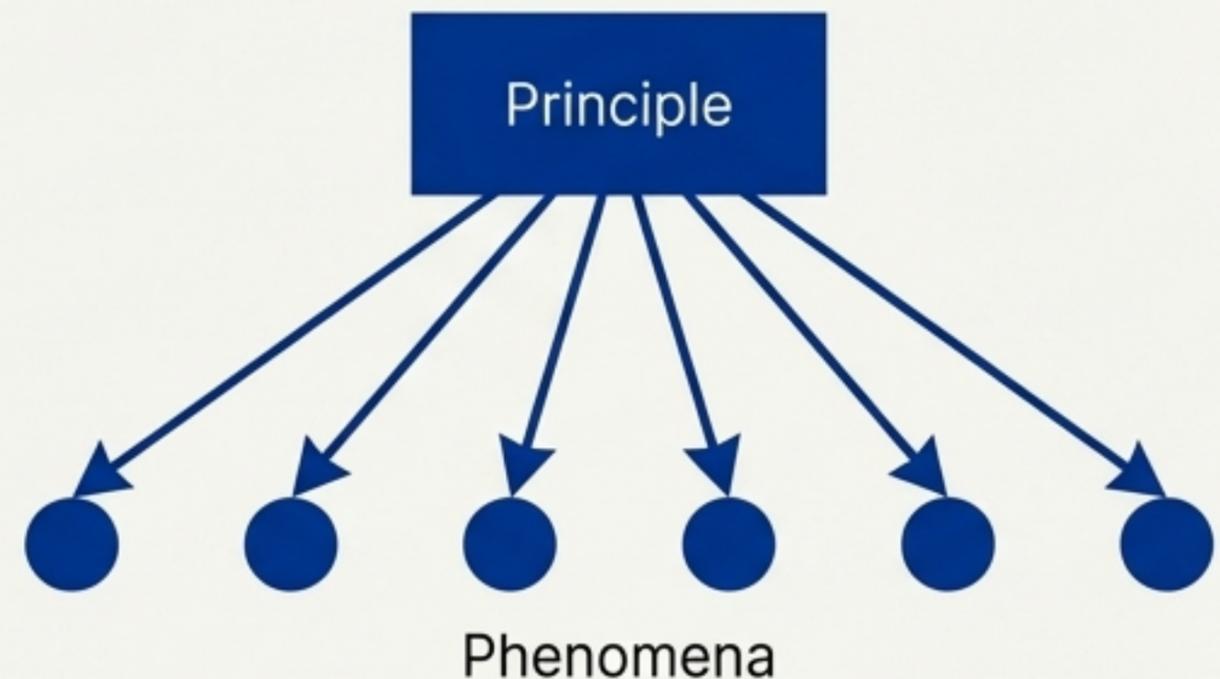
Descriptive Physics (The Old Way)

Laws **describe** observations.



Generative Physics (WILL)

Laws are **generated** by relational consistency.



“Mathematical complexity is the symptom of philosophical negligence.”

$$\mathbf{WILL = 1}$$

$$\mathbf{(E * T) / (M * L) = 1}$$

Energy, Time, Mass, and Length are not independent entities.
They are four projections of a single, self-consistent Unity.

Spacetime and Energy are mutually defining aspects of a
single relational structure.

antonrize.github.io/WILL/