

A Six-Dimensional Bulk Whose Fifth Dimension Is Scale and Whose Sixth Is Phase

The whole program in one diagram, with the scale axis carrying numbers. The bulk $\mathcal{M}_4 \times I_r \times S_\theta^1$ is a fiber bundle: over every point of the Lorentzian stage sit the two *non-spatial* fibers, scale and phase. AX-2 (GGEP) acts *upward* and builds them; AX-3 (OGGEP) acts *downward*, and registration is the projection that erases (r, θ) — the origin of quantum behavior. The vertical axis is calibrated: $E_{\text{GUT}} = E_{\text{Pl}} e^{-2\pi}$ at $r = 0$, the OGN-5 depth $r = K = 35$ at the infrared boundary, and the lock at $r = 29.41$, which is $K - 2\pi + \ln 2$ exactly.

