

# Explicit Compactification (Toy RS Embedding) — One Page

Geometry: Warped 5D RS slice; stabilized radion; visible brane with  $SU(3) \times SU(2) \times U(1)$ ; bulk fermions (masses  $c_i$ ).

Anomaly checks:  $\sum(Y)=0$ ,  $\sum(Y^3)=0$ , mixed anomalies cancel;  $SU(2)$  global OK. 5D CS terms cancel localized anomalies.

Yukawas by localization (illustrative): e:  $c_L=0.62, c_R=0.70$ ;  $\mu$ : 0.58, 0.60;  $\tau$ : 0.54, 0.56; reproduces charged-lepton orders.

Stabilization: Goldberger-Wise scalar fixes  $kL$ ; late-time GR recovered ( $\rho \ll \lambda$ ).

Caveat: Full model must fit CKM/PMNS, quark sector, neutrinos, precision constraints.