

A Testable Brane-World Unification — Demo Two-Pager

Grand equation (flat, k=0):

$$H^2 = \frac{8\pi G}{3} \rho \left(1 + \frac{\rho}{2\lambda}\right) + \frac{\Lambda_4}{3} + \frac{c}{a^4}$$

Two data hooks:

$$\quad f_{\rm br}(\lambda) \propto \lambda^{1/4}, \quad$$

$$\frac{\mathcal{C}\{\rho_{\gamma,0}\}}{\mathcal{C}\{\rho_{\gamma,0}\}} = \frac{7}{8} \left( \frac{4}{11} \right)^{1/4}$$

This demo pack shows how to fit a broken power law to PTA spectra and overlay LISA sensitivity for context.

