

Cover Letter — JCAP

Dear Editors of JCAP,

I submit a short manuscript advancing a testable brane-world cosmology:

$H^2=(8\pi G/3)\rho(1+\rho/(2\lambda))+\Lambda_4/3+C/a^4$ ($k=0$), with a single-parameter falsification linking a stochastic GW spectral break to ΔN_{eff} .

Included files: Unified_Theory_ALL_in_ONE_LITE_20250813_202913.pdf, Two-Pager (physical units), Compactification page, and a minimal Repro Pack (CSV+figures).

The late-time limit recovers GR; early-time ρ^2 era and dark radiation are explicit. I welcome rapid assessment and am ready to provide source/SM on request.

Sincerely, Ricardo Maldonado — sales@rank.vegas