

# The Triune Universe's Falsify-Me Abstract Collection No. 10

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February 14, 2026

# Triune Falsify-Me Abstract 10

## 1. 10. Triune Effective Equation of State $w_{\text{eff}}(z)$

We express the effective equation of state as

$$w_{\text{eff}}(z) = \frac{\sum_i w_i(z) p_i(z)}{\sum_i w_i(z) \rho_i(z) c^2},$$
 with each role obeying basic inequalities

(binding  $w_B > -1/3$ , chasing  $w_C < -1/3$ , structuring  $|w_S + 1/3| \ll 1$ ). The model predicts a specific three-phase pattern in  $w_{\text{eff}}(z)$ : an early chasing-dominated dip, a structuring plateau, and a late mild chasing resurgence. This pattern can be reconstructed from data using model-independent methods.

Falsification: demonstrate, from combined probes, that  $w_{\text{eff}}(z)$  never leaves a narrow band around  $-1$  inconsistent with such a three-phase structure.