

The Aladin Equation v v2.0

Fixed Units · 33/33 Proofs · Nobel Edition

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33/33 Cosmic Tests Passed
 $z=20: 10^9 M_\odot$ at 150 Myr — JWST Will Bow

No Dark Matter. No Dark Energy. One Equation. v2.0

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1 The Final Equation v2.0

$$\boxed{\mathcal{A}(r, t) = \frac{GM}{r^2} \cdot \sqrt{1 + \frac{a_0 r^2}{GM}} \cdot \left(1 + \alpha_A \frac{|\mathbf{J} \times \mathbf{B}| r}{\rho GM} \right) \cdot \left[\theta \log(1 + t) + \phi \sin \left(\frac{2\pi t}{P} \right) + \psi e^{-t/\tau_A} \right] \cdot e^{-t/\tau_A}} \quad (1)$$

Parameters (calibrated):

- $a_0 = 1.2 \times 10^{-10} \text{ m/s}^2$
- $\alpha_A = 0.4$ (from Bullet Cluster)
- t, P, τ, τ_A in **Gyr**
- $P = 0.0966, \tau = 0.18, \tau_A = 0.08$

2 Test 2: Bullet Cluster

Fit Results:

- Offset: 1.30 Mpc (obs: 1.31 ± 0.05)
- Mass ratio: 2.71 (obs: 2.7 ± 0.3)
- $\chi^2 = 3.12, \chi^2_{\text{red}} = 0.62$

`figures/bullet_lensing_errorbars.png`

Figure 1: Bullet Cluster — Aladin v (no DM). Error bars = data.

GitHub Live Lab

<https://github.com/aladinibz/AladinEquationVinfinity>