# OMNISCALE GRAVITY — 1-PAGE TEASER (V4.6)

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## ONE POTENTIAL, CONSERVATIVE SCOPE

Identify $\Phi \equiv c^2\chi$ and use the weak-field/1PN metric with $\beta = \gamma = 1$ as a bookkeeping device on a flat background. Use the same $\Phi$ for light *and* motion; GW sector is conservative ($v = c$, $+/\times$ only; no scalar dipole). Low-$g$ closure A/B keeps the field scalar and curl-free in general.

## STATUS OF SECTORS (MINI)

| Sector | Now | Next |
|---|---|---|
| $\chi$ & $\Phi$ | Map $\Phi = c^2\chi$; closure A/B | Derive from action |
| Metric 1PN | $\beta = \gamma = 1$ | Derive including $g_{0i}$ |
| $g_{0i}$ | Assume GR ($-4V_i/c^3$) | Predict Lense–Thirring |
| GWs | $v = c$, $+/\times$ only | Maintain pulsar/GW safety |

## DECISIVE FALSIFIERS

Frame dragging; PPN $\gamma, \beta$; $v_{\mathrm{gw}} \neq c$ or extra GW polarizations; no LOS-environment correlation of $H_0$ after systematics.

## WHY IT MATTERS

One shared $\Phi$ ties orbits, lensing, and time delays; fewer knobs $\Rightarrow$ stronger tests.

## FIGURES



*RC: $v_c$ (km/s) vs $R$ (kpc).*

*Deflection: $\alpha(b)$ (radians).*

*Shapiro: $\Delta t$ (µs) vs $b/R_{\odot}$.*