

RBFL / RBFT 6.0

The Compact Formula Statement

A compressed, public-facing expression of the RBFL idea: gravity excess as scaled phase-field coherence anchored to baryonic structure.

$$g_{\text{RBFL}} = g_b + C_\phi \sqrt{a_\phi g_b}$$

Gravity is the coherent phase expression of baryonic structure.

Status: speculative formulation note. This document is a compact explanatory statement, not peer-reviewed proof, not a replacement for general relativity, and not a claim that dark matter has been disproven.

The compressed RBFL statement

$$g_{\text{RBFL}} = g_b + C_{\phi} \sqrt{a_{\phi} g_b}$$

where the second term is the RBFL phase-response contribution:

$$\Delta g_{\phi} = C_{\phi} \sqrt{a_{\phi} g_b}$$

The 3D direction-safe form

$$\mathbf{g}_{\text{RBFL}} = \mathbf{g}_b + C_\phi \sqrt{a_\phi |\mathbf{g}_b|} \hat{\mathbf{g}}_b$$

Plain-English reading: the baryonic field gives the source direction; the square-root term gives the low-acceleration saturated scaling; the coherence factor decides how strongly the phase-field response expresses through the baryonic structure.

gravity excess = phase-field coherence × saturated baryonic scale

This is the shortest honest statement: RBFL is not simply "more mass." It is a proposed scaled coherence response attached to baryonic structure.

The compact symbol hides the architecture

$$C_{\Phi} = A_{\text{lock}} S_{\text{phase}} D_{\text{phase}} G_{\text{rot}} B_{\text{switch}} H_{\text{proxy}} P_{3D}$$

- **A_lock** - outer locked reference amplitude
- **S_phase** - phase strength / saturation response
- **D_phase** - coherence or degree of ordered response
- **G_rot** - rotational organization and shear geometry
- **B_switch** - boundary, slip, and phase-state switching
- **H_proxy** - available projected height / envelope proxy
- **P_3D** - projected 3D phase correction

$$P_{3D} = Z_{\text{phase}}^{-1}$$

In the improved architecture, P_{3D} is not a new force. It is the reciprocal of baryonic phase impedance, describing how the proposed 3D phase envelope appears in projected or radial data.

The law starts with baryons, not residuals

The compact formulation only remains scientifically useful if the source side is declared before residuals are inspected. The baryonic structure defines the baseline field first:

$$\rho_b \rightarrow \Phi_b \rightarrow g_b, \quad \nabla^2 \Phi_b = 4\pi G \rho_b, \quad g_b = -\nabla \Phi_b$$

1. Source

2. Baseline

3. Prediction

4. Detection

COMPACT PUBLIC STATEMENT

The RBFL Compression

$$g_{\text{RBFL}} = g_b + C_{\phi} \sqrt{a_{\phi} g_b}$$

Scientific boundary: this is a speculative compact formulation for a falsifiable research programme. It should be read as a testable hypothesis, not as established physics.