

MASSIVE GRAVITON THEORY AND NUCLEAR CONFINEMENT (SGDM)

Strong Nuclear Gravitation, Yukawa-Newton Crossover, and Baryonic Charge Quantization

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1. Primary Massive Graviton Properties

The fundamental graviton possesses rest mass $M_g \approx \hbar H_0 / c^2 \approx 2.6 \times 10^{-68} \text{ kg}$ and spin $s = 2$, with Yukawa shielding radius $\lambda_g \approx 1.4 \times 10^{26} \text{ m}$.

2. Strong Nuclear Gravity and Unified Potential

On subnuclear scales $r \leq 1.4 \text{ fm}$, strong gravity $G_{\text{strong}} \approx 10^{38} G_N$ binds nucleons with exact charge $N_g \equiv A$.

The unified gravidynamic potential $\Phi(r) = - (G_N M / r) [1 + 10^{38} e^{-(r/r_0)}] + \frac{1}{6} \Lambda c^2 r^2$ spans quarks, atoms, and Multiverse cosmology without singularities.