

Minimum Mass Unit and Black Hole Structure in Absolutism

Qizhou Xin
Independent Researcher

Abstract

Based on the direction number theory in Absolutism, this paper shows that under the critical gravitational condition $g = c$, light changes from linear motion to circular motion and solidifies into the minimum mass unit of matter. A new black hole model is proposed: mass concentrates on a thin horizon shell; outward light cannot escape, so the black hole appears dark; inward light propagates freely and converges at the center $g = 0$, forming an extremely bright optical core. This model reveals the universal stability mechanism of matter and avoids the singularity in traditional theories. **Keywords:** Absolutism; Minimum Mass Unit; Black Hole Structure; Horizon Shell; Optical Core

1 Minimum Mass Unit

In Absolutism, the direction number is $N = c/g$. At $g = c$ ($N = 1$), light is confined to circular motion, and energy condenses into mass. Using kinetic–potential energy balance $E_k = E_p$ and $g = Gm/r^2 = c$:

$$\frac{1}{2}mc^2 = \frac{Gm^2}{r}, \quad \frac{Gm}{r^2} = c.$$

We obtain the minimum mass unit:

$$m = \frac{4G}{c^3}, \quad r = \frac{2G}{c^2}, \quad E = mc^2 \approx 5.6 \text{ eV}.$$

2 Black Hole Structure

The black hole has a thin shell structure at the horizon where $g = c$:

- Outward light cannot escape, so the black hole appears black.
- Inward light propagates inward since $g < c$ inside the horizon.
- Light converges at the center $g = 0$, forming an extremely bright optical core.

3 Physical Significance

All stable structures (electrons, protons, stars) have an optical core at $g = 0$. Gravity is the macroscopic effect of light–energy exchange between basic units. The black hole horizon is a critical ordered state, and the central optical core is the ultimate condensed form of matter.