

At the Surface of Our Universe

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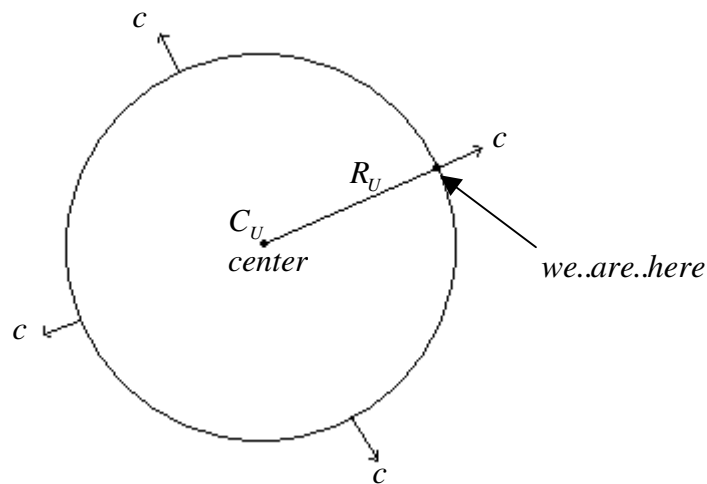
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The title means that this is not the only one. The multiplicity of things is a law of nature. Our universe can be just a simple subatomic particle of another mega universe.

Orthodox physics states that the universe has no center, but this corresponds to another hidden centralistic view of our position, because when the physicists make the calculations, they always put us in the center of the “observable universe”.

This universe has a center and we are not living at the center of it, we are living at the surface of our universe, just like we are living at the surface of the earth. It exists which is already a proof of that. The Hubble constant is not constant with the direction of observation.

We are living at the surface of a black hole that expands at light speed.



c -- Local expansion speed; R_U -- Local universe radius

We found that there's a particular relation between the Pioneer acceleration and the Hubble's constant:

Pioneer or universe acceleration -- $g_U = 8.74 \times 10^{-10} \text{ m s}^{-2}$

Hubble's constant -- $H_0 = 2.91 \times 10^{-18} \text{ Hz}$

$$\frac{g_U}{H_0} = c \quad \text{-- Light speed}$$

As the universe expansion is accelerating, the speed of expansion is not a residual speed from an earlier explosion. There must be a force accelerating the universe and the initial speed must be zero.

The universe is expanding with a uniform accelerated motion, which means no initial Big-Bang.

$$T_U = \frac{1}{H_0} \quad ; \quad T_U = 3.44 \times 10^{17} \text{ s} \quad \text{-- age of the universe}$$

$$R_U = \frac{c}{2} T_U \quad \text{or} \quad R_U = \frac{1}{2} g_U T_U^2$$

$$R_U = 5.14 \times 10^{25} \text{ m}$$

The local speed of expansion relative to the center of the universe, is equal to light speed c . We are living at the surface of a black-hole, expanding at escape speed as the equations confirm.

Escape speed of our universe:

$$c = \sqrt{\frac{2GM_U}{R_U}}$$

M_U -- Mass of our universe; G -- Gravitational constant

$$M_U = \frac{c^3}{4GH_0} \quad \Leftrightarrow \quad M_U = 3.47 \times 10^{52} \text{ kg}$$

Average density of the universe:

$$\rho_U = \frac{3H_0^2}{4\pi G} \quad \Leftrightarrow \quad \rho_U = 3.03 \times 10^{-26} \text{ kgm}^{-3}$$

General formula of the force according to UART:

$$F = \frac{kh(c^2 - v^2)^2 f_0^4}{c^2(c^2 + vw_0)(w_0 + v)^3}$$

At the precise surface of a black-hole the attractive force is equal to zero ($v \approx c$).
The local vacuum is the universe gravitational field that corresponds to a super fluid.

$$M_U w_0^2 = hf_0 \quad \text{and} \quad f_0 = \frac{c}{\sqrt{k}} = f_M = 2.12 \times 10^{25} \text{ Hz}$$

Initial expansion speed -- $w_0 = 6.4 \times 10^{-31} \text{ ms}^{-1}$