

An alternative Theory of Black Holes

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Abstract

We are cirtizising the conventional theories of Black Holes.

1 Introduction

Conventional theories of Black Holes are saying that Black Holes are results of imploding stars. A prerequisite is a defined size. A definite problem of this idea is that according to Newton,

$$m_{sol}a = \gamma \frac{m_{Sol}M_{BH}}{r^2}, \quad (1)$$

with m_{sol} =mass of sun and M_{BH} =mass of Black Hole, if $M_{BH} \rightarrow \infty$ follows $r \rightarrow 0$ and $a \rightarrow \infty$.

So any star would feel the gravity of the Black hole.

Conventional theories are telling us, that any Black Hole has an event horizon which plays the role of a border beyond nothing can escape even not light.

The first problem with this idea, is that there's no logical reason why there should be a more or less sharp border that makes a Black Hole having a border. Probably the idea of a star which is imploding is of finite size is the result of an event horizon.

We don't discuss the process of an implotion of a star here.

According to Newton (1), gravity is allways existing and because of $M_{BH} \rightarrow \infty$ nothing can escape a Black Hole, no matter how far away the star is from it.

2 New Idea

We are proposing a new idea that is explicit following from Einstein's energy formula, i.e.:

$$E = mc^2 = \frac{m_0}{\sqrt{1 - (v/c)^2}}c^2, \quad (2)$$

According to (2), if $v \rightarrow c$, which is the travelling velocity of the Black Hole, the mass becomes close to infinity. The problems of a singularity and the event horizon are not a problem anymore. A Black Hole is becoming a relativistic effect.