

Properties of Strong Force

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Abstract

If the distance increases the interaction strength increases and if the distance decreases then the interaction strength decreases with energy. Further we have to know the quarks can be removed when distance decreases with the increase energy. That the colors forces are leak out from quarks. The strong forces are still exist when the colors are inside the quarks and force carrying particle. It means that the color force depends on the color emission. It should be noted that the Higgs Bosons are emitted or absorbed by the quarks.

Keywords: Quarks, Gluons, Interaction, Strong Force, Energy

1. Introduction

If the energy increases to the quarks. On the other hand if the retarded force applied as a form of energy, The quark go to the closer another quarks so the interaction strength decreases with energy.

Now Here Einstein famous energy mass relation frequently applied, We have the rest mass

$$\text{Energy of quarks, } E = mc^2$$

In this relation, We can see that, $C = dr/dt$ -----(1)

Here, m = mass of quark

$$C = \text{velocity of light}$$

Here, If the distance increases the interaction strength increases and if the distance decreases then the interaction strength decreases with energy. Further we have to know the quarks can be removed when distance decreases with the increase energy.

*The strong force depends on the two type of distances between quarks of same path.

(1) The strong force depends on the two type of distances between quarks(along the line joining of the quarks).

(2) Distance of travelling quarks(along the line joining of the

quarks).

That the colors forces are leak out from quarks. The strong forces are still exist when the colors are inside the quarks and force carrying particle. It means that the color force depends on the color emission.

It should be noted that the Higgs Bosons are emitted or absorbed by the quarks Or Gluons. Since the particles do not have a mass of their own, they get their mass by interactions with the Higgs field the Higgs field found extreme atomic nucleus. All systems (living or nonliving) in the universe are organized by Higgs Boson. When this extinct from the nucleus, then the Atoms destroyed.

Color on Quarks: The three quarks the proton (u,u and d) have different color charges, so that the total color charge is white (or neutral).

Energy of Quarks: QCD theory is provided by the collisions between the elementary particles. The kinetic energy can be exchange or transformed into new particles. For example, The mass and kinetic energy. These quarks are very deep within the process, very close to each other but moving far away from each other at an extremely high velocity. This makes the phenomena, when quarks are moved away from each other, they are obviously influenced by increasingly strong forces. From equation (1)

We can observed that the distance between quarks are increases, so

that the strong force become so stronger.

References

1. Gross, D., Politzer, D., Wilczek, F. (2004). Nobel prize winner in 2004.

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