Quantum Colour Dynamics

Sjaak Uitterdijk

Abstract- The abbreviation for Quantum ChromoDynamics is QCD, but the term Quantum Colour Dynamics tells already more appropriate what has been created: a shamefully childish fantasy.

Background information

Copied from [1]:

"The QCD analog of electric charge is a property called colour."

"The three kinds of charge in QCD are usually referred to as "colour charge" by loose analogy to the three kinds of colour (red, green and blue) perceived by humans. "

Comment:

The fundamental question still is: what is meant with "colour charge", realizing that one could, for example, also have chosen brown, yellow and purple, because the "kind of charge" pertinently does not depend on the chosen colour, as perceived by humans.

Copied from [1]:

"The colour force between quarks is responsible for the strong nuclear force." Copied from [2] in order to investigate "strong nuclear force".

"The nuclear force is a force that acts between the protons and neutrons of atoms. Neutrons and protons are affected by the nuclear force almost identically."

Comment:

So, a (nuclear) force has been created, by creating colour forces, in order to effectuate that neutrons and protons affect each other almost identically. (As if they would not be electrically charged.) Reference [2] gives the following bit more detailed explanation:

"Since protons have charge +1e, they experience an electric force that tends to push them apart, but at short range the attractive nuclear force is strong enough to overcome the electromagnetic force. The nuclear force binds nucleons into atomic nuclei."

The repulsive and attractive electrostatic force, commonly referred to as Coulomb force, between two electrically charged particles is inversely proportional to their distance squared. The addition "at short range" is ridiculous, because why would the "attractive nuclear force" be limited in range, while it supposed to be "strong enough to overcome" the Coulomb force at short range. The last mentioned property means that it is supposed to be very strong!

If such fantasy would represent reality, one of the consequences would be that electrons would not be able to orbit the atomic nucleus due to a lack of attractive forces.

Conclusion QCD is downright a shamefully childish fantasy, presented as high quality science. Reference [3] presents a more scientifically reliable solution.

References

- [1] https://en.wikipedia.org/wiki/Quantum_chromodynamics
- [2] https://en.wikipedia.org/wiki/Nuclear_force
- [3] Atomic Nuclei Modelled Without Exotic Particles and Magic Forces