

The differences between new elementary particle physics and the Standard Model of particle physics

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Abstract: giving the main difference between new particle physics
with the Standard Model of particle physics

Main viewpoints and conclusions:

The main difference between new elementary particle physics with the Standard Model of particle physics is:

In new elementary particle physics that beyond the Standard Model, there are no exist quark definition and quark particles system; but, in the Standard Model of particle physics, there are exist quark definition and quark particles system.^{[1][2]}

Besides, the bump which at an energy of 750 gigaelectronvolts (GeV), if it exist, it is just only a X -lepton or called X -meson that different from π , μ , τ , k , ρ , ω , φ and the others that have been known; another situation, it is a X -baryon.^{[3][4]}

References

- [1] *Quarks take wrong turns*
<http://phys.org/news/2004-04-quarks-wrong.html#nRlv>
- [2] *A. O. Barut, Stable Particles as Building Blocks of Matter,*
ICTP Preprint IC/79/40 (April, 1979)
- [3] *Scientists say hoped-for physics particle was just a blip (Update 2)*
<http://phys.org/news/2016-08-burp-intriguing-hints-physics-particle.html>
- [4] *Redefining Leptons (or called Mesons) and Baryons*
<http://rxiv.org/abs/1503.0151>