The Connection Between HCE8S Theory and the X(4430) Tetraquark

George R. Briggs

Abstract: The development of HCE8S theory has advanced to a point that a connection can be discerned between the prolific tetraquark X(4430) and HCE8S theory.

In preparing my latest flow diagram¹ for holographic cyclic universe E8 symmetry or HCE8S theory, I noticed a connection between the prolific tetraquark X(4430) mc^2 and the 4-digit energy of QU x 8 = 270.5 GeV. Sixteen x 270.5 = 4328. Also 4430 x 13.5/13.8 = 4334 (rounded to 4-digits). The difference between these two numbers is exactly 6. I interpret this as a notification (by whom!) of the 6 quarks of our universe made at a universe age of 13.5 billion years (the end of the 8th cyclic universe).

The X(4430) tetraquark (C, antiC, Down, antiUp quarks) is a very prolific tetraquark and could be marking the mc² energy gap between the c quark (1275 MeV) and the d quark (4.8 MeV). Now 1275/4.8 = 265.625. This should indicate an important age if it acts like other quark ratios of HCE8S theory. An immediate candidate comes to mind; the age of the Permian extinction² (in millions of years) = 252. The ratio 266/252 = 1.05555--. Now 1.02222-- = 13.8/13.5. What's going on here?

1. George R. Briggs,"An HCE8S flow diagram incorporating the latest ideas", Vivra 1806.0056, (2018)

2. Wikipedia, "Permian extinction", (2018)