There Are 4 Particles of Nature Intrinsically More Energetic Than the Tetraquark: These Were Partly Responsible for the E8 Symmetry Breaking at the Time of the Big Bang

## George R. Briggs

Abstract: There are 4 particles of nature intrinsically (mc^2) more energetic than the copious tetraquark (4.430 GEV): The top quark (173 GEV), the Z particle (91.2 GEV), and the two W particles (80.4 GEV each). These are all much more energetic than the tetraquark and should be considered as a class of particles by themselves and as a group signaled by the copious tetraquark. The group is partly responsible for the E8–symmetry breaking at the time of the big bang

The 4-quark particle Z(4430)¹ is the only such particle known among the several hundred found to date. It also is very copious in its production. These two features should make it of world-shaking importance, but as far as the author is aware, it is not. There are only 4 known particles more intrinsically energetic than the tetraquark and the author believes the tetraquark was provided to alert us of this fact and to make us realize that the 4-highest positive intrinsic energy particles (which we can observe) plus the 4- highest negative intrinsic energy (which we cannot observe) constitute a set of 8 very energetic particles representing the SU(3) symmetry of life which were capable of breaking² E8 symmetry at the time of the big bang and most certainly did so.

This 8-representation particle set action was an example of SU(3) symmetry –the symmetry of life<sup>3</sup> or the 8-fold way<sup>4</sup> at work in the universe.

- 1. "LHCDb confirms existence of exotic new particle", Wikipedia, (2007)
- 2. "Gravity As We K now it is a Phenomenon of an Epoch of E8 x U(1) Broken symmetry Which Began with the Big Bang", see ViXra, 1405.0210
- 3. See ViXra, 1310.0261
- 4. "Quark Model", Wikipedia (2014)