We Have Evidence of Supersymmetry at the LHC Already: the ttH Entity

George R. Briggs

Abstract: People everywhere are awaiting with bated breath the discovery of supersymmetry at the LHC. We already have made the discovery – the ttH process entity by the ATLAS collaboration. There is no compelling reason why a proof of supersymmetry requires finding a partner pair particle. It should suffice to show that a supersymmetric force exists bringing bosons and fermions together in violation of the teachings of quantum mechanics, and this has been accomplished.

A cyclic mode of operation has been proposed[1] for the universe in which the present universe received its entire mass from a dying prior universe. The transferring matter must be in energyless form to maintain a flat universe overall and one that does not crunch into a singularity. This is accomplished by confining bosonic mass (of negative energy according to supersymmetric theory[2]) together in entities with fermionic positive-energy mass. Supersymmetry alone does not guarantee that the positive energy and negative energy of the entities will cancel, for that we need additional help from the E8 symmetry[3] of the universe, and this symmetry must be unbroken to guarantee that both energy polarities for the bosonic components will be present. The E8 symmetry was unbroken in the epoch which ended with the big bang and the fermibosonic entities generated in this epoch have the required 0 net mass characteristic.

The fermibosonic entity entering the present universe epoch comes in two forms, one form of spin 1 negative mass and the other form of spin 0 negative mass. These 2 entities are the only supersymmetry entities needed for a cyclic universe (the spin 0 type are subdivided into 8 fundamental quantities at some point to form the 8 fundamental particles).

1. Roger Penrose, “Cycles of Time”, Alfred A. Knopf. (2011).

2. Dan Hooper, “Dark Cosmos”, p.91, Collins, (2006)

3. A. Garrett Lisi and James Owen Weatherall, “A Geometric Theory of Everything”, pp. 54-61, Scientific American, Dec. (2010).