

Wether or Not the Strong Force is Included in MHCE8S Theory Produces Two Final Values of Ho

George R. Briggs

Abstract: If the strong force is included in MHCE8S theory a final value of $H_0 = 74.03$ brings in the strong force safely energetically (0.86 %) to the theory whereas a reduction in H_0 from 74.03 to 73.24 excludes the strong force by $\sim 1/4$ %.

Since we as yet had seen no use of the strong force in MHCE8S theory, we had concluded that the strong force is not a part of E8 symmetry. However we have found that an additional¹ 545.281 MeV/galaxy-sec will enable the strong force to form the tightest bound nucleus Ni^{62} ($z=28, n=34$). See pages 10 and 13 of the cited reference. A way to get this energy is to provide another (4th) dimensionless constant to the theory. The constant 1.000055 already² used to signal the 66-million-year-old meteoric extinction event can also be used for this purpose. This constant can bring in 550 MeV/galaxy-sec, which is a factor $550/545.281 = 1.0086542$ more than needed. If we decreased H_0 from³ 74.03 to 73.24 (1.0107864) we would have $1.0107864/1.0086542 = 1.0021139 = 0.21139\% = \sim 1/4\%$ less energy than needed for the strong force to be included. Careful measurements of H_0 will decide this question.

1. "Nuclear binding energy", Wikipedia, (2019)

2. George R. Briggs, "Peculiar signaling properties of the tau and mu leptons and W and Z bosons and more", ViXra 1809.0598, (2018)

3. Bruce Wallman, "Resolving the tension between Planck $H_0 = 66.93$ and Riess et al $H_0 = 73.24$ ", ViXra 1906.0138, (2019)