

Neutrino Mass from a $d=7$ Effective Operator in a SUSY-GUT Framework

Wednesday 22 May 2013 16:00 (15 minutes)

If the $d=5$ Weinberg operator is forbidden by a discrete symmetry, neutrino mass can be generated by new physics at the TeV scale, which can be tested at the LHC. We want to discuss models where neutrino mass originates from a $d=7$ operator in the framework of SUSY-GUTs containing an $SU(5)$ subgroup. The embedding in GUT multiplets has phenomenological consequences, which we want to discuss on the basis of a specific example. We will present the cosmological consequences of additional heavy d -quarks that are predicted in this scenario and are constrained by big bang nucleosynthesis and direct searches for heavy nuclei.

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Session Classification: Parallel Session on Flavor Physics + Composite Models