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Type: **Parallel talk**

Special Grand Unification

Thursday, 22 June 2017 15:30 (15 minutes)

I will propose new-type grand unified theories (GUTs) based on GUT gauge groups broken to their special subgroups as well as their regular subgroups. In the framework, to obtain the Standard Model (SM), 4D gauge anomaly cancellation restricts the minimal number of generations of the 4D SM Weyl fermions. In this talk, I will show that in an $SU(16)$ GUT on 6D orbifold space whose GUT group is broken to its special subgroup $SO(10)$ and further SM gauge groups, three generations of the SM fermions are allowed by the 6D and 4D gauge anomaly cancellation on the bulk and fixed points without exotic 4D chiral fermions. This talk is based on arXiv:1704.08827.

Presentation type

Parallel talk

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