## **SUSY 2023**



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## Realistic SU(5) GUT with lower dimensional representations

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What is the minimal viable renormalizable SU(5) GUT with representations no higher than adjoints? In this talk I discuss an SU(5) model in which vectorlike fermions  $5_F + \overline{5}_F$  as well as two copies of  $15_H$  Higgs fields are introduced in order to accommodate for correct charged fermion and neutrino masses and to reproduce the matter-antimatter asymmetry of the universe. The presented model is highly predictive and will be fully tested by a combination of upcoming proton decay experiments as well as low energy experiments in search of flavor violations.

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