

# Phenomenology 2021 Symposium



Contribution ID: 1207

Type: BSM

## Viable Full Unification of the Standard Model into $E_8$

Wednesday 26 May 2021 17:30 (15 minutes)

A 10 dimensional model with  $\mathcal{N} = 1$  SUSY and  $E_8$  as a gauge group will be presented. It will be shown that through the orbifold  $T^6/(Z_3 \times Z_3)$ , only the Standard Model remains after compactification, with feasible Yukawa couplings. Gauge coupling unification can be achieved at  $M_{GUT} = 10^7 GeV$  with a viable proton lifetime. Therefore the highly predictive extra dimensional GUT model can be within reach of near future experiments.

### Summary

**Primary authors:** J. DE ANDA N., Francisco; MORAIS, António; ARANDA, Alfredo; PASECHNIK, Roman

**Presenter:** J. DE ANDA N., Francisco

**Session Classification:** BSM VI