

## Splitting $SO(10)$ with a bulk flux

*Thursday 1 October 2015 17:20 (15 minutes)*

Recently, a model with  $SO(10)$  symmetry and bulk flux in 6d was constructed. Anomalies can be canceled and the flux leads to interesting features. Notably, a  $U(1)$  flux breaks supersymmetry at a high scale in the matter sector while leaving it intact on gauge and Higgs multiplets. On the other hand, the flux creates a multiplicity for the matter fields while protecting them from symmetry breaking by Wilson lines.

I present the model as well as preliminary results on its phenomenology.

**Primary authors:** RUEHLE, Fabian (DESY); Mr SCHWEIZER, Julian (DESY); DIERIGL, Markus (DESY); BUCH-MULLER, Wilfried (DESY)

**Presenter:** Mr SCHWEIZER, Julian (DESY)

**Session Classification:** Strings & Mathematical Physics

**Track Classification:** Strings & Mathematical Physics