

## Reinterpretation of long-lived particles searches within SModelS

*Wednesday 16 May 2018 16:20 (15 minutes)*

SModelS provides an efficient framework to reinterpret new physics searches at the LHC in arbitrary theories with  $Z_2$ -odd BSM sectors by a decomposition into simplified model topologies. We show how the signatures of heavy stable charged particles and R-hadrons are embedded in this framework. We discuss recasting of this exotic search and the generation of the simplified model database. Finally, we present two exemplary applications: supersymmetry with a gravitino LSP and the inert doublet model.

### **Presentation**

**Presenter:** HEISIG, Jan (RWTH Aachen University)

**Session Classification:** Joint session with Long-Lived Particles Workshop