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SModelS - Development towards signatures beyond missing energy

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SModelS is a tool designed to decompose Beyond Standard Model (BSM) theories with a Z2 symmetry and confront them to results from the LHC experiment. The code uses simplified models results to achieve the task in a model independent way.
The existing version focuses on supersymmetry searches with missing energy (MET) final state and already includes a large variety of searches from ATLAS and CMS. Ongoing development is aimed at exploring beyond MET signatures of current interest within the theory and experimental community.

I will present the latest SModelS development which includes upgrading SModelS to a completely object oriented version and thus allows to probe beyond BSM models containing non-MET signatures. The modification facilitates integrating the particles'properties such as mass and life time which is imperative to investigate other signatures.
Furthermore, I will present the improved database of experimental results which is extended by adding the latest results from the LHC including searches for Heavy Stable Charged Particles (HSCP).
On the basis of these developments I will exemplify the impact of this new SModelS version on new physics scenarios.

Primary authors: WONGEL, Alicia (HEPHY); Mr LESSA, Andre (University of Oklahoma); Ms KULKARNI, Suchita (Physics Institute)

Presenter: WONGEL, Alicia (HEPHY)

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