Hands-On SModelS: a tool to make systematic use of simplified models results

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Recasting tools like CheckMate, MadAnalysis, or Rivet allow reinterpretation of LHC results by rerunning the analyses on new signal samples. SModelS works differently; it takes a candidate BSM theory that exhibits a Z2 symmetry, decomposes it into its simplified models spectrum, and confronts it with a large database of simplified models results from ATLAS and CMS SUSY searches. This procedure is much faster, though more conservative, making it a handy tool for tasks such as model surveys, classification of most important signal topologies, or the discussion of topologies missed by the current analyses.

In this tutorial, we shall learn to use the various SModelS functionalities, scrutinize concrete examples, and discuss the merits and shortcomings of this approach.

Bring your favorite model, either as an SLHA or LHE file!

Presentation

Talk given in person

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