

Strategy for the ATLAS pMSSM summary effort

Wednesday 17 December 2014 09:00 (20 minutes)

The strategy for the ATLAS pMSSM summary effort, which will lead to one of the so-called legacy papers of the collaboration, is presented. A flat scan of the pMSSM parameter space is performed by Tom Rizzo, an ATLAS short term associate. Various constraints are imposed for the scan to select viable models. A broad selection of searches in ATLAS is implemented. The selected models are first evaluated at event generation level in order to select a set we are likely to just about exclude. These will be simulated with AtlFast-II. The goals of the effort are to evaluate the impact of SUSY searches on a large set of pMSSM models, show the reach and complementarity of the searches, identify and classify models that are not excluded. A section is dedicated to the impact of ATLAS on dark matter. As the paper is still in a preliminary stage, no results have been approved for the public.

Author: SMESTAD, Lillian (University of Bergen (NO))

Presenter: SMESTAD, Lillian (University of Bergen (NO))

Session Classification: Indirect Dark Matter Searches