



Contribution ID: 49

Type: **Planary Talk**

Signatures of supersymmetry with underabundance of neutralino dark matter

Wednesday, 8 April 2015 14:30 (23 minutes)

Motivated by the absence, so far, of any signal for the coloured supersymmetric particles, we focus on the possibility that the electroweak sector may play the leading role in discovering supersymmetry. So far, the interest in the supersymmetric electroweak sector has often been linked to the fact that the LSP might account for the observed Dark Matter in the universe. The new LHC and direct detection limits cast, however some doubts on that possibility and it is possible that the LSP component in the observed DM is small, and the bulk of DM has different origin. We investigate the signatures of the supersymmetric electroweak sector with underabundance of neutralino dark matter and conclude that it is discoverable by the complementarity of dedicated collider experiments and future direct detection experiments.

Primary author: POKORSKI, Stefan (University of Warsaw (PL))

Co-authors: DELGADO, Antonio (University of Notre Dame (US)); SAKURAI, Kazuki (University of London (GB)); BADZIAK, Marcin; OLECHOWSKI, Marek (University of Warsaw, Faculty of Physics)

Presenter: POKORSKI, Stefan (University of Warsaw (PL))

Session Classification: SUSY