

## **Search for MSSM neutral and charged Higgs in ATLAS.**

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The search for the neutral Higgs boson(s) beyond the Standard Model is presented, based on the ATLAS data collected in 2011. A wide region of the MSSM parameter space is tested via searches for Higgs decays into two tau-leptons. Additionally, the obtained results are interpreted in terms of the exclusion limits for the Standard Model-like Higgs boson production.

The experimental observation of charged Higgs bosons would provide a clear signature of the physics beyond the Standard Model. The search for these particles is presented, based on the ATLAS data collected in 2011. Several final state topologies are explored, with Higgs bosons originating from the top-quark decays in top pair events and subsequently decaying into  $\tau\nu$  or  $c\bar{s}$ .

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