

# 26th International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY2018)



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## **Search for the supersymmetric partner of the top quark in fully hadronic final states at 13 TeV with the ATLAS detector**

This contribution presents the search for the supersymmetric partner of the top quark in all-hadronic final states. The stop squark can be produced in pairs in the pp collisions produced in the LHC, and decay through different channels depending on the Supersymmetry (SUSY) parameters. This analysis focuses in the decays of the stop to top and neutralino, where the top quark decays hadronically, although other decay modes are considered. Final states are characterized by multiple jets and large missing transverse momentum, which arises from the neutralinos, that are not detected. The analysis presented is performed using 36.1 fb<sup>-1</sup> of data collected with the ATLAS detector during 2015 and 2016. The results are shown in terms of exclusion limits on the masses of the SUSY particles.

### **Parallel Session**

Supersymmetry: Models, Phenomenology and Experimental Results

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