



ID de la contribución : 632

Tipo : Poster

A general search for new phenomena with the ATLAS detector in pp collisions at $\sqrt{s}=8$ TeV

This poster presents a model-independent general search for new phenomena in proton-proton collisions at a centre-of-mass energy of 8 TeV with the ATLAS detector at the LHC. The data set corresponds to a total integrated luminosity of 20.3/fb. Event topologies involving isolated electrons, photons and muons, as well as jets, including those identified as originating from b-quarks and missing transverse momentum are investigated. The events are sub-divided according to their final states into exclusive event classes. For the 697 classes with a Standard Model expectation greater than 0.1 events, a search algorithm tests the compatibility of data against the Monte Carlo simulated background in three kinematic variables sensitive to new physics effects. Although this search approach is less sensitive than optimized searches for specific models, it provides a more comprehensive investigation for new physics signals.

Summary

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Clasificación de temáticas : Beyond the Standard Model