

Search for rare processes and lepton-flavor-violating decays of Higgs boson at the ATLAS experiment

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The Standard Model predicts several rare Higgs boson processes, among which are the production in association with c-quarks, the decays to a Z boson and a photon, to a low-mass lepton pair and a photon, and to a meson and photon. The observation of some of these processes could open the possibility of studying the coupling properties of the Higgs boson in a complementary way to other analyses. In addition, lepton-flavor-violating decays of the observed Higgs boson are searched for, where on observation would be a clear sign of physics effects beyond the Standard Model. Several results for decays based on pp collision data collected at 13 TeV will be presented.

Alternate track

1. Beyond the Standard Model

I read the instructions above

Yes

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