

DIS2023: XXX International Workshop on Deep-Inelastic Scattering and Related Subjects



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Type: **Parallel talk**

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

Tuesday, 28 March 2023 10:00 (20 minutes)

The Standard Model predicts several rare Higgs boson decay channels, among which are 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 decays could open the possibility of studying the CP and 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.

Submitted on behalf of a Collaboration?

Yes

Participate in poster competition?

No

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