

## Exotic decays of the Higgs bosons

*Wednesday, November 9, 2022 5:05 PM (15 minutes)*

Precision studies of the properties of the Higgs bosons may provide a unique window for the discovery of new physics at the LHC. New phenomena can in particular be revealed in the search for lepton-flavor-violating or exotic decays of the Higgs bosons, as well as in their possible couplings to hidden-sector states that do not interact under Standard Model gauge transformations. This talk presents recent searches by the ATLAS experiment for decays of the Higgs bosons to new particles, using collision data at  $\sqrt{s} = 13$  TeV collected during the LHC Run 2.

### Type of talk

Experimental measurements

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**Session Classification:** Wednesday Session A

**Track Classification:** Physics Topics: Beyond the Standard Model