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## Search for Higgs boson decays to invisible final states produced in vector boson fusion (+photon) with the ATLAS detector

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Some new physics extensions of the Standard Model predict that the 125 GeV Higgs boson can be a portal to invisible dark matter candidates through its decay. Direct searches for Higgs boson decay to invisible particles are a convenient way to explore this scenario. I present the results of a search for invisible decays of the Higgs boson produced through the vector boson fusion channel (+low pT photon) in  $\boxtimes$  collisions at  $\boxtimes \sqrt{=}$  13 TeV with the ATLAS detector.

## Are you are a member of the APS Division of Particles and Fields?

Yes

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