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## Search for invisibly decaying Higgs bosons produced in vector boson fusion with ATLAS in Run 2

Dark matter is one of the remaining puzzles of the Standard Model. This poster presents preliminary results of a search for dark matter candidates in invisible Higgs boson decays with the ATLAS experiment using 139 fb<sup>-1</sup> of proton-proton collision data. The search targets vector boson fusion Higgs boson production, which is expected to be the most sensitive channel. This presentation highlights the background estimates for V+jets and multijet processes, the event categorisation, limit setting as well as the interpretation of the result in terms of Higgs portal models.

### Collaboration / Activity

ATLAS

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