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Contribution ID: **3761** Type: **Oral not-in-competition (Graduate Student) / Orale non-compétitive (Étudiant(e) du 2e ou 3e cycle)**

Searching for Beyond-Standard-Model charged Higgs bosons in low-mass $W\gamma$ resonances.

Wednesday 21 June 2023 11:45 (15 minutes)

A search for a beyond the Standard Model charged Higgs boson through $W\gamma$ resonances is presented, with a focus on the leptonic channel. The final state consists of either an electron or muon accompanied by at least one photon and less than two jets alongside a veto of b-jets is required. The analysis is based on the 139 fb^{-1} of the proton-proton collision data at the centre-of-mass energy of 13 TeV collected by the ATLAS detector within the Large Hadron Collider. A mass range of 100 GeV to 200 GeV is considered for this hypothetical charged Higgs boson. The current status of this analysis will be presented.

Keyword-1

Higgs

Keyword-2

Beyond-Standard-Model

Keyword-3

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