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Searches for Dark Matter with the ATLAS Experiment at the LHC

Monday, July 17, 2023 9:30 AM (30 minutes)

The presence of a non-baryonic Dark Matter (DM) component in the Universe is inferred from the observation of its gravitational interaction. If Dark Matter interacts weakly with the Standard Model (SM) it could be produced at the LHC. The ATLAS Collaboration has developed a broad search program for DM candidates in final states with large missing transverse momentum produced in association with other SM particles (light and heavy quarks, photons, Z and H bosons, as well as additional heavy scalar particles) and searches where the Higgs boson provides a portal to Dark Matter, leading to invisible Higgs decays. The results of recent searches on 13 TeV pp data from the LHC, their interplay and interpretation will be presented.

Is this abstract from experiment?

Yes

Name of experiment and experimental site

ATLAS

Is the speaker for that presentation defined?

No

Details

N/A

Internet talk

Maybe

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