Contribution ID: **202** Type: **Talk**

Dark Matter searches with the ATLAS Detector

Thursday 26 August 2021 17:00 (25 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 experiment has developed a broad search program for DM candidates, including resonance searches for the mediator which would couple DM to the SM, searches with large missing transverse momentum produced in association with other particles (light and heavy quarks, photons, Z and H bosons) called mono-X searches 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, their interplay and interpretation will be presented. Prospects for HL-LHC will also be discussed.

Details

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Is this abstract from experiment?

Yes

Name of experiment and experimental site

ATLAS

Is the speaker for that presentation defined?

Yes

Internet talk

Maybe

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