



Contribution ID: 477

Type: **Talk**

Search for dark matter at the LHC

Sunday 5 September 2021 16:25 (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 and CMS experiments have 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 collision data, their interplay and interpretation will be presented.

Primary author: BEHR, Janna Katharina (DESY)

Presenter: BEHR, Janna Katharina (DESY)

Session Classification: Energy frontier physics beyond the standard model

Track Classification: Energy frontier physics beyond the standard model