



Contribution ID: 152

Type: Oral presentation

Searches for dark matter with the ATLAS detector

Thursday 21 July 2022 14:00 (20 minutes)

The presence of a non-baryonic Dark Matter (DM) component in the Universe is inferred from the observation of its gravitational interaction. If DM interacts weakly with Standard Model (SM) particles it could be produced at the LHC. The ATLAS experiment 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). The results of recent searches on 13 TeV pp data, their interplay and interpretation will be presented.

Author: ATLAS COLLABORATION

Co-author: RIU, Imma (IFAE Barcelona (ES))

Presenters: COSTA BATALHA PEDRO, Rute (LIP Laboratorio de Instrumentacao e Fisica Experimental de Part); COSTA BATALHA PEDRO, Rute (LIP - Laboratorio de Instrumentação e Física Experimental de Partículas (PT))

Session Classification: Parallel 3D - Dark sector