



Contribution ID: 36

Type: LHC experiments

New search results for low-mass dijet resonances using trigger-level jets at ATLAS

Tuesday, 5 June 2018 17:15 (15 minutes)

The LHC delivers an unprecedented number of proton-proton collisions to its experiments. In kinematic regimes first studied by earlier generations of collider experiments, the limiting factor to more deeply probing for new physics can be the online and offline computing, and offline storage, requirements for the recording and analysis of this data. In this contribution, we describe a strategy that the ATLAS experiment employs to overcome these limitations and make the most of LHC data during Run-2 - a compact data stream involving trigger-level jets, recorded at a far higher rate than is possible for full event data. We discuss the challenges posed in the analysis of this data, collected in 2016, including the custom jet calibration developed. We also present the results of that analysis, demonstrating the competitiveness and complementarity with traditional data streams.

Presenter: KALDERON, William (Lund University (SE))

Session Classification: Posters session