

Dark Matter searches with the ATLAS Detector

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The presence of a non-baryonic dark matter component in the Universe is inferred from the observation of its gravitational interaction. If dark matter interacts weakly with the Standard Model it could be produced at the LHC. The search for dark matter at the LHC can either be performed directly, by looking for a signature of large missing transverse momentum coming from the dark matter candidates escaping the detector, or more indirectly by looking for the intermediate mediators which would couple the dark matter particles to the Standard Model. A broad and systematic search program covering these various possibilities with the ATLAS detector is in place: this talk will review the latest results of these searches and show their complementarity.

Preferred Session

Dark Matter

Comments

This talk would be well-suited for either the Dark Matter or Collider Physics session.

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