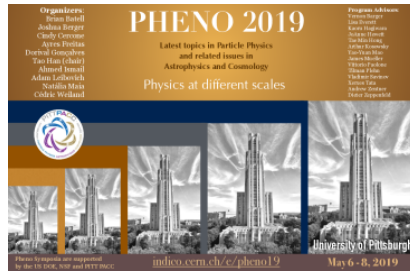


## Phenomenology 2019 Symposium



Contribution ID: 688

Type: parallel talk

# Searches for supersymmetry in R-parity violating and long-lived signatures with the ATLAS detector

Monday 6 May 2019 17:45 (15 minutes)

R-parity violation introduces many viable signatures to the search for supersymmetry at the LHC. The decay of supersymmetric particles can produce leptons or jets, while removing the missing transverse momentum signal common to traditional supersymmetry searches. Several supersymmetric models also predict massive long-lived supersymmetric particles. Such particles may be detected through abnormal specific energy loss, appearing or disappearing tracks, displaced vertices, long time-of-flight or late calorimetric energy deposits. The talk presents recent results from searches of supersymmetry in these unusual signatures of R-parity violation and long-lived particles with the ATLAS detector.

## Summary

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**Session Classification:** SUSY I