

# ATLAS searches for supersymmetry with long-lived particles

*Monday 14 November 2022 15:45 (15 minutes)*

Various Supersymmetry (SUSY) scenarios, including split SUSY and anomaly or gravity-mediated SUSY-breaking scenarios, lead to signatures with long-lived particles. Searches for these processes may target either the long lived particle itself or its decay products at a significant distance from the collision point. These signatures provide interesting technical challenges due to their special reconstruction requirements as well as their unusual backgrounds. This talk will present recent results in long-lived SUSY searches using ATLAS Run 2 data.

## **Poster fallback option for rejected abstracts for parallel oral presentations**

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