

## Long Lived Particles Searches in SUSY and BSM in the ATLAS experiment

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Many models of physics beyond the Standard Model predict new particles with long lifetimes. Examples include Supersymmetry with R-parity violation, suppressed decays of the next-to-lightest Supersymmetric particle, or models with hidden sectors. The Large Hadron Collider has extended the reach of particle-physics experiments with a potential for discovery of new physics at the TeV scale and many searches have been carried out by both ATLAS and CMS. The methodology of the searches (reconstruction techniques, background suppression, etc.) and the sensitivity of these searches in the ATLAS experiment are reviewed.

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