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## Search for Stopped Long-lived particles with the ATLAS experiment

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Massive, long-lived particles (LLP) are predicted in several supersymmetry and beyond the Standard Model scenarios. In some cases these heavy objects, if produced in 7 TeV pp collisions at the CERN LHC, may lose all of their energy and come to rest within the detector volume. We describe the search for gluino R-hadrons which have been captured within the ATLAS detector volume, particularly the calorimeter, and decay at some later time, dictated by the lifetime of the particle. Events containing one or more jets, potentially produced from the 2- or 3- body decays of the gluinos stopped within the calorimeter are isolated. Although the analysis is motivated by the search for long-lived gluinos we are also sensitive to the decays of other long-lived particles which may be captured by ATLAS. Candidate events are triggered in the empty bunch crossings in order to remove collision backgrounds. Simple selection criteria enable the discrimination of signal-like events from backgrounds, which arise from cosmic muons, noise and beam related sources.

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