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Searching for Displaced Leptons in the ATLAS Detector LESYA HORYN, University of Chicago, ATLAS COLLABORATION COLLABORATION — Many extensions to the Standard Model include long lived particles (LLPs), which are metastable to the ATLAS detector. This talk presents results from a search for two leptons with high impact parameter in the in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector at the LHC using the full Run 2 dataset. Such a signature could be the result of a gauge mediated supersymmetry breaking (GMSB) slepton decaying into a gravitino and standard model lepton, last searched for in OPAL at LEP. Results of this analysis are presented.

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