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Search for compressed top squarks with one lepton final state in √s=13 TeV pp collisions with the ATLAS detector

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Natural supersymmetry suggests a light top squark (t1), possibly within the discovery reach of Run 2 of the LHC. This poster presents the latest result of an analysis targeting a compressed region of the stop phase space where the mass difference between the stop and the lightest neutralino ($\tilde{\chi}01$) is smaller than the top-quark mass, using pp collision data collected over the full Run-2 of the LHC. A machine learning technique was employed in the analysis to improve the discrimination of signals from backgrounds dominated by the $t\bar{t}$ process.

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