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”(YSF) Search for supersymmetry in pp collisions at 13 TeV in the single lepton final state with the CMS experiment”

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In this talk, an inclusive search for Supersymmetry is presented. The search is performed in events containing a single lepton, multiple jets, and missing transverse energy in the final state. The proton-proton collision data were recorded by the CMS experiment during Run 2 of the LHC at a center-of-mass energy of 13 TeV. Selections on b-jet enriched and depleted regions target different signal models. The search uses $\Delta\phi$, the azimuthal angle between the lepton and four-vector sum of the missing energy and lepton, as a powerful discriminating variable to distinguish between background and signal. Additionally, multiple exclusive search regions are defined in different kinematic observables to enhance sensitivity to a range of different mass scenarios. The latest results in this clean event topology will be discussed and interpreted in the context of simplified models.

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