

Abstract Submitted
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Search for Charged Massive Stable Particles Using Data from D0

YUNHE XIE, Brown University, D0 COLLABORATION — We report on a search for charged massive stable particles (CMSPs) by the D0 Experiment at Fermilab's Tevatron. CMSPs are predicted in many theories beyond the Standard Model. Time-of-flight information was used in the search for pair-produced CMSPs, based on the signature of two particles, reconstructed as muons, with speed and invariant mass inconsistent with beam-produced muons. The analysis was done with data taken by the D0 detector in Run II corresponding to an integrated luminosity of 1.1 fb^{-1} . Limits on the production of stable stau leptons, gaugino-like charginos, and higgsino-like charginos are presented.

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