

Abstract Submitted
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Searching for Supersymmetric Dark Matter Annihilation Signals in the AMS01 Electron Spectrum GRAY RYBKA, MIT — If dark matter is composed of supersymmetric neutralinos, some of the cosmic ray fluxes incident on earth could be the products of neutralino self-annihilation. The AMS-01 experiment flown on the space shuttle in 1998 measured cosmic ray fluxes above the atmosphere. I search the AMS-01 electron spectrum for neutralino annihilation remnants that have drifted through the galaxy to earth, and use the results to place limits on which supersymmetric models, cosmic ray propagation models, and dark matter distributions are compatible with each other.

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