THE COSMIC-RAY ANTIPROTON TO PROTON RATIO FROM 5 TO 50 GEV

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We present a new measurement of the cosmic-ray antiproton/proton abundance ratio as a function of energy. The data were obtained from a balloon flight of the HEAT-pbar instrument in the Spring of 2000 from Ft. Sumner, NM. Our results for the energy-dependent antiproton fraction are compared with other measurements and recent predictions based on the observed abundance of secondary light elements in the cosmic rays. Our data appear to be consistent with a purely secondary production of antiprotons.