

Title: The Rigidity Spectra of Charged Cosmic Nuclei from
5 GV/c to 100 GV/c

Author(s): Lawrence H. Smith, Andrew Buffington, Charles D. Orth,
and George F. Smoot

Sponsoring Institution(s): Space Sciences Laboratory
University of California, Berkeley

Postal address for author underlined above: Space Sciences Laboratory
University of California
Berkeley, CA 94720

Abstract

We have previously^{1,2} reported that the spectral indices of the secondary nuclei of Li, Be, B, and N are steeper than those of C and O. We have repeated this measurement using a new instrument which is less susceptible to possible systematic errors. We report on the preliminary data from this measurement and present the spectra of helium to iron with improved statistics.

¹"Primary Cosmic Ray Nuclei Rigidity Spectra," Proc. of the Joint Meeting of the APS and AAS, San Juan, Puerto Rico, December 1971, reported in IKK, Zentrastelle fur Atomickernenergie, Number 3, 1972.

²Astrophysical Journal, March 1973.