

Abstract Submitted
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A New Measurement of the Energy Spectra of Heavy Cosmic-Ray Nuclei up to Very High Energies PATRICK BOYLE, MAXIMO AVE, FLORIAN GAHBAUER, CHRISTIAN HOEPPNER, JOERG HOERANDEL, MASAKATSU ICHIMURA, DIETRICH MULLER, ANDREW ROMEROWOLF, SCOTT WAKELY, University of Chicago — The TRACER cosmic-ray detector was exposed in a long-duration balloon flight from McMurdo, Antarctica in December 2003. The instrument, with a geometric factor of $\sim 5 \text{ m}^2 \text{ ster}$, performed well and provided measurements for a duration of ten days with zero dead-time. TRACER measured the energy of cosmic ray nuclei at single charge resolution over the range oxygen to iron ($8 \leq Z \leq 26$). We shall present preliminary results on the energy spectra of these nuclei from $\sim 500 \text{ MeV/nucleon}$ to $\sim 10 \text{ TeV/nucleon}$. The data will be compared with results from previous measurements, and discussed in the context of current models on the galactic propagation of cosmic rays.

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