

Abstract Submitted
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Observation of the GZK Cutoff DOUGLAS BERGMAN, Rutgers University, HIRES COLLABORATION — The GZK Cutoff is the predicted end of the cosmic ray spectrum at an energy of about 6×10^{19} eV, and is due to interactions between the cosmic rays and the microwave background. The cutoff was predicted soon after the discovery of the Cosmic Microwave Background, and has been called the Holy Grail of Ultrahigh Energy Cosmic Ray physics. We use evidence from fits to the published HiRes Monocular differential spectra and from the $E_{1/2}$ criterion, the energy at which the measured integral spectrum is half the expected integral spectrum with no cutoff, to argue that HiRes has observed this cutoff.

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