Abstract Submitted for the APR08 Meeting of The American Physical Society

Observation of the GZK Cutoff by the HiRes Experiment GARETH HUGHES, Rutgers, the State University of New Jersey, HIGH RESOLU-TION FLY'S EYE COLLABORATION — The High Resolution Fly's Eye (HiRes) Experiment has observed the GZK cutoff. It is seen at $6x10^{19}$ eV, the expected energy for the Greisen Zatsepin Kuz'min threshold. An "ankle" structure is seen a decade below the suppression. We present a description of the experiment, data acquisition, analysis and fits to the resulting spectra. The significance of the break in the spectrum is shown to be greater than 5 sigma.

> Gareth Hughes Rutgers, the State University of New Jersey

Date submitted: 11 Jan 2008

Electronic form version 1.4