

Abstract Submitted  
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***p*-air Inelastic Cross-Section Measurement at  $10^{18.5}$  eV Using Cosmic Ray Data** KONSTANTIN BELOV, University of Utah, THE HIGH RESOLUTION FLY'S EYE (HIRES) COLLABORATION — Cosmic ray data can be used to measure hadronic cross-section at the energies unreachable by modern accelerators. Using high quality cosmic ray data provided by the High Resolution Fly's Eye stereo fluorescence detector we find the p-air inelastic cross-section value to be  $456 \pm 17(stat) + 39(sys) - 11(sys)$  mb at  $10^{18.5}$  eV. We discuss the result, and the statistical and systematic errors.

Konstantin Belov  
University of Utah

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