

Abstract Submitted
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ANITA: A Balloon Borne Radio Detector of Ultra High Energy Neutrinos KIMBERLY PALLADINO, Ohio State University, ANITA COLLABORATION — The ANtarctic Impulsive Transient Antenna (ANITA) searches for ultra high energy neutrinos interacting in the antarctic ice cap. It is a long duration balloon experiment composed of an array of broadband dual-polarized horn antennas that flew over Antarctica in December 2006 through January 2007. ANITA relies upon the Askaryan effect, in which a particle shower in medium emits coherent Cherenkov radiation at radio wavelengths, for the detection of a neutrino induced shower. ANITA is designed to detect or constrain flux models of ultra high energy neutrinos created by the interaction of ultra high energy cosmic rays with the cosmic microwave background. The science and flight performance of the ANITA instrument will be discussed.

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