

Abstract Submitted  
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**Observation of Reconstructable Radio Waveforms from Solar Flares with the Askaryan Radio Array (ARA)** BRIAN CLARK, The Ohio State University, THE ASKARYAN RADIO ARRAY COLLABORATION — The Askaryan Radio Array (ARA) is an ultra-high energy ( $> 10^{17}$  eV) neutrino detector in phased construction at the South Pole. The full detector will consist of  $\sim 37$  autonomous stations of antennas which search for the radio pulses produced by neutrino interactions in the Antarctic ice. Three of the proposed detectors have been installed at up to 200m depth, with an additional two slated for deployment in Austral summer 2017. A prototype of the detector was deployed in January 2011, in time to serendipitously observe the relatively active solar month of February. In this talk, we will present preliminary results from an analysis of radio waveforms associated with an X-class solar flare observed in this prototype station. These are the first reconstructable events of natural origin seen by ARA, and could potentially be a powerful calibration source for the array.

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