

Abstract Submitted
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Mini-Tunka KATE ORR, University of Kansas — Tunka is a 133-antenna array whose purpose is to detect particle showers and measure Cherenkov light. Mini-Tunka is an attempt to re-create the Tunka experiment locally and on a smaller scale for the detection of cosmic ray muons. From the measurements I will attempt to determine the nature of the primary cosmic rays and, in the process, hopefully resolve some anomalies in the Tunka data. Ultimately the study of Cherenkov radiation will aid in the study of other much higher energy cosmic rays. Mini-Tunka is on-going and I will be discussing the process of setting up the experiment, from hardware to the search for a suitable location, and the process of muon detection and how it can be used to determine characteristics of the primary cosmic rays, such as direction of approach and energy.

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