Abstract Submitted for the CAL13 Meeting of The American Physical Society

Multilateration of Cosmic Ray Muons NATHANIEL MILGRAM, R. CRIBBS, K. MCARDLE, R. MORSHEAD, Cal Poly, San Luis Obispo — Cosmic rays produce showers of muons when they collide with molecules in the upper atmosphere. The incident cosmic ray's direction can be reconstructed from the times of arrival of shower muons at detectors placed on the ground. We developed a simulation and reconstruction algorithm based on standard multilateration techniques using iPython to study the feasibility of building a cosmic air shower array at Cal Poly. An overview of the project and current status of the feasibility study will be presented.

Nathaniel Milgram Cal Poly, San Luis Obispo

Date submitted: 04 Oct 2013 Electronic form version 1.4