

QUARKNET ANNUAL REPORT 2018 UNIVERSITY OF MISSISSIPPI

In 2018 our QuarkNet group held an extended workshop, first in June and then in August. The workshops had Particle Physics and Cosmology Lecture and optics demonstrations. We assembled Berkeley type Cosmic Ray Detectors, wrapped and changed phototubes, and in general worked on repairing two detectors. We took data with the Berkeley detector and measured the cosmic ray flux versus angle. The data is displayed in a spreadsheet below. In a follow-on meeting in August Dr. Kroger covered lens and light collection optics in glass and scintillators. The teachers assembled several optics demonstrations that they could bring back to their classrooms. The Optics workshop was largely supported by the department. Finally we discussed possible 2018-19 activities.

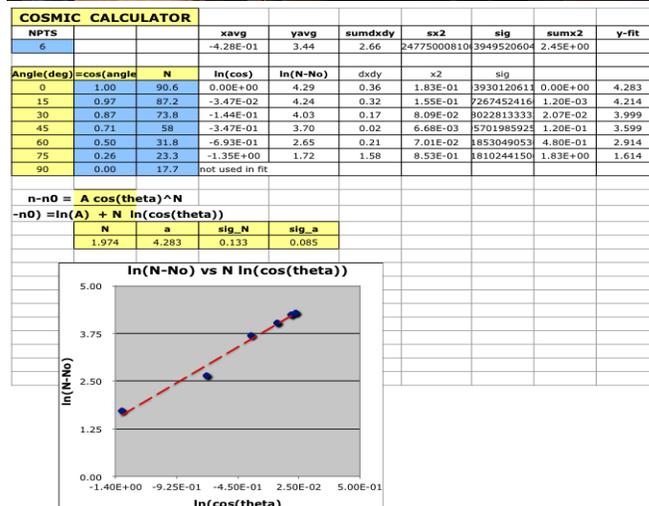


Figure 1: Faculty and Teachers at the UM QuarkNet summer workshop and a Cosmic Ray Spectra Analysis.