

## First C.R.O.P. Saturday Workshop

September 28, 2013

8:30 – 9:00	Participants arrive, nametags (Lecture Hall # 136)
9:00 – 9:05	Welcome and review day's agenda
9:05 – 9:10	Evaluation information
9:10 – 9:15	Research method information – Michelle Howell Smith
9:15 – 10:10	Pre-workshop assessment
10:10 – 10:25	Introduction to C.R.O.P., C.R.O.P. history, cosmic ray physics, and extensive air showers
10:25 – 10:35	Introduction to oscilloscopes and their use
10:35 – 10:45	Break, move to lab rooms 131, 137 & 141 (Snacks provided at the atrium by the vending machines)
10:45 – 12:00	Hands-on work with oscilloscopes, function generators, oscilloscopes in the classroom activities, and oscilloscope worksheet (small groups)
12:00 – 1:00	Lunch (Food provided at the atrium by the vending machines)
1:00 – 1:30	Introduction to scintillators and photomultiplier tubes
1:30 – 2:10	Hands-on work with scintillators, and PMTs, including high voltage safety and light leak testing (small groups)
2:10 – 2:15	Mini Break
2:15 – 3:15	Continue hands-on work with PMTs. Activity with detectors to estimate threshold (small groups)
3:15 – 3:30	Discussion of school activities with scintillators and oscilloscopes (Lecture Hall # 136)
3:30 – 3:45	Auger Observatory presentation
3:45 – 4:00	Wrap up and Q&A
4:00	Adjourn
4:00 – 4:30	Optional Tour of the Department of Physics and Astronomy, Jorgensen Hall

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