



# International Symposium on Future Directions in UHECR Physics

## Tuesday, February 14, 2012

### Theory and measurement of UHECR flux and composition - 500/1-001 - Main Auditorium (2:00 PM - 4:00 PM)

-Conveners: James Matthews

time	[id] title	presenter
2:00 PM	[M4] Particle physics connection	ELLIS, Jonathan R.
2:40 PM	[M9] Review of accelerator data of relevance to shower simulation	Prof. ITOW, Yoshitaka
3:20 PM	[M23] Recent results from LHCf	MITSUKA, Gaku
3:40 PM	[M99] Estimates of the proton-proton cross section at UHE energy	Prof. LIPARI, Paolo

### Theory and measurement of UHECR flux and composition - 500/1-001 - Main Auditorium (4:30 PM - 6:30 PM)

-Conveners: Peter Grieder

time	[id] title	presenter
4:30 PM	[M4] Measurement of the proton-air cross section with the Pierre Auger Observatory	Dr ULRICH, Ralf Matthias
4:50 PM	[M8] Measurements of the muon shower content at the Pierre Auger Observatory	YUSHKOV, Alexey
5:10 PM	[M03] New Physics at UHE energies	Prof. FARRAR, Glennys
5:30 PM	[M29] New technique and results of cosmic ray investigations in the energy interval $10^{15}$ – $10^{19}$ eV	Prof. PETRUKHIN, Anatoly
5:50 PM	[M10] WG Review of modeling and description of air showers	Dr ENGEL, Ralph