

Introduction to the Instrument Analysis Workshop 4

Eduardo do Couto e Silva July 14, 2005

E. do Couto e Silva



Dinner Tonight – Confirm by coffee break



Make sure during the break you load your talks in the computer

Warren can help you

Talks will appear on the web later in the day

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Workshop Series

- Happy anniversary to us!
 - There is one more coming
 - Aug 29 during LAT Collaboration meeting
- Original Plan was to do only 5 workshops
 - We are considering to continue the effort for one more year
 - Adjust its scope as we change phases in the LAT project

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Goals for this Workshop

- Revisit data taken during the last few months
 - 2 towers
 - Most of the analysis
 - End to end tests
 - SVAC runs
 - 4 towers
 - Handful of runs only
 - 6 towers
 - Almost no runs
 - » we will take more soon
- Sharpen data analysis ideas for full LAT
 - Learn from our mistakes
- Provide feedback to data taking plans

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What we will talk about?

- Comparison of baseline run to those taken with
 - Different PDU voltages
 - Different trigger types
 - Different TKR cable readout
 - Different input rates (pulse generator)
 - Different CAL configurations
 - 4 range high energy muon gain
 - Flight configuration
- Some preliminary studies
 - Calibrations
 - Alignment
 - Trigger
 - Deadtime
- Discussions
 - Data taking configurations for the next LAT tests
 - Data access
 - Preparation of internal notes
- Special guest appearance
 - ACD
- To be delivered to SLAC in about a month

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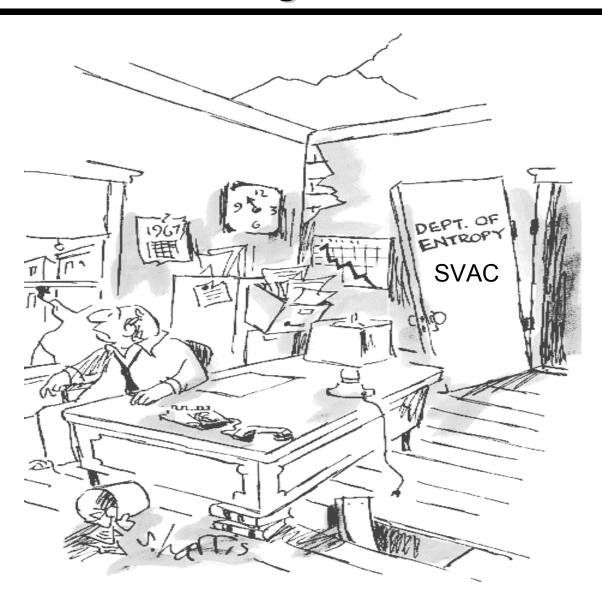
Timeline for data taking

- 8 towers in a grid
 - End of July
- ACD at SLAC
 - Mid-August
 - Will get some ACD only data
 - Maybe we will integrate ACD into 8 towers!
- LAT
 - All CAL modules are at SLAC
 - TKR modules may be all delivered "at once"
 - During the month of September
- The last two bullets require a midcourse correction in our data taking plans

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We need to organize ourselves





Proposal for the next workshop (Aug 29)

We will have a discussion on Friday afternoon

- Invited talk
 - Operations
- Expected results
 - Calibration trends
 - Knowledge of how stable the system is crucial for the next phase (ISOC)
 - Inter and Intra tower alignment
 - Comparison with metrology survey
 - Monte Carlo comparisons
 - Is the geometry implemented correctly?
 - Studies with photons from secondary cosmic ray showers
- Discussions
 - How does the TEM diagnostics and system timing work?
 - How do the trigger and filter work on orbit?
 - How we will configure the ACD for data taking tests
 - We will have the best muon telescope ever!
 - How to turn around results in a period of few weeks
 - There will be a crunch during the end of the year
 - Construction will be over and we need to help I&T during its final stages
 - Proposal on distributions to be monitored during operations
 - Benefit from our knowledge in looking at the data

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Operations



"The message isn't completely clear. Either we're being attacked by some missiles coming over the Arctic Circle, or there's a severe gumdrop shortage in North Carolina." Rob Cameron not is his best days...

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Last Slide

- Thanks for coming
 - I know everyone is busy
- We have two full days of data analysis presentations
 - Only 1 data analysis from SVAC
 - This means the Collaboration is carrying the effort
- Next logical steps
 - Final characterization and calibrations of full LAT
 - Operations

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