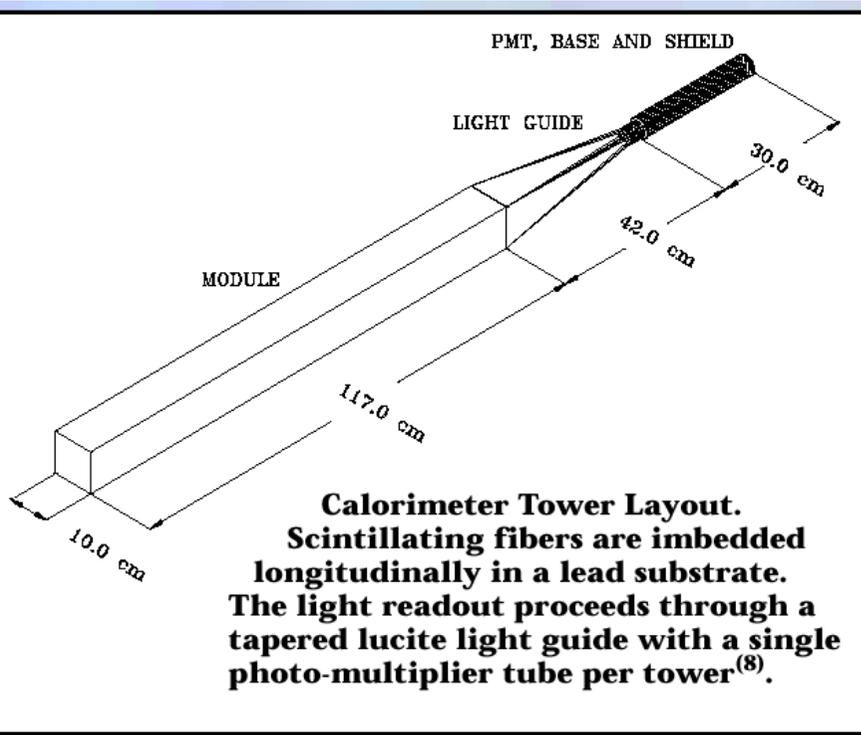


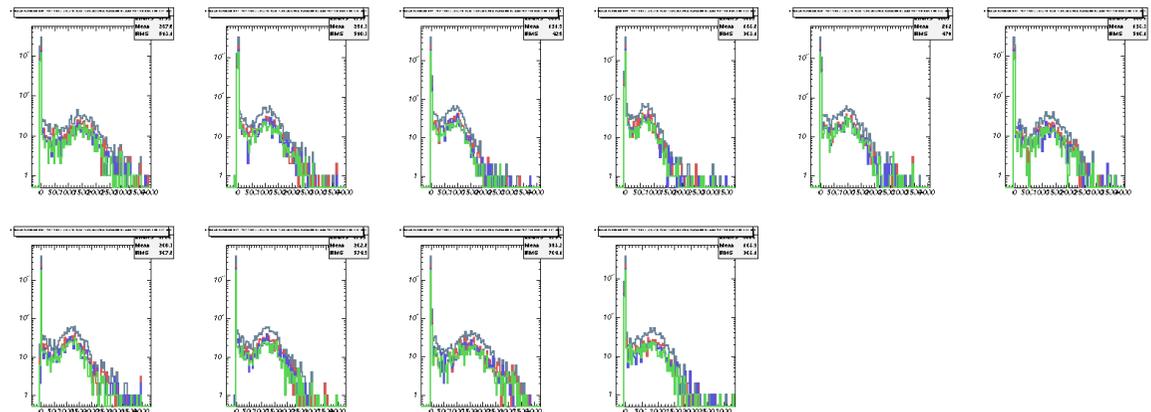
SpeCal Status

Gerrit van Nieuwenhuizen, MIT
PHOBOS Collaboration Meeting
BNL, December 11, 2003

SpeCal/PCal Module Testing



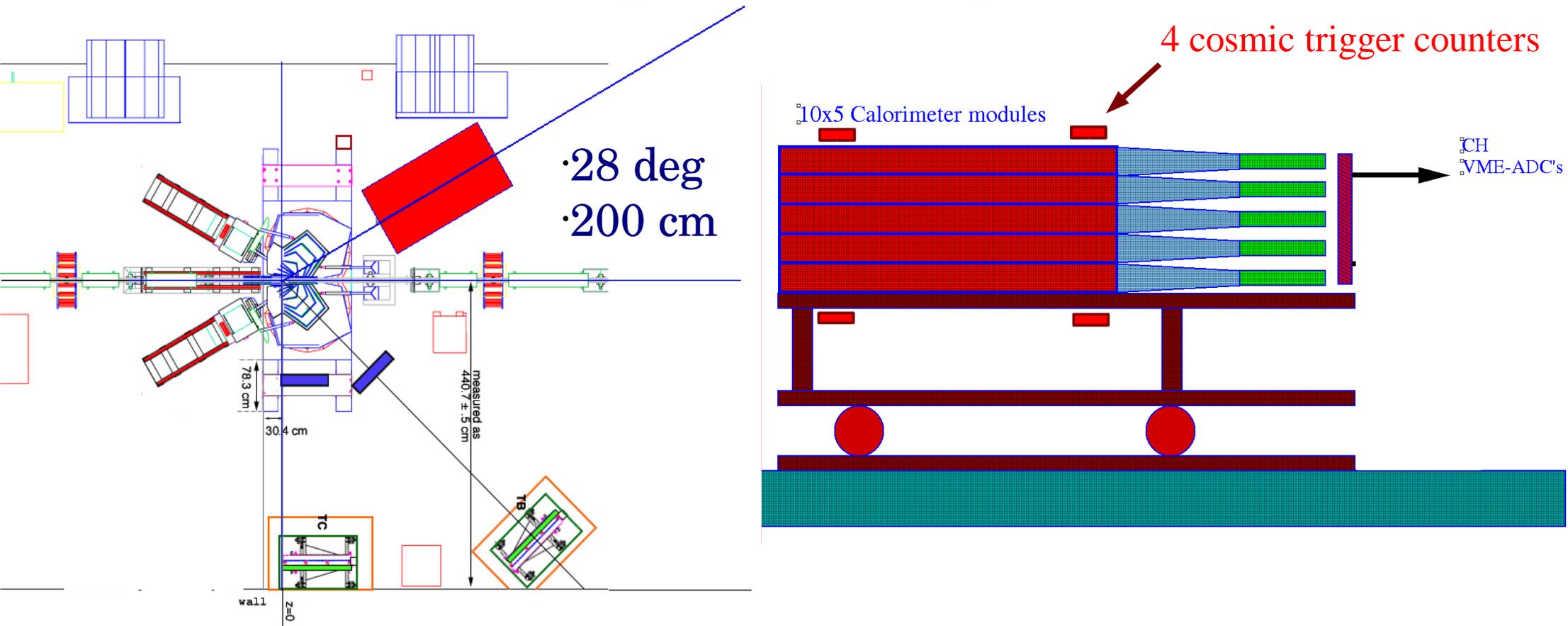
- Rigged 200 in tunnel on pallets
- Limited # of test cables
- Used 40 pre-tested PMT's
- Cosmics triggered
- Some 160 modules tested
- Enough good modules found
- Not many modules left!



SpeCal Assembly and Installation

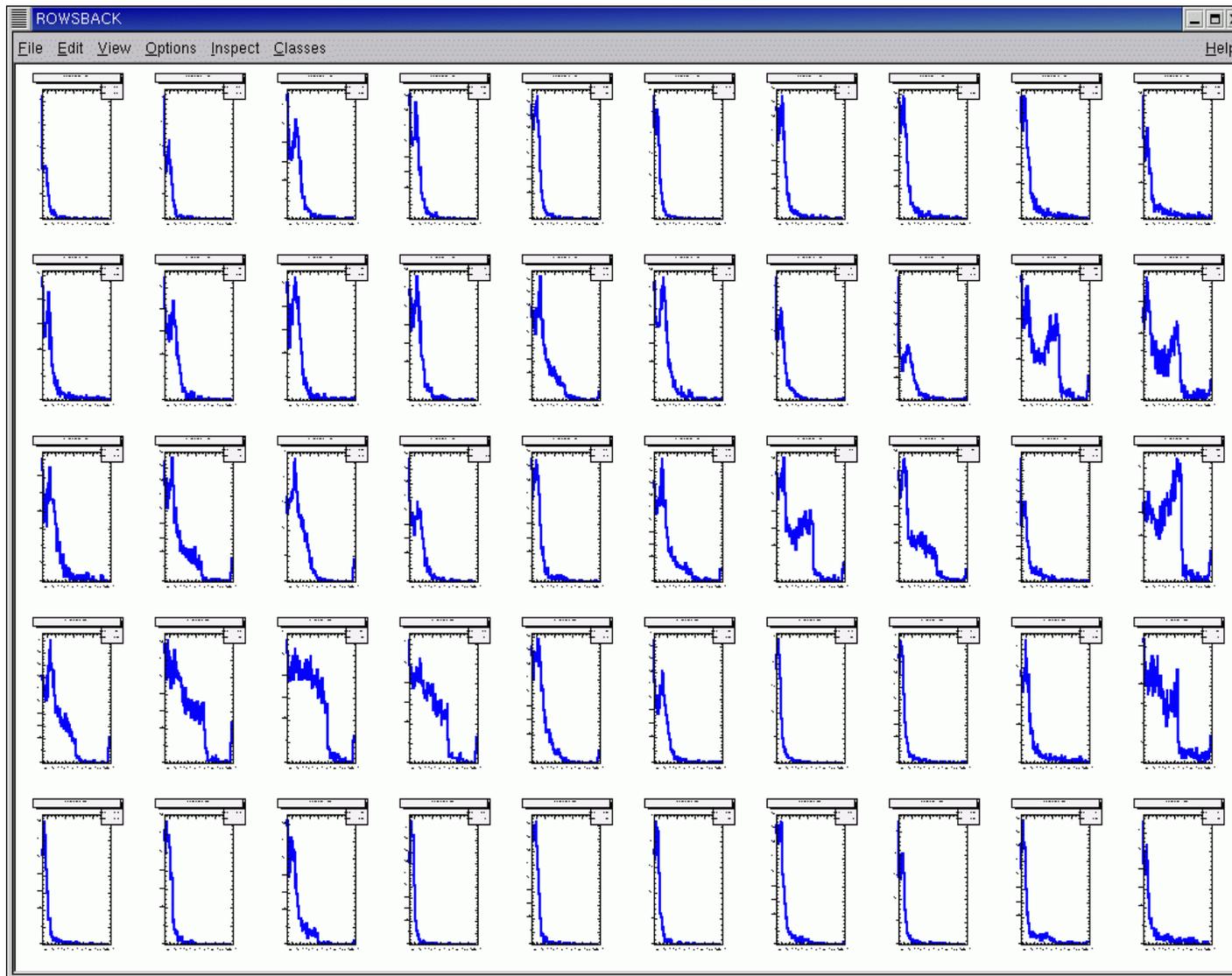


SpeCal Setup

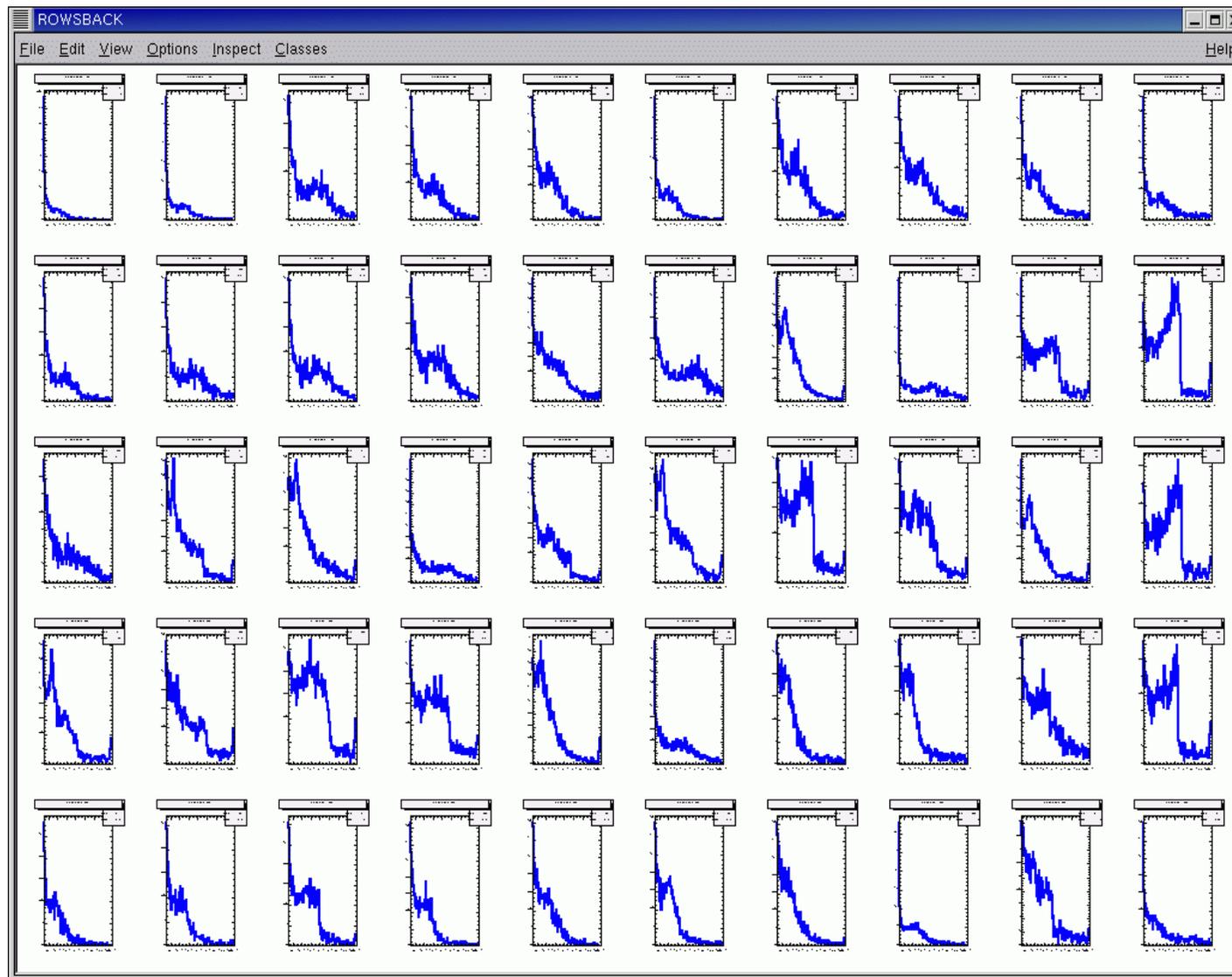


- SpeCal fully installed, cabled up, etc.
- 8 'SpecTrig' paddles providing 4 cosmic triggers
- E864 HV for SpeCal, NIM HV for paddles

SpeCal Cosmics 1600 Volt



SpeCal Cosmics 1900 Volt



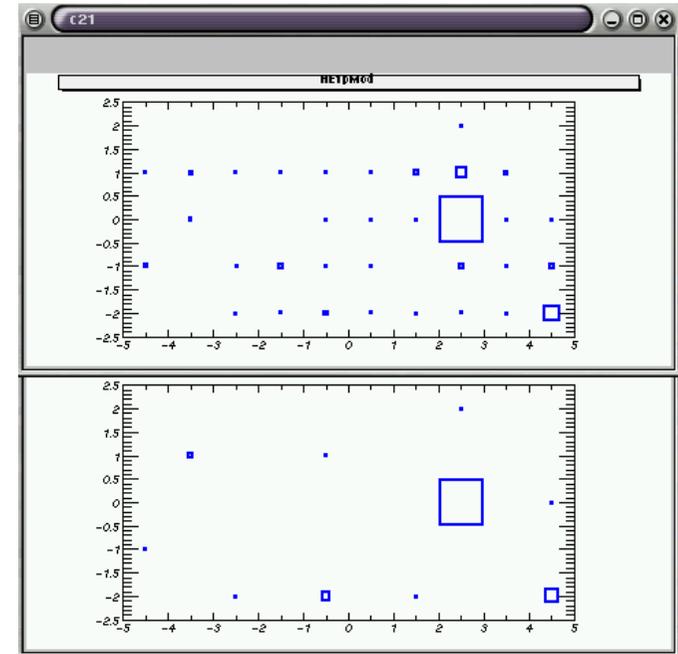
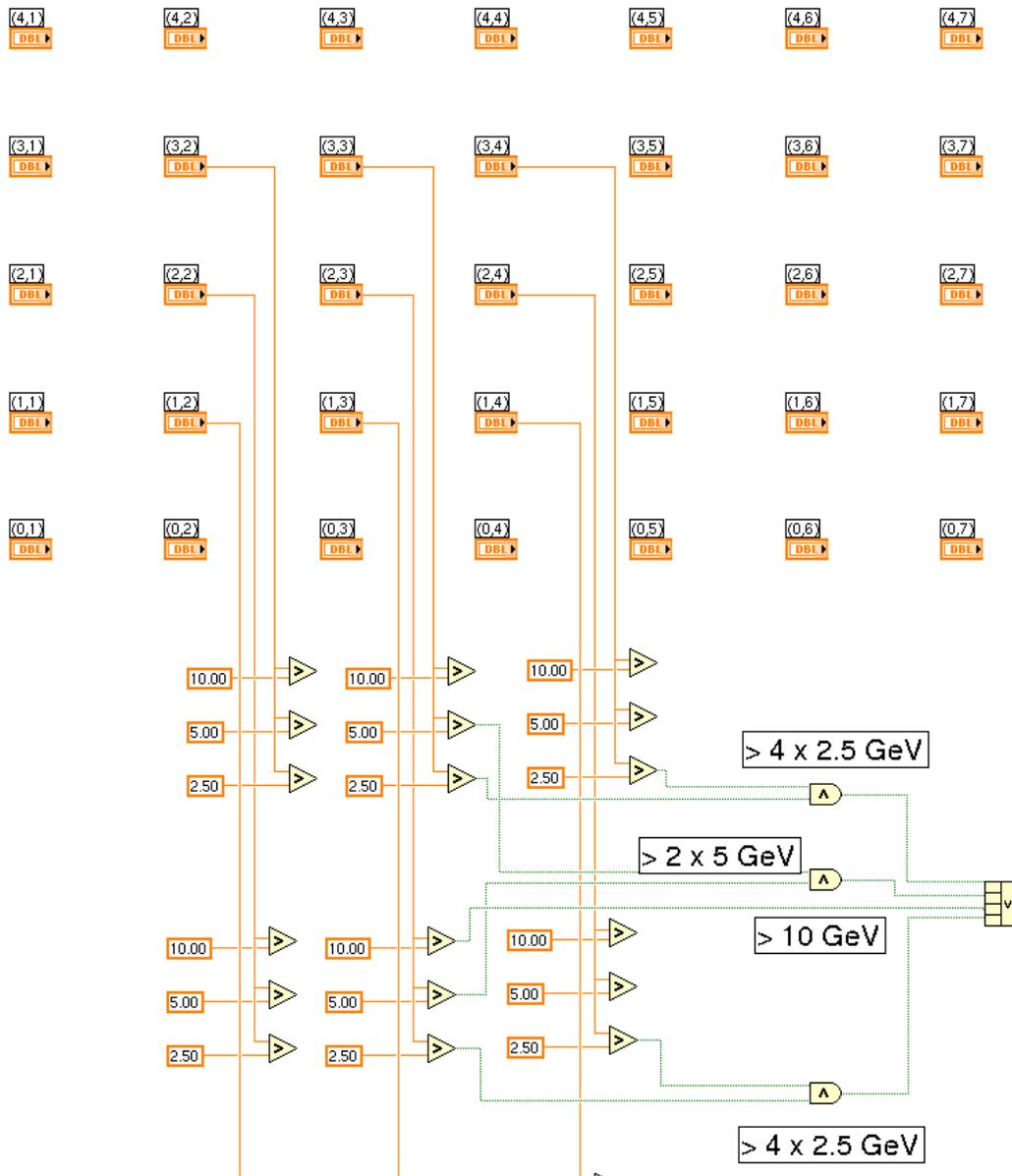
Issues Remaining I

- Small amount of VME-ADC's
 - Currently 3 ADC's available
 - 1 repaired ADC soon back
 - 1 broken ADC sent to Wiener/CAEN
 - Can borrow 1 ADC soon
 - 4 new ADC's arriving in January
- HV Control problems
 - 3 crates daisy-chained, SpeCal HV control is flaky
 - Dedicated SpeCal HV control line didn't work
 - Possible problem with one of the PMT driver cards
 - Need long access to debug

Issues Remaining II

- Cosmic results are worrismatic
 - 10 to 15 channels give strange spectra
 - Need to pinpoint problem
 - If tubes are the culprit then need long access to replace
- Geometry needs to be done
- Online software needed (piggyback on Pcal?)
- For the time being SpeCal is a slave detector
- As soon as all current issues are resolved we'll start setting up a high-Pt trigger

High Pt trigger



- Tedious if shower overlaps modules
- Need to discriminate 3 times per signal
- That's 50 1-to-4 fanout channels
- Hundreds of logic gates
- Maybe we can use XLM?
- Any bright insights are welcome!!!

Conclusions

- Lots of hard work behind us
- Still a lot of work ahead