Status of the Cosmic Ray Test Stand at UF

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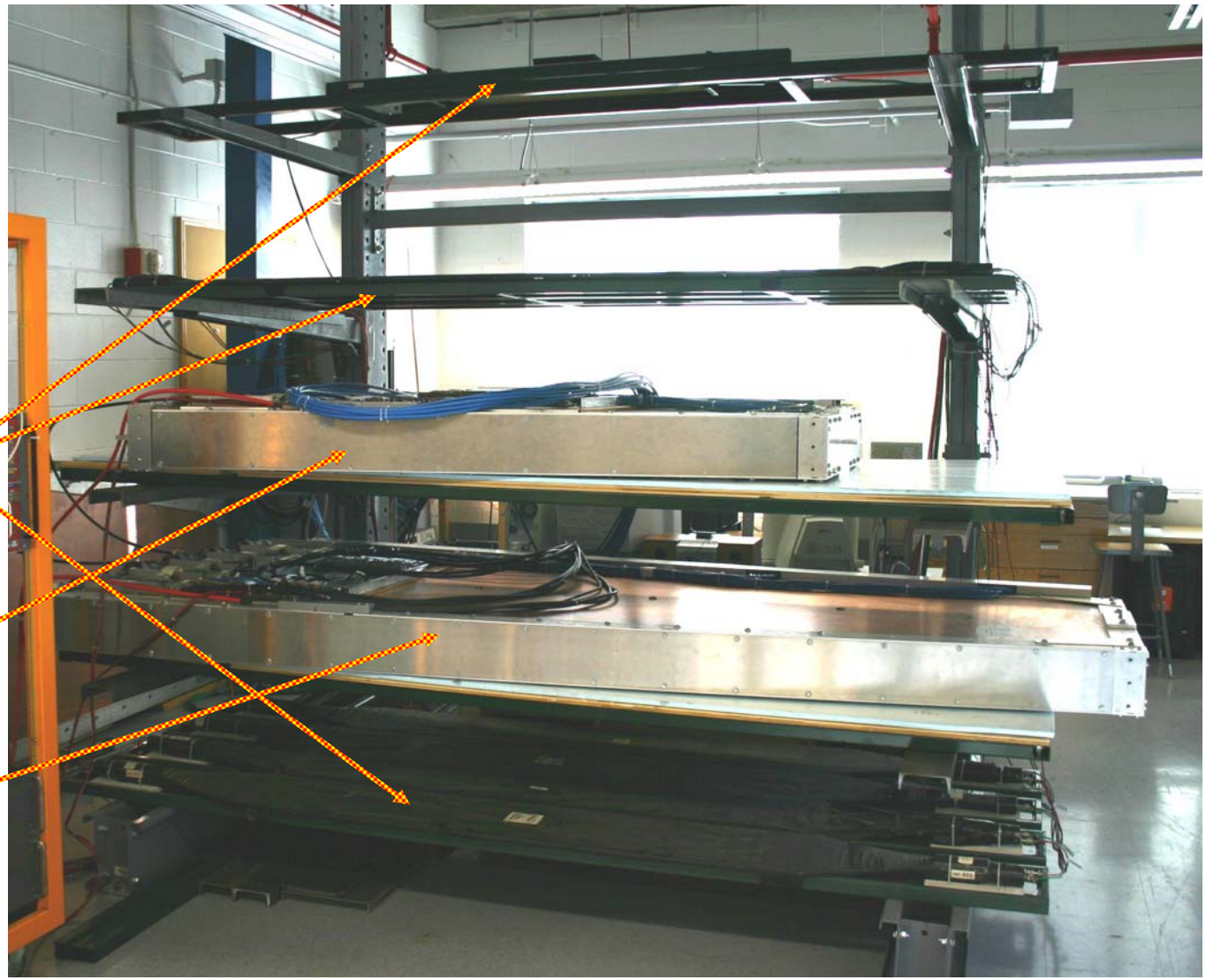
Chamber Setup

2 chambers
and
3 rows of
scintillators

Scintillator

ME 2/1
20 degrees

ME 234/1
10 degrees

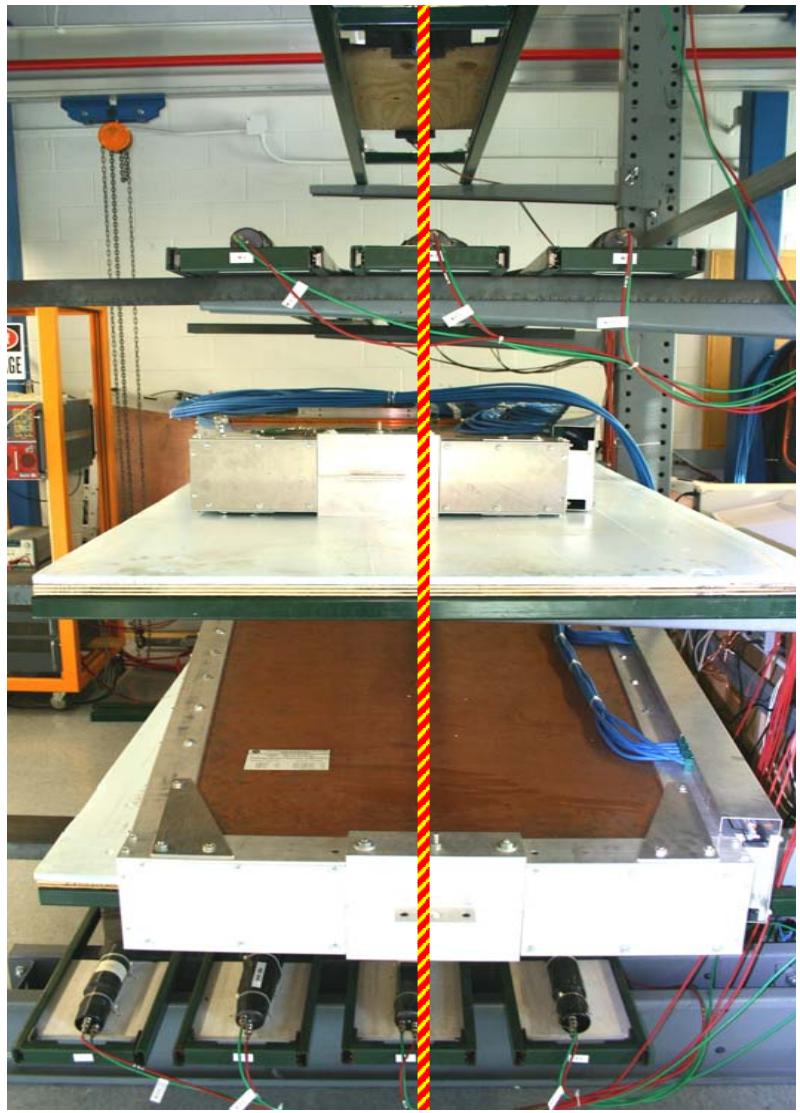


Scintillator Trigger Setup

Top scintillator
- two panels
- both read out

Middle/bottom scintillator
- one panel
- two PMTs
- one PMT read out

Trigger for L1Accept
- any three of four PMTs
- includes always one top panel
- L1A rate ~ 4 Hz



Peripheral Crate Setup

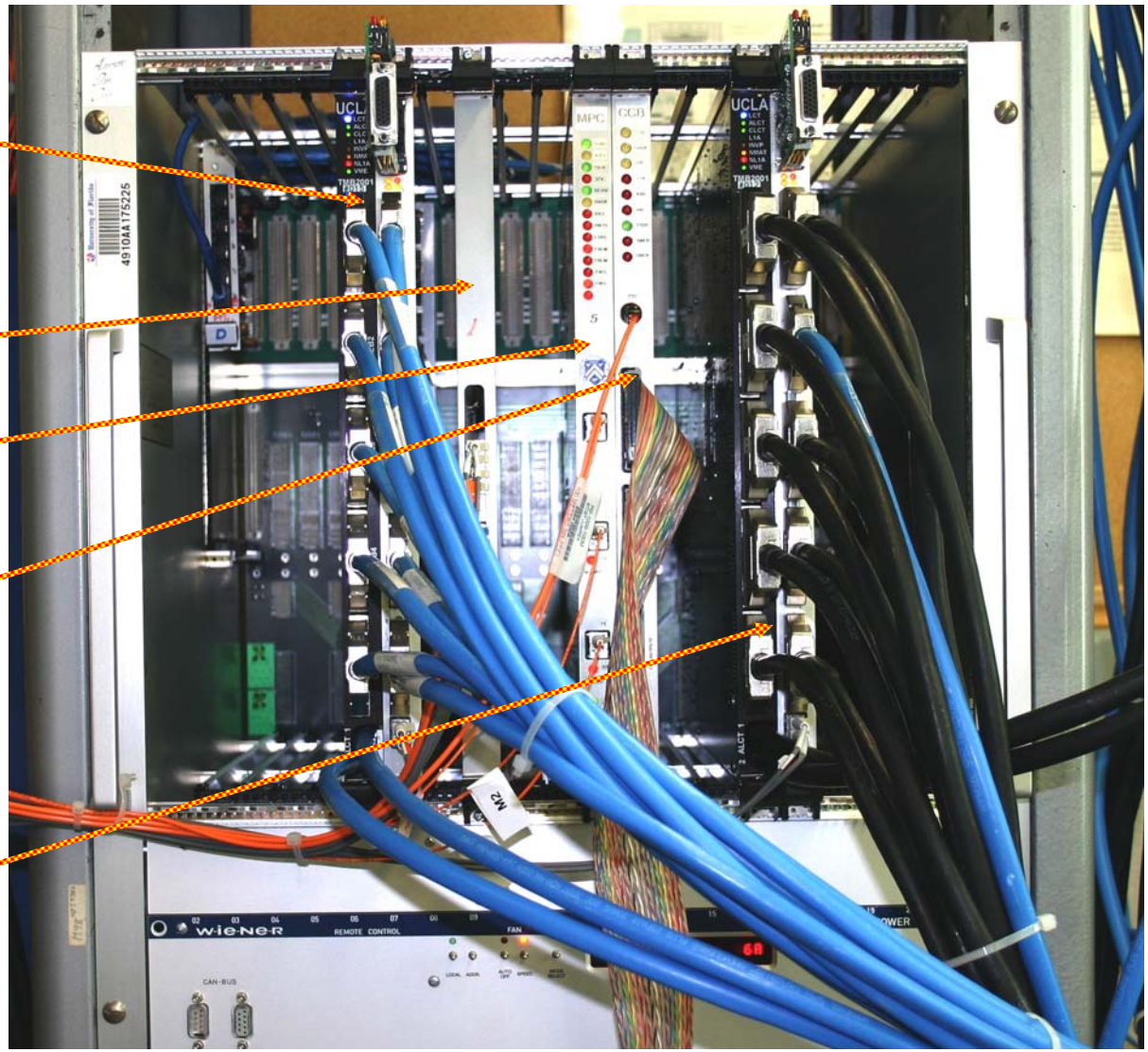
TMB/DMB for ME 2/1 with 9m blue cables

DDU

MPC

CCB with TTCrm

TMB/DMB for ME 234/1 with 11m black cables



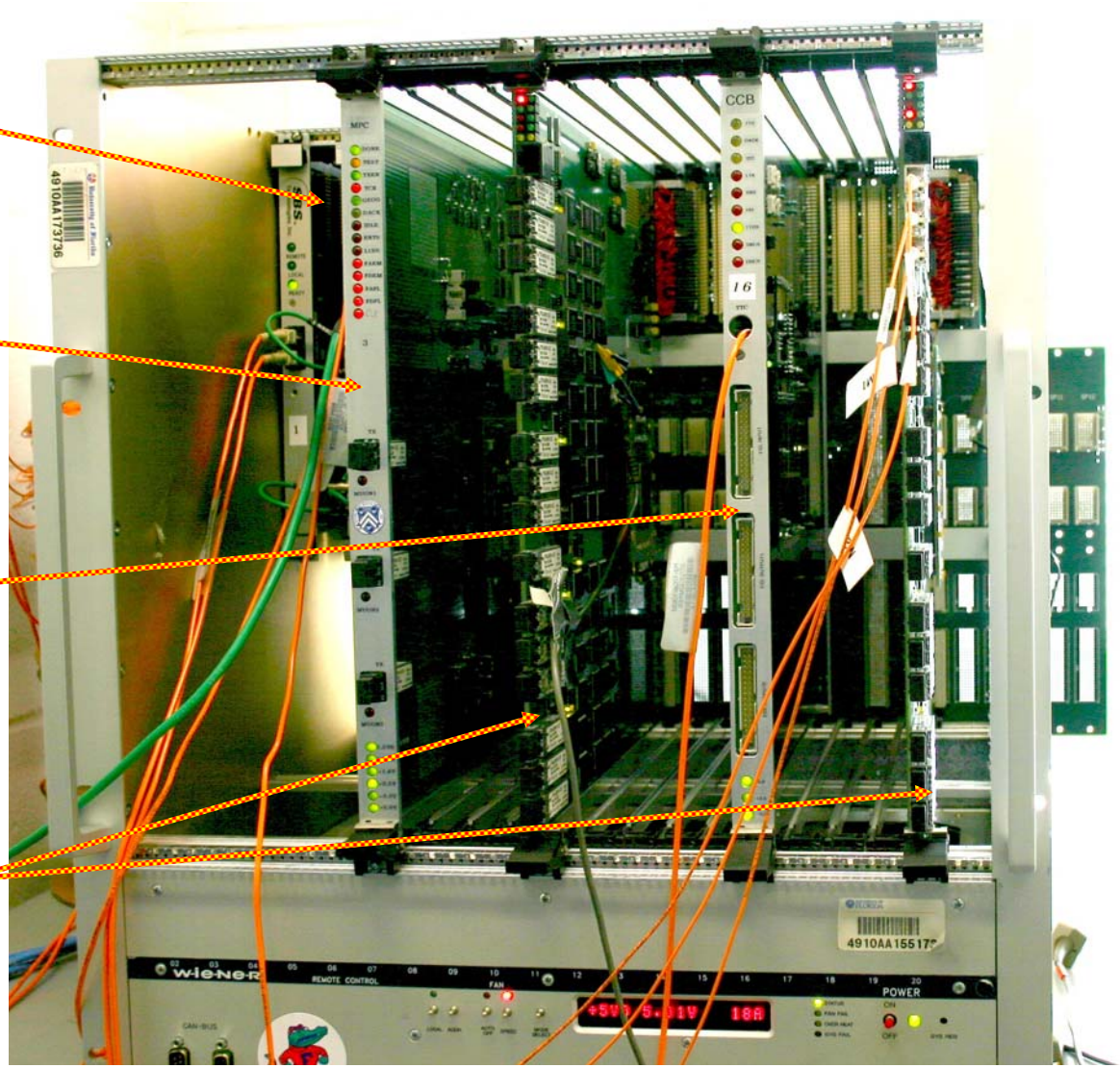
TrackFinder Crate Setup

TTCvx/TTCvi

MPC for
in-Crate tests

CCB with
TTCrq

SectorProcessor



DAQ Setup

DAQ PC
- 1 GB RAM (512 MB BigPhys)
- 80 GB HD for CSC data
- Connects to PC via Dynatem and to TFC via SBS VME controllers
- Control programs
  PC: cfeb_control
  TFC: TFGUI and console programs
- Needs tuning

Three Terminal PCs
- For access to DAQ PC

Test Stand Status

- Approx. 75% of L1A in coincidence with LCT from ME 234/1 – Rate is improving with time (Gas flushing)
- ME 2/1 less efficient than ME 234/1
  Efficiency is improving with time (Gas flushing)
- Data transfer between DDU and DAQ PC working
- Data transfer between MPC/PC and SP/TFC working
- Setup for data transfer between SP and DAQ PC in progress
- LCT–L1A delay timing done
- PHOS4 timing in progress

Changes to Testbeam Setup

- ME 2/1
  - cfeb_control ALCT code changed to account for chamber type #3
  - New ALCT threshold and delay setting files
- New timing values for both chambers
- L1A trigger rate by a factor of 100 lower
- Lower L1A trigger rate will make it difficult to test system saturation (DAQ PC, software)

To Do

- Finish timing-in of chambers
- Fine tuning of chamber setup (Scintillator/HV)
- Finish setup of data transfer between SP and DAQ PC
- Verify data quality
- Setup software for Slice Test working group
- …