# SBS / A1n DAQ

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#### APV25

Standard VME access ok : can configure board

Check address assignment in VME64X crate

Need to debug data transfer and try block transfer

### Calorimeter

 cnugep and srcdaq configured on 36 subnetwork (gave up with computer center to run on 88 subnetwork)

Using VME crate and one V792 for calorimeter

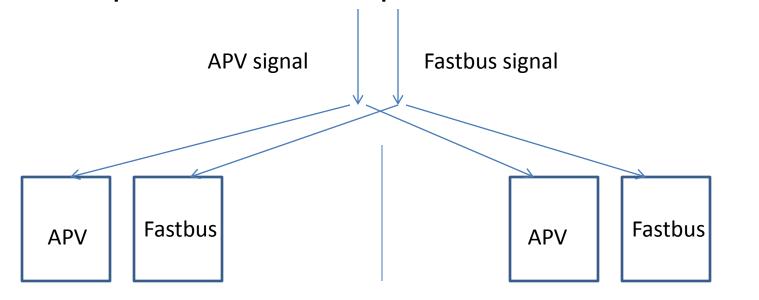
Working on 1881 readout in case more channels needed

### **Fastbus**

- 2 New TI borrowed from electronics group
- Old backplane TI not working, need to test them
- Readout of Fastbus in new TI (Sergey's slide)
- Test event blocking: should improve about 30 %, need to work on new decoder: most likely ok to reach 10 KHz for A1n with 6 crates
- Need check board flipping for SBS ( 100 KHz L1/Fastclear and 3 KHz L2 )
- Might get SFI and power supply from Bates

### DAQ schemes

2 x electronics
 2 independent DAQ in parallel Split signals between the two



- Pro: standard CODA, no synch issue
- Con: need twice more APV VME boards and need to split signal between the two

## DAQ schemes

• 1 DAQ, several Fastbus crates

Scatter channels

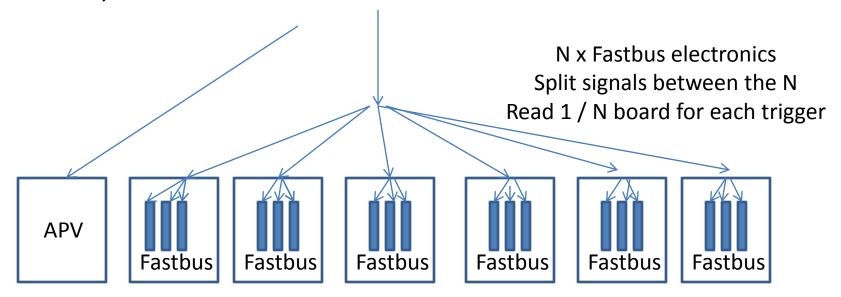
To reduce readout deadtime

APV Fastbus Fastbus Fastbus Fastbus Fastbus Fastbus Fastbus

- Pro: standard CODA, no synch issue
- Con: limited by front end busy when data transfer becomes negligible

### DAQ scheme

1 DAQ, several Fastbus crates



- Pro: Reduced front end dead time, only need Fastbus modules, splitting easy if use MQT by daisy chaining
- Con: Synchronization between boards need to be checked

### **MQT**

Vicor power supply adapted

Test without 8 V supply

- Works but noisy: electronics group will check it
- Need to make batch panel for input signals

### Task list

- Fastbus inventory and test (Sergey)
  - SFI, GAC, ATC, 1881, 1877S, TI
- Test Fastbus buffering, event blocking and multicrate with new TI (Sergey / Alexandre)
- Module flipping (Sergey / Alexandre)
- Implement scaler crate and do deadtime measurement ( Alexandre )
- APV work with Evaristo DAQ and test with CODA ( Alexandre )
- MQT (Electronics group)