PØD Repair Update

Status updates:

-> Schedule

-> Hardware rundown

-> Manpower
Schedule:

Magnet opening schedule (as of last week):
  -> New support brackets to be ready Nov. 7 (today)
  -> Magnet opening week of Nov. 7 (this week)
  -> Mezzanines, scaffolding to be installed early next week

Allows some tasks to be moved forward from week of Nov. 28
  -> Inspections (dry air containment, access to all side TFBs)
  -> Running power, ground down from power point at top corner of PØD
Brief hardware udpates:

Mounting frame:
  • Built, boxed up, will ship tomorrow
Cooling

Design approach (reminder):
- Cooling loop of same ID as existing loop, inserted into one PØD cooling loop downstream of TFBs

Cooling blocks:
- Designed, parts fabricated, final assembly in progress

Mounting
- In final prototyping
- Bracket mounts on RMM
- Cooling block held onto FPGA with springs on guide pins
PØD Repair Update

Cables:
- Procurement of TFB-to-RMM cables delayed
- Found that boot on cables was too large to plug into RMMs
- New slim connector cables identified
- Being tested in UK now, order early this week
Manpower:

RMM mounting
- Done in advance, planned to start Nov. 12
- Lead: Vittorio Paolone
- Assistance: Scott, Jay Jo

Magnet open work: Two weeks, starting Monday, November 28

First week: Main hardware work
- Need 6 people total
- Bruce Berger, Dave Warner, Scott Davis, Istvan Danko, Jay Jo, Tomasz Wachala
- Dan Ruterbories - consulting role

PØD testing/recommissioning - one week, Sat. Dec. 3 - Fri. Dec. 9
- Needs defined by DAQ/analysis tasks...
- Danko, Wachala, Ruterbories (consulting), ...

Closeup
- One day (Sat. Dec. 10), ~4 people

-> Two UK electronics and one UK DAQ person will also be on hand
PØD testing and recommissioning

Outline of the plan:
• Check that the system works stably over 1 week
• Check channel pedestals/gains/HV tuning
• LI checks - tests all channels, including fiber-MPPC coupling, at multiple light levels
• Cosmics - higher level check of full system functionality

Are there other tests?
• Explicit tests that timing changes (due to longer TFB-to-RMM cables) have been handled correctly?
• Charge injection scan?
• LI data at different overvoltages (time permitting; relevant to PDE vs. overvoltage correction)

Flesh out details
• What types of LI data are needed? → LI group
• Who will analyze the data?