

# Status of CEDARs (1/2)

- Missing mechanical parts for PMT housings
  - Will be produced by workshop in Illinois, expected in approx. 3 weeks
- Installation
  - Signal cables assembled & installed
  - LV & HV assembled, installation today afternoon
  - HV crate installed, already (or soon) in DCS; using modules from FI55 (E-pool has none available)
  - Fibers for gain monitoring – installation along with HV & LV cables
  - Old PMTs still not connected
  - Old DAQ not connected, will set up tomorrow (except for PMTs)
  - Fibers for DAQ - installed
- PMT characterization
  - On-going, need to measure gain vs HV for each PMT
  - Still working of software for data acquisition using scope
  - Expected to start measurements this afternoon. Time to measure single PMT, incl. setup of the base – approx. 40 min.

# Status of the CEDARs (2/2)

- Electronics
  - Verified full path up to TDC (i.e. base, discriminator, summing circuits) – all is working, seeing nice signals
  - Good SNR at nominal PMT gain, can trigger on single photon pulses
  - TDCs already in CERN. Some problem with firmware, Igor will start working on them on May 15<sup>th</sup>
- Plan
  - Setup current PMTs for operation. Use outputs of currently installed discriminator and supply them to TDCs in parallel to the old DAQ.
    - Will need ECL -> LVDS converter for this. Will check E-pool if they have one
  - Take bases back to Warsaw for assembly.
    - Will send them to CERN after assembly and testing
  - Plan for PMT replacement during MD on Jun 6<sup>th</sup>, with long MD as backup.