Coordinate Detector Electronics Layout

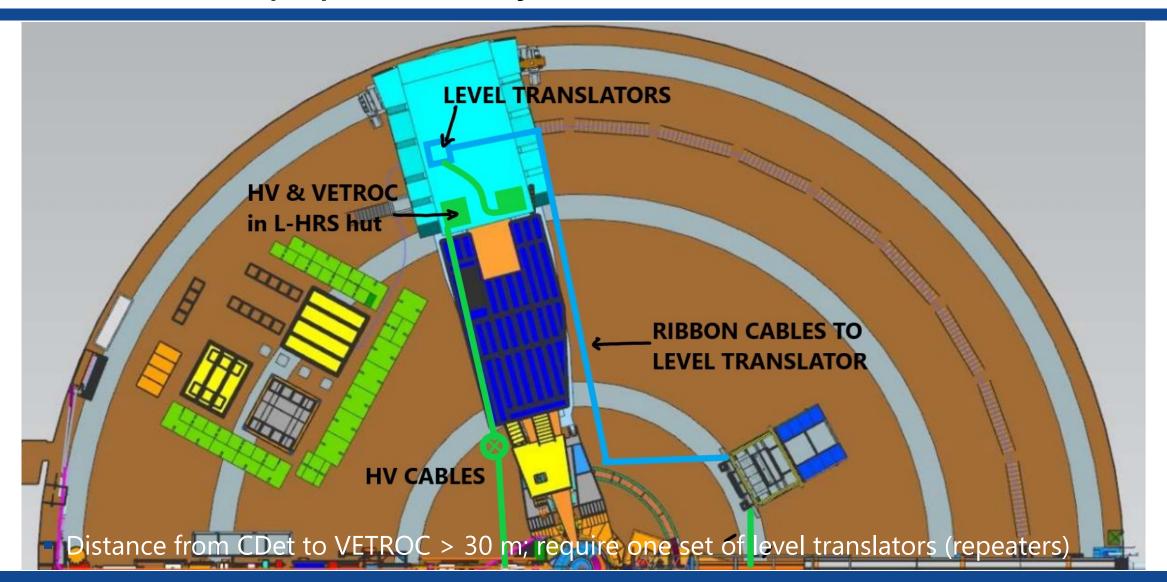
Peter Monaghan

Christopher Newport University

SBS Weekly Meeting, 9th August 2023



Equipment Layout in the Hall





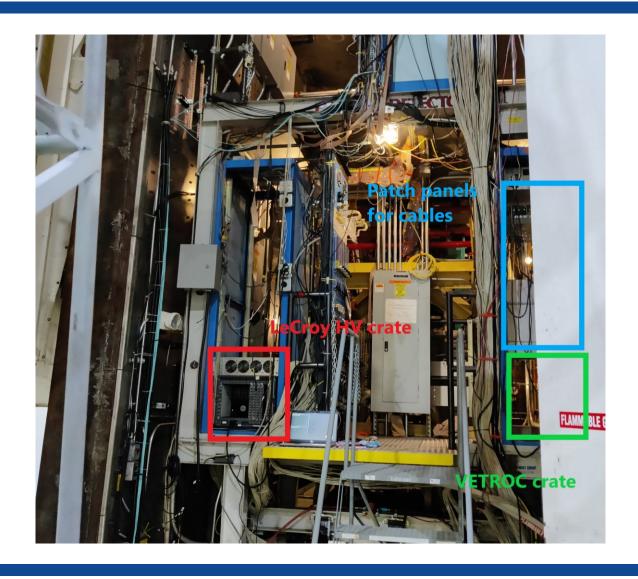
Level Translator Location



- Utilize rack on lower platform of L-HRS
- Install Level Translators and power supply in rack
- Ribbon cables from detector connect to level translators
- Output ribbon cables will route upwards through HRS to the shield hut
- Connect to VETROC via another patch panel in shield hut



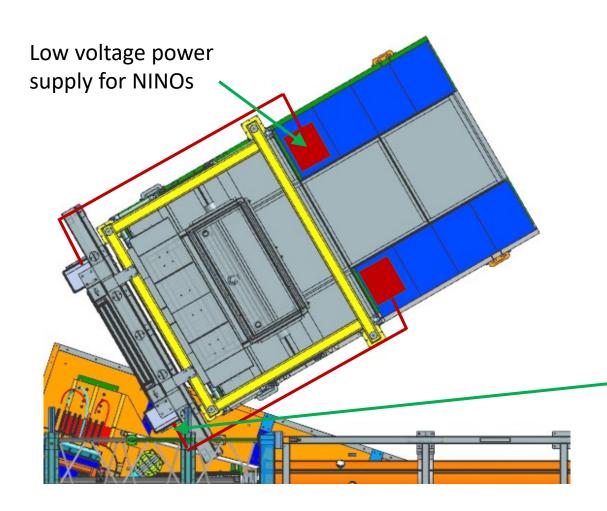
L-HRS Shield Hut Layout



- HV & VETROC crates in separate racks
- Install patch panels for ribbon cable feed through for VETROC
- Require short 16-pin to 64-pin (VETROC) connector cables (to be made)
- HV crate installed, with cards already tested
- HV cables being installed for hodoscope and reused for Cdet
- Route HV cables through floor onto new cable trays on left side of HRS



Low Voltage Power Layout



- Two Wiener power supplies located in ECal racks.
- Distribution boxes at detector.
- Run single multistrand cable from distribution box to each half module.
- Equipment in hand, except cables.



Equipment Status

- Need to purchase 168 (100') ribbon cables + 336 (16-pin) connectors.
- Sufficient level translators in hand; need appropriate power supply (in progress).
- Need 4 more 16-pin feed-through patch panels (8 in hand).
- Short 16-pin to VETROC connector cables need to be made.
- VETROC connectors in hand (Connecticut).
- HV crate, cards and cables (Glasgow) in hand.
- Need to purchase multistrand cables/connectors for NINO power supply.

