

DUNE Single Phase TPC Cold Electronics Report

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DUNE Technical Board

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Meetings

- Meeting of institute representatives held Monday 9/11
 - 13 out of 19 institutions represented (BNL missing due to protoDUNE electronics review)
 - Introduce technical lead, discuss plans for meetings, needs for consortium organization, document on ASIC development
 - Not much discussion on the Cold Electronics Strategy document
- Start biweekly open consortium meeting next Monday at 11am
 - Include regular reports from protoDUNE and DUNE technical board
- Dave and I need to meet (via video/phone but also in person) with institutions (start organizing next week) to understand interests and strengths of groups (& for me, meet new colleagues)

Consortium

- Single Phase TPC Cold Electronics Consortium
 - Only US institutions
 - Single funding agency
 - Experience indicates that we won't get optimal WBS on first attempt
 - Adapt (if needed) WBS to available / appropriate managers at every level (L3/L4)
 - Two days to think about this
 - Need to know the consortium, identify the right candidates
 - Strike balance between expertise, team building, bringing everybody on board
- Software and physics deliverables
 - What is the DUNE approach ?
 1. Full schedule (including P6) and reporting to funding agencies ?
 2. Only milestones to track progress (not in P6) , but no reporting of uncoded labor ?
 3. Nothing ?
 - All have pros and cons. Based on experience (3.) would prefer to use (2.)

First attempt at WBS

- Four L3 areas, without a dictionary (list of deliverables) this is pretty useless
 - I may have too much of a US project management bias
 - Management (M. Verzocchi)
 - Includes system engineering
 - Inside the cryostat (TBA)
 - ASICs (front end, ADC, COLDATA, put test boards here ?)
 - FE motherboards
 - Integration on APAs and feedthroughs (FEM boxes, cable infrastructure, signal flanges, feedthroughs)
 - Test Facilities and QC
 - Outside the cryostat (TBA)
 - Warm Interface (board, crate, backplane, power & timing cards)
 - Power and bias voltage supplies and cables (includes ALL cables inside TPC)
 - Integration at SURF
 - Test Facilities and QC
 - Software and Calibrations (not in P6 ?) (TBA)

Group meetings / structure

- In addition to consortium meetings (biweekly):
 - Institution representatives meetings (more frequently than collaboration meetings, but probably not monthly)
 - Project management board / team (only 1 country involved)
 - Include L3/L4 managers, will probably meet more frequently than monthly (at least bi-weekly)
 - Do we have representatives in other consortia boards/teams and DUNE working groups (physics, calibration, computing) and representatives from other consortia in our board or
 - Do we do all the interface discussions in the DUNE technical board plus informal appointments ?
 - Expect to have 1 contact person for Speakers Bureau