Plans for Converging on WIB Proposal

Eric James Warm Interface Board Working Meeting April 21, 2016



Near-term Goals

- Next two months are critical for putting ourselves in a position to produce ProtoDUNE detector components on the required timescale
- By the end of June, we need for each subsystem
 - Updated conceptual design
 - Proposal for institutional responsibilities
 - Preparations underway for a design review to be held in late summer/early fall
- First two items on this list need to be reviewed by the DUNE Technical Board

Proposal for Institutional Responsibilities

- Need to clearly state subsystem deliverables and the institutions taking responsibility for each of them
- Organization of engineering team that will produce the final designs of the detector components
- Institutional responsibilities for the needed QA/QC on detector components (note: full QA/QC plan will be required at the time of the design review)
- (Most Important) Institutional responsibilities to the formation of the team on the ground at CERN who will install, commission, and operate the detector

Warm Interface Board

- Complicated subsystem to define since it serves as the interface between the Cold Electronics and DAQ
- Lots of issues have to be settled upon before the design can move forward
 - Cold Cables
 - Timing/Control Signal Distribution
 - Power distribution
 - Configuration of output fibers (and output data format)
- Grounding & Shielding considerations are of the utmost importance

Warm Interface Board II

- Different ideas about functionality of Warm Interface Board
- Do not want this to be a competition between two different approaches
- Instead, would like to attempt to reach a consensus on what is actually required
 - It's not clear to me that we wouldn't benefit from having multiple flavors of Warm Interface Boards

Plan

- Make as much progress as we can today on defining technical specifications
- Follow-up with a 1 or 2 day in-person workshop in May to further refine specifications and formulate proposal for institutional responsibilities

Doodle Poll

http://doodle.com/poll/ewbzmthebdffwvrh

