

3rd BTeV Electronics & Associated Software Workshop

Goals & Agenda

- **Session 1 Goals**

- Introduce implementers to the various **constraints in putting electronics on or near the detector** (information will be used in Session 5)
- **Reestablish the BTeV Proposal baseline electronics conceptual designs** used to get the experiment costed and approved
- Mention some **updates** and propose ‘refinements’ **to the BTeV Proposal baseline conceptual designs**
- Bring new people up to date on the **status of detector/sensor and electronics R&D** currently happening and planned over the next year or so
- Let all people know of the planned and/or proposed **test beam work for the next year or so**
- Present the hardware, software and costs of the proposed **BTeV-standard test stand**; discuss its purpose and when it might be needed
- **Introduce Session 2** to workshop participants – it’s goals and how they might be accomplished during the session and in a follow-up report

Workshop Goals

(continued)

- **Session 2 Goals**

- **Format:** Parallel sessions with breakout groups changing as needed during the 3 ½ hour session
 - Answer pre-generated list of questions; generate & answer others
 - Co-chairs/moderators write detailed reports
- **Goals:** Working sessions on all electronics and associated software needed to be done as well as that not needed to be done prior to the February 2002 Baseline Review including:
 - Electronics & software to support test beam activities
 - Electronics R&D including that for custom ICs
 - Discussion of electronics and/or software that could be common to one or more front-end systems
- Work on as many details as time permits; if possible, complete unfinished items shortly after the workshop

- **Session 3 Goals**
 - ‘Breakout group’ reports of their **Session 2 activities**
- **Session 4 Goals**
 - **Review of Thursday’s activities** including:
 - New and/or unanswered questions
 - Problems
 - Possible common-needs areas
 - **Goals for Friday’s sessions**
 - Initial presentation & brief discussion of **current requirements for an experiment at Fermilab** including – quality assurance, personnel & equipment safety, electrical infrastructure, cabling, etc.
 - **Electronics projects presentation** including assignments to date and proposed initial documents to write; also reasons for, issues included in, and differences between various documents
 - **Introduce Session 5** to workshop participants – it’s goals and how they might be accomplished during the session and in a follow-up report

Workshop Goals

(continued)

- **Session 5 Goals**

- **Format:** Parallel sessions with breakout groups changing as needed during the 4 ½ hour session
 - Answer pre-generated list of questions; generate & answer others
 - Co-chairs/moderators write detailed reports
- **Goals:** Working sessions on post-baseline electronic and associated software activities including:
 - All production electronics & associated software
 - All production custom ICs
 - Systems integration, initialization, error detecting and recovery, etc.
 - Electronics and/or software that could be common to one or more systems
- Work on as many details as time permits; if possible, complete unfinished items shortly after the workshop

- **Session 6 Goals**

- ‘Breakout group’ reports of their Session 5 activities
- Presentation of Requirements document example including URL to template
- Proposal for initial Requirements documents and a schedule for their completion
- Proposal for front-end high-voltage system mini-workshops
- Discussion of next workshop topics and schedule
- Closing remarks