

## Minutes SBS Meeting February 15, 2012

**Attendees:** Bogdan Wojtsekhowski, Charles Perdrisat, Mahbub Khandaker, John LeRose, Alexandre Camsonne, Adam Sarty, Vina Punjabi, Nilanga Liyanage, John Leacock, Brian Quinn, Adam Sarty, John Annand, Robin Wines, Yang Wang,

- 1) Charles Perdrisat makes a presentation about the Trigger for the “New” Electromagnetic Calorimeter (NewCal)
  - a) See [link](#) for his slides.
  - b) Highlights:
    - i) Gives list of assumptions:
      - (1) HERA-B midsection shashlik detectors are available (?)
      - (2) Gives details (size, shape, etc.)
    - ii) Shows modular structure
      - (1) General overall size
      - (2) 37 layers,  $20 \times X_0$
      - (3) Pmt’s and bases are not available
    - iii) Discusses conceptual design
      - (1) Trigger formulation
      - (2) Electronics required
      - (3) Diagrams showing the principle
      - (4) Kinematics
        - (a)  $Q^2$  x rate,  $E_e$ ,  $Q^2$ , and rate vs.  $\theta_e$
      - (5) Bogdan has questions re calibration
    - iv) Problems to be addressed
      - (1) Parallel outputs from 432 of 1728 PM’s
      - (2) 4 outputs from the 1<sup>st</sup> level adder octets
      - (3) Are the detectors really available?
    - v) Design considerations
      - (1) Overall schematic view
      - (2) Wrap detector around constant  $Q^2$  circles?
        - (a) Doable but difficult
        - (b) Partially solves the problem of energy spread and trigger level accuracy
      - (3) Next concept is easier to do
        - (a) 3 sections centered at  $-16^\circ$ ,  $0^\circ$ , and  $16^\circ$
    - vi) Closes asking for comments and advice
- 2) Bogdan Wojtsekhowski
  - a) Re getting the detectors, has an appointment to speak to “Gunther”
  - b) Re PMT’s, hope to get from BABAR
    - i) Have 3000 but some are already committed
    - ii) 5000-8000 more are available, presently looks good that we’ll get them

- c) Bases need development. John Annand is working on this.
- d) Have electronics from Real Compton, and GEp3
- 3) Charles adds that Monte-Carlo is "pending"
- 4) Shielding is discussed
  - a) Possibility to use the coordinate detector as an active element is mentioned. Needs to be evaluated.
- 5) Re further discussion in the future, Charles says yes, but not too soon. Maybe in a month or so.
- 6) Nilanga asks about blocks degrading in the radiation field.
  - a) Shashlik is much better than lead-glass
  - b) Lead-glass would require 3 x 1-hour cleanings per day
- 7) Next meeting will have presentations by Mahbub Khandaker, John Annand, and Adam Sarty
- 8) Bogdan starts discussion about organizing the collaboration
  - a) Semi-annual meetings? Who organizes?
  - b) Dedicated groups for different activities?
    - i) "Publication" committee to oversee not just publications but any presentations made regarding SBS topics. Mahbub agrees to start this up with help from John LeRose and one other to be named person.
  - c) Guidelines for "SBS Related" grants are suggested. We decide to ask Kees to provide a straw man draft of this.

-JJL