

## Minutes SBS Meeting March 28, 2012

**Attendees:** Bogdan Wojtsekhowski, Robin Wines, Kees de Jager, Mahbub Khandaker, Charles Perdrisat, John LeRose, John Annand, Adam Sarty, Seamus Riordan, and Gordon Cates

1. John Annand discusses GEn/GMn by recoil polarimetry
  - a. See [link](#) for his slide
  - b. Proposal to be resubmitted in April for PAC 39
  - c. Shows kinematic settings, count rates, and expected duration of measurements
    - i. 2.5%-10% statistical errors
    - ii. 3% systematic errors
  - d. Configuration:
    - i. BigBite for the electron arm
    - ii. HCal with SBS dipole for the other arm
  - e. Robin asks for specific magnet position information
2. Seamus Riordan gives presentation on measurement of the Electric Form Factor of the Neutron with SBS
  - a. See [link](#) for his slides
    - i. Reviews GEn I
    - ii. Gives Physics details and motivations
    - iii. Polarized  $^3\text{He}$  target
      1. Nuclear corrections
      2. FSI contributions
      3. Two photon effects
    - iv. Previous measurements at JLab
    - v. Experimental setup
      1. BigBite
      2. Neutron arm
      3. Polarized  $^3\text{He}$  target
    - vi. Discusses various backgrounds and problems
    - vii. Sample error bars at 4 proposed kinematics ( $Q^2 = 1.5, 3.7, 6.8, \& 10.2 \text{ GeV}^2$ )
    - viii. Schematic of the setup with details
    - ix. Summary error budget
    - x. Instrument requirements
    - xi.  $Q^2 = 10 \text{ GeV}^2$ , 10-20% accuracy
  - b. Concerns expressed by attendees re inelastic background
    - i. Various suggestions made:
      1. Use  $\text{H}_2$  target e.g. to study
      2. Good to have empirical data
  - c. Bogdan suggests return in 1-2 months to discuss progress on preparations
  - d. Robin needs distances of magnets from the target at different angles. Bogdan says Al Gavalya already has it all. Check with Al.