
Injector Commissioning & Optimization

QWeak Collaboration Meeting
November 08, 2009

Team

- **Coordinator: Suleiman**
- **Members: Poelker, Grames, Hansknecht, King, Carlini, Paschke, Ramsay**
- **Plan:**
 - **Higher Voltage:**
 - I. **Gun: Dec 2009, Test Cave**
 - II. **CEBAF Beamline: May 2010**
 - **Electron Polarization Reversal: Commission at 100 kV during PREx, >100 kV in May 2010**
 - **New Helicity Board: Commission during PREx**
 - I. **QWeak Pattern: May 2010**
 - II. **QWeak Reversal Rate: May 2010 (need target & Lumi)**
 - **New IA (Charge Feedback): May 2010 (need analysis support)**

Standard Parity Setup (May 2010)

I. Laser Alignment of Pockels Cell:

- +HV & -HV
- Pitch, Yaw, & Roll
- x & y Stages
- IHWP IN/OUT
- Pockels Cell OFF

II. Electron beam optimization (PQB):

- RHW Angle
- Photocathode Angle

III. Injector Matching & Adiabatic Damping (Yves Roblin)

Issues

- Hall B is taking physics beam
- Need a student and a postdoc
- Hall A and Hall B beams crosstalk with Hall C. Charge feedback on Halls A and B beams.
- 32 MHz beam for background studies?