

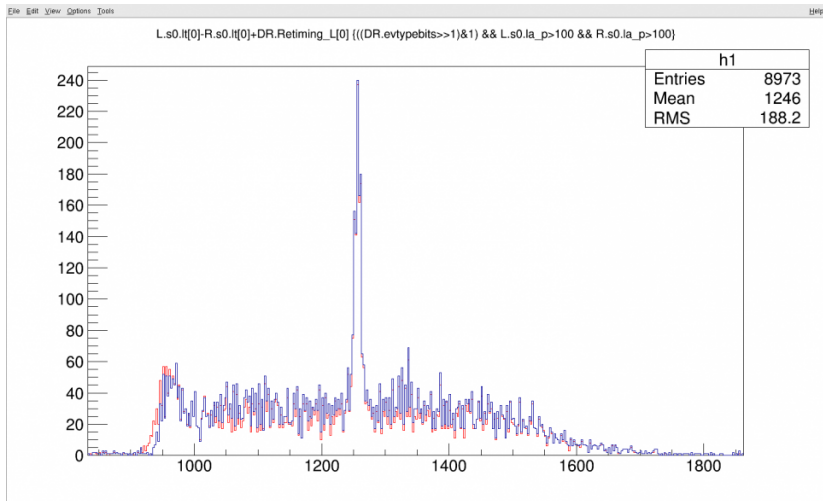
Ar(e,e'p) RC Report

Florian Hauenstein

Feb 28th, 2017

- Owl:
 - Finished kinematic setting 1 on Argon
 - Production on Ti @ $25\mu\text{A}$
- Day:
 - Controlled Access to move spectrometers
 - Correction of target offset (4 mm)
 - Improvement on trigger window
- Swing:
 - Unwanted movement of target (caused by Hall C control)
 - Start production on kinematic setting 3

Coincidence Time Peak



- Clear coincidence peak for both coincidence triggers: main trigger (red) and efficiency coincidence (blue)
- Cut on ADC values to suppress random events

- Owl:
 - Harp scans
 - Checks on dummy and optics target
- Day:
 - Move of our target by Hall C (wrong links in GUI → solved now)
 - Ar and Ti boiling study
- Swing:
 - Production on Ar and Ti

- Owl:
 - Finished kinematic setting 3 on Argon
 - Production on Ti @ $25\mu\text{A}$ for rest of shift
- Day:
 - Takeover as RC from Evan
 - Controlled Access to move spectrometers
 - LHRS magnet and beam pipe blocks movement below 15.5° (next slide)
 - New kinematic setting 4 (RHRS $\rightarrow 45.5^\circ$)
 - Change of coincidence gates at DAQ
- Swing:
 - Long beam shut down
 - Controlled access to correct for problems due to new gates

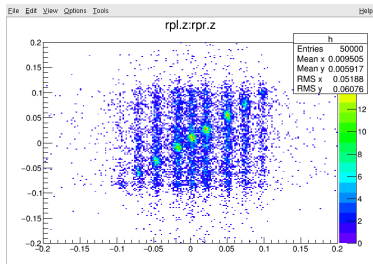
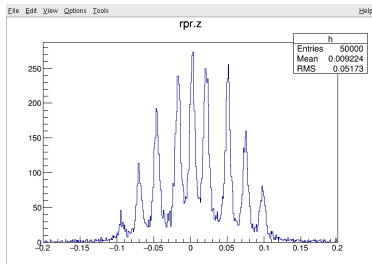
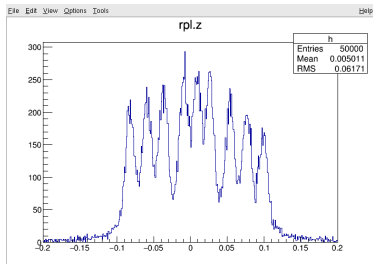


- Plexiglas cover and water cooling pipes prevent angles $< 15.5^\circ$
- Change of planned kinematic setting to similar one with larger angles on both spectrometers

- Finished Ar production in setting 4 by sunday afternoon
- Switch to Ti production
- Dummy and optic runs in between
- Some runs on C for inclusive e measurements on the LHRS (cross section normalization)
- Minor problems
 - Target alarms due to changes from ESR
 - Beam off during storm on saturday evening

- Owl:
 - Production on Ti @ $25\mu\text{A}$
- Day:
 - BCM calibration
- Swing:
 - Smooth Ti production
- Finished setting 4 by Tuesday → Move to the next setting

Multifoil target on both arms!

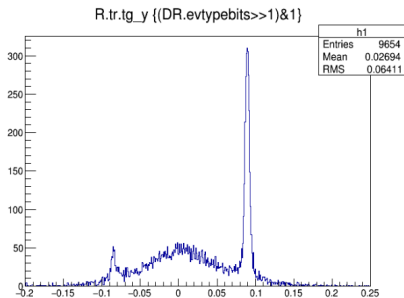
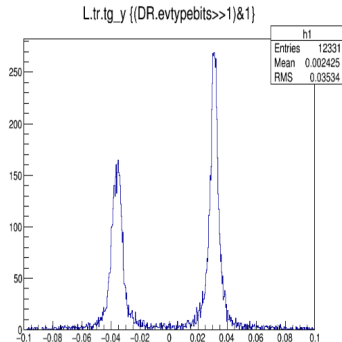


- After calibration see multifoil target on both arms

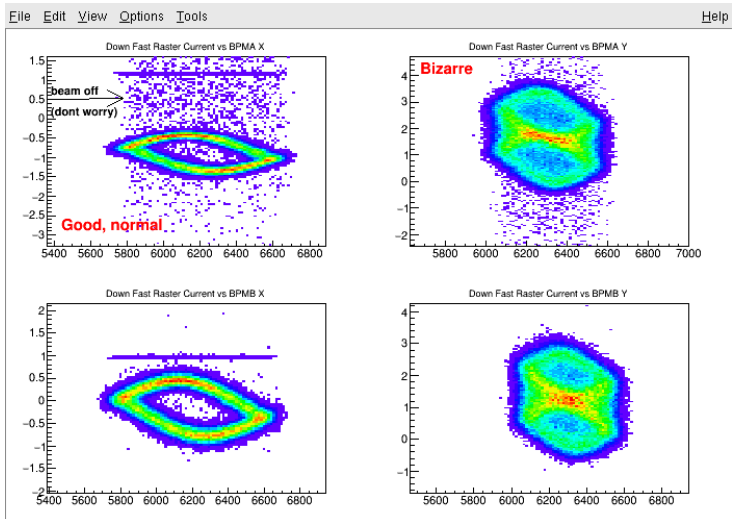
Dummy target

Check the Dummy run: 597:

angle_L= 15.53 , Angle_Right = 44

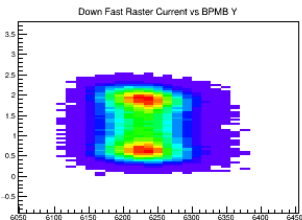
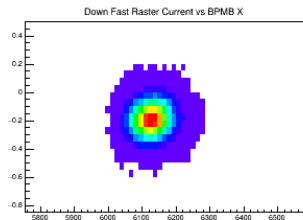
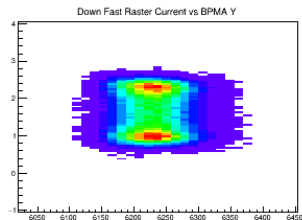
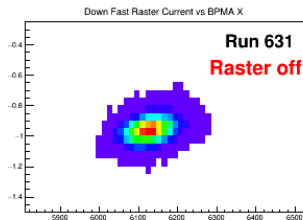


BPM or beam issues



- Might come from raster problems (checked again without raster)

BPM or beam issues (continued)



- Problem also with raster off
- Beam is jumping → MCC checks BPM today