

Hall A RC Report

Feb 13 - Feb 20

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Run Summary

Experiment: APEX (E12-10-009) 4th week

Measurement: e^+e^- in coincidence

Progress:

- Beam horizontal position scan
- BPM calibration
- Coincidence DAQ setup
- SCIFI test with cosmics
- Production data taking with Tungsten foils

Daily Activities

- Wednesday (2.13):
 - Production configuration setup
 - 4 hours of beam on W foils
- Thursday (2.14):
 - Check scattering chamber vacuum
 - Trigger timing test
 - 6 hours of beam on W foils (up to 25uA)
- Friday(2.15):
 - 10 hours of beam on W foils (30 uA)
 - Raster dimension study

Turning Raster On

1) Initialize BRM ->
Initialization Sequence Status
Reset BRM FSD BRM NOT ENABLED

2) Set Raster Size
Height
Width

3) Send Current ->

4) Log It! ->
Calc (Goal)
Vert
Horiz

5) Clear FSD faults ->
FSD (FSD card rdbk)
Ix - Max Current
Iy - Max Current
Ix - Min Current
Iy - Min Current

6) Clear Master FSD ->

7) Unmask Fast Raster FSD ->

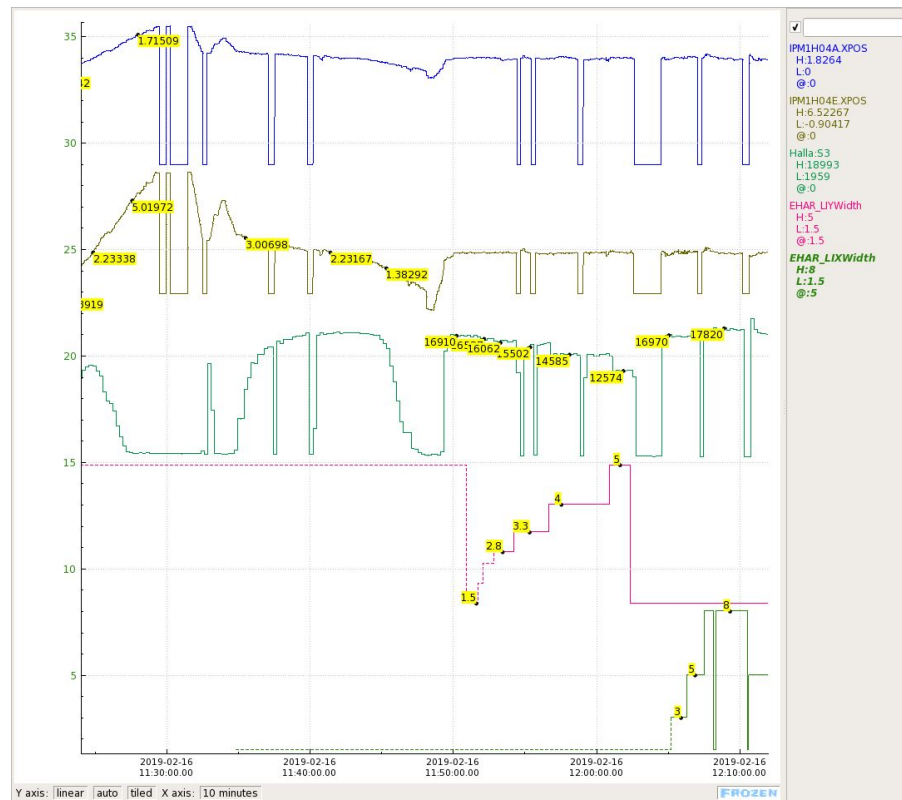
Notes:
-< To Change Raster Size Follow step 2 & 3
-< Button may need to be pressed twice
-< Makes a one line ELOG with new raster settings

Table:
Raster measured current must stay within the min/max ranges.

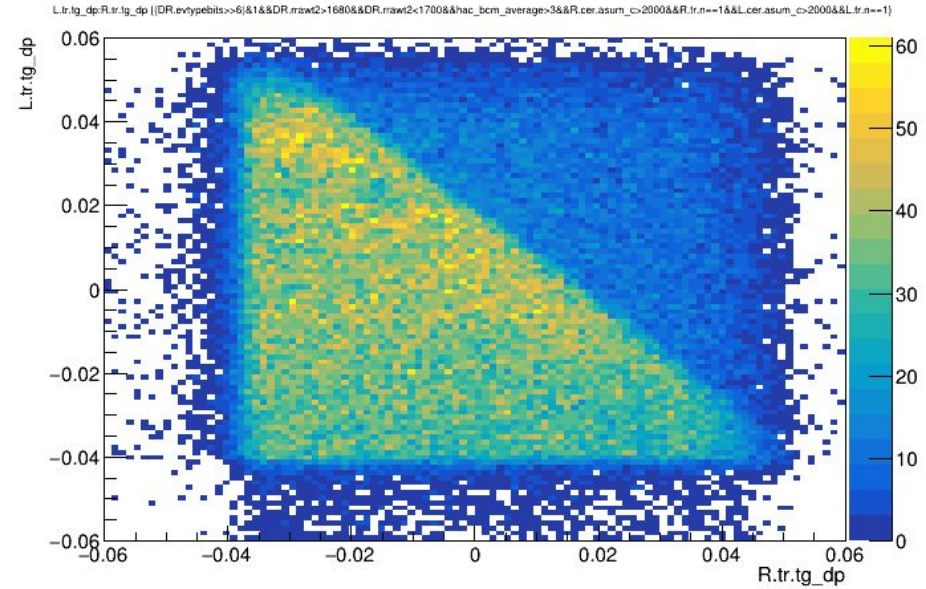
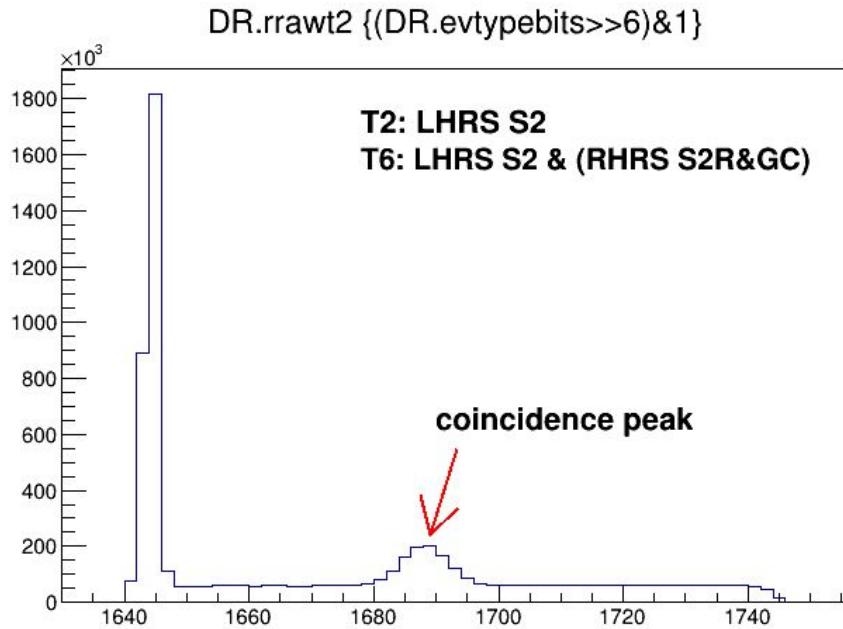
	MIN	MEASURED	MAX
Ix	2.24	-1.01	48
Iy	2.24	3.45	48
Ix	2.24	1.01	48
Iy	2.24	10.96	48

Daily Activities

- Saturday (2.16):
 - 10 hours of beam on W foils (30 uA)
 - Beam position scan with W foils
 - BPM calibration (fix Harp A)
 - 6 hours of production running
- Sunday (2.17)
 - 4:20am all magnets tripped due to LCW short. HRS magnets recovered, but not septum
 - SCIFI test with cosmics
- Monday and Tuesday (2.18, 2.19)
 - Hall in control access to fix septum power supply ...



Coincidence signal



~150 possible coincidence events /sec at 30uA

Thank you!