BCM Calibration (~1 hour)

Dave Mack updated 9/1/21

Instructions to Hall C shift crew:

Note: This procedure is invasive to Hall D if we are sharing the same slit.

1. Give the MCC operator a copy of this procedure.

1. Fast Raster on 2x2 (to protect stuff)

2. Target out will make life simpler. (But LH2 or LD2 is in principle OK according to operational restrictions at http://opsweb.acc.jlab.org/internal/ops/ops_webpage/restrictions/ops_restrictions.html .)

3. Ask the MCC operator to show they can stably reach the maximum desired current.

We're only interested in scalers. Check that the Unser and BCM scalers are counting on one of the xscalers screens . When the MCC calls to tell you they are ready,

4. Start a run labelled "BCM calibration".

5. Make sure the daq keeps running during the procedure until the operator calls to say it is complete. You should keep track of the progress.

Instructions to the MCC operator:

Note: This procedure is invasive to Hall D if we are sharing the same slit. Hall C currents will generally be higher than Hall A currents this run, so imho A and D should be sharing the same slit.

- A strip chart in the elog of Hall C current vs time would be greatly appreciated.

- Do each of the following currents, plateauing for ~1.5 minutes each. (If you get a trip, then 45 seconds is long enough. But if there's a trip too near the start of beam-on interval, then restart the 1.5 minute clock.)

- Approximate currents are fine. The Hall C Unser will determine the true beam current.

- The zeroes are as important as the beam-on periods. *Close the slit for these*.

In units of muA:

0, 80-ish, 0, 65, 0, 55, 0, 40, 0, 20, 0, 10, 0, 5,

Then

0, 80-ish, 0, 65, 0, 55, 0, 40, 0, 20, 0, 10, 0, 5, 0.

Let Hall C know when you're done. Thanks!