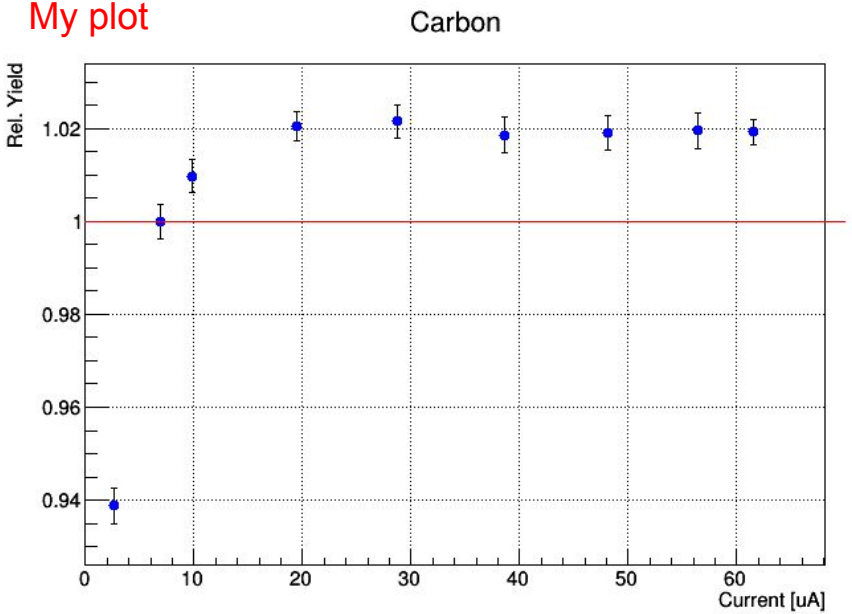
Kaon Meeting 6/28

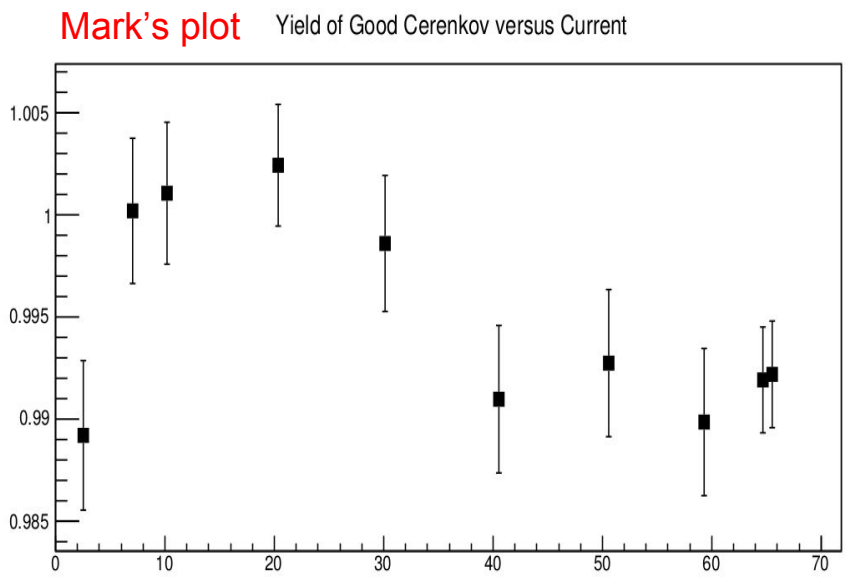
Richard Trotta

Relative Yield for Carbon (January runs)

My plot



Mark's plot



Yield Discrepancies

- My values are between 2-10% different than Mark's calculated values. The lower current runs are closer to 10% and this percent difference decreases as the current increases.
    - For instance my yield for run 1415 is 82.410 while Mark's was 91.007 (~9.5% difference at 2uA) but for 1420 my yield is 89.408 while Mark's was 91.170 (~2 difference at 40uA).

Current Calibration and Offsets

Mine-

gNumBCMs=6
gBCM_Names="BCM1 BCM2 Unser BCM4A BCM4B BCM17"
;gBCM_Gain = 4574, 3847, 4166, 13560, 6456., 2154.
;gBCM_Offset = 250200, 250100, 393000, -2994.0, -1148.0, -154.3
gBCM_Current_threshold=5.0
; index = 0 to gNumBCMs-1
gBCM_Current_threshold_index=3

Mark-

gNumBCMs = 6
gBCM_Names = " BCM1 BCM2 Unser BCM4A BCM4B BCM17"
gBCM_Gain = 4795.0, 4092.0, 4000.0, 12940.0, 6238.0, 2042.0
gBCM_Offset = 250300.0, 250200.0, 393000.0, -189.5, 127.8, 204.9

gBCM_Current_threshold = 5.0
; index = 0 to gNumBCMs-1
gBCM_Current_threshold_index = 3

Updates on luminosity code

- As long as the root files are available it is quick and easy to create plots.
- Incorporated code from T->MakeClass(“hms_cut”) and Mark to produce ascii files
  - Ascii files contain run numbers, counts (good cerenkov with and without track cuts), charge, current, efficiencies, and lifetimes
- These ascii files are the inputs to my luminosity plot code which can now...
  - Accept any runs/any number of runs (as long they are in the ascii files)
  - Select between good cerenkov counts with or without track cuts
- The code is relatively easy to change now so any suggestions would be great!