Forward Tracking Hodoscope

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SANE Detector Working Group Meeting

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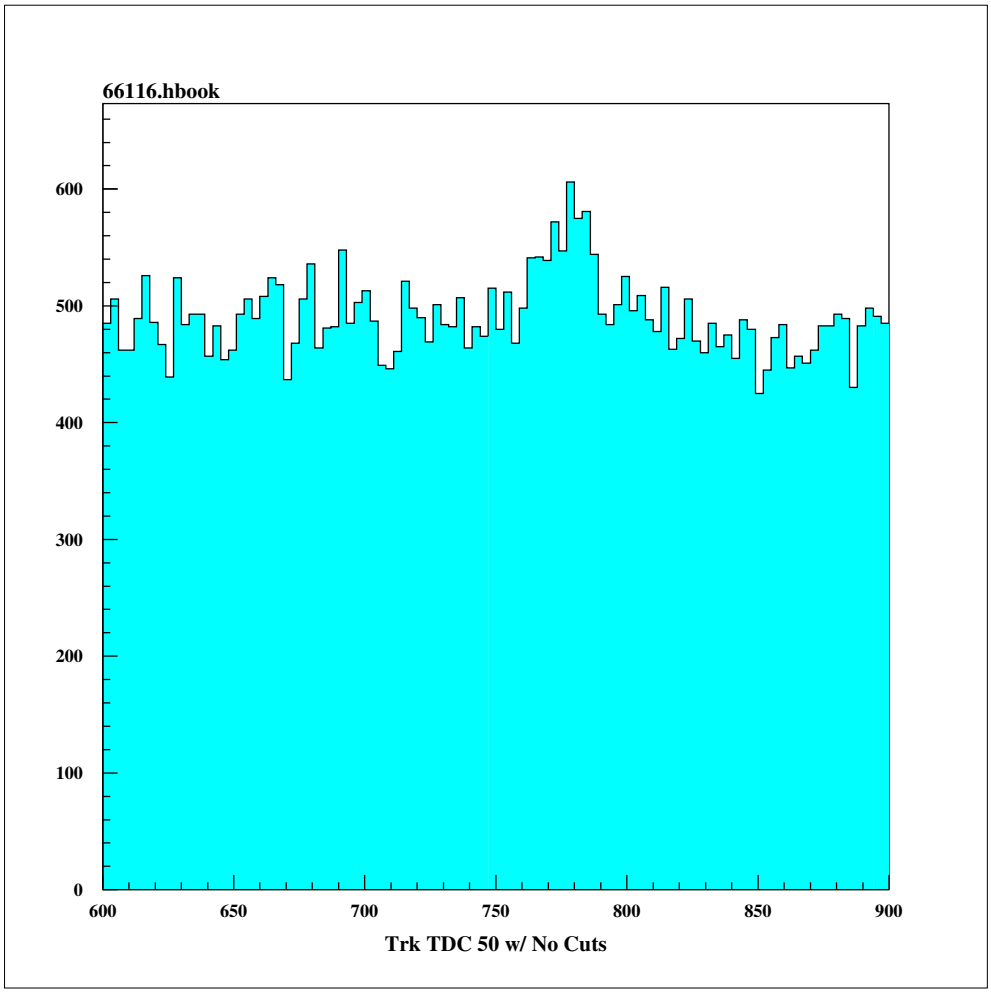
Single Counter Time Spectrum

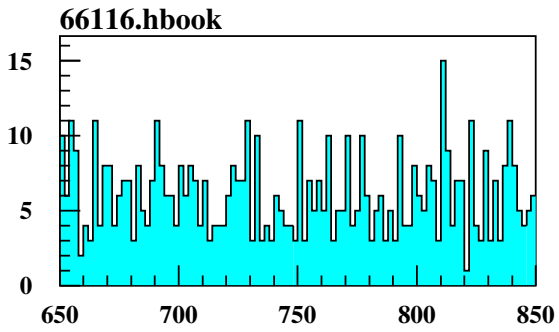


- ***Large background from Moller e^- and other low energy particles.***
- ***Target field (longitudinal) will help sweep away Mollers.***
- ***Software coincidence of two offset Y-planes will further reduce background.***

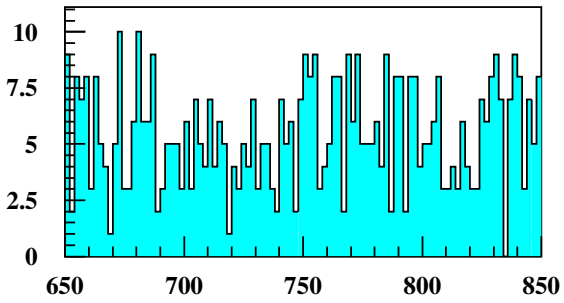
BigCal Cluster Y Determination

- ***Single counter (Trk 59) for five ranges in BigCal cluster Y.***
- ***Cleanest TDC spectra corresponding to Y$\sim$0.***
- ***Define cut projecting Tracker Chnl number on to BigCal.***
- ***Plot TDC vs. Tracker Chnl when BigCal Y within $\pm$ 4 cm of expected position.***
- ***Signal:Background $\sim$ 4:1***

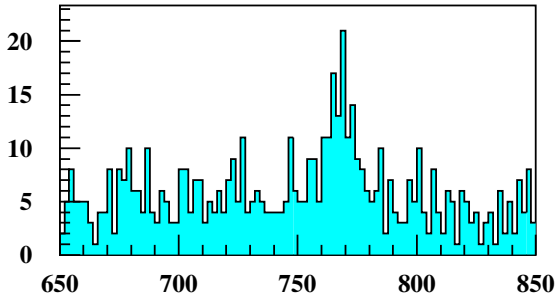
Single Counter Projection On To BigCal



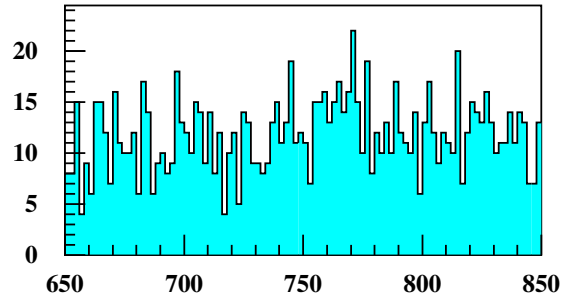
Trk TDC 59 w/ BCal Cluster Y A



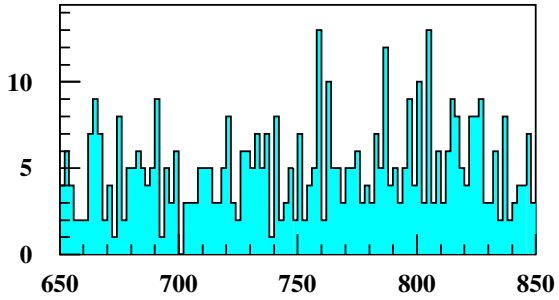
Trk TDC 59 w/ BCal Cluster Y B



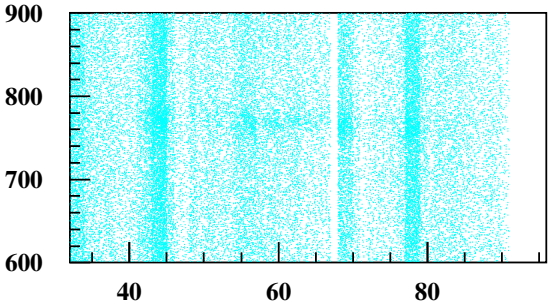
Trk TDC 59 w/ BCal Cluster Y C



Trk TDC 59 w/ BCal Cluster Y D

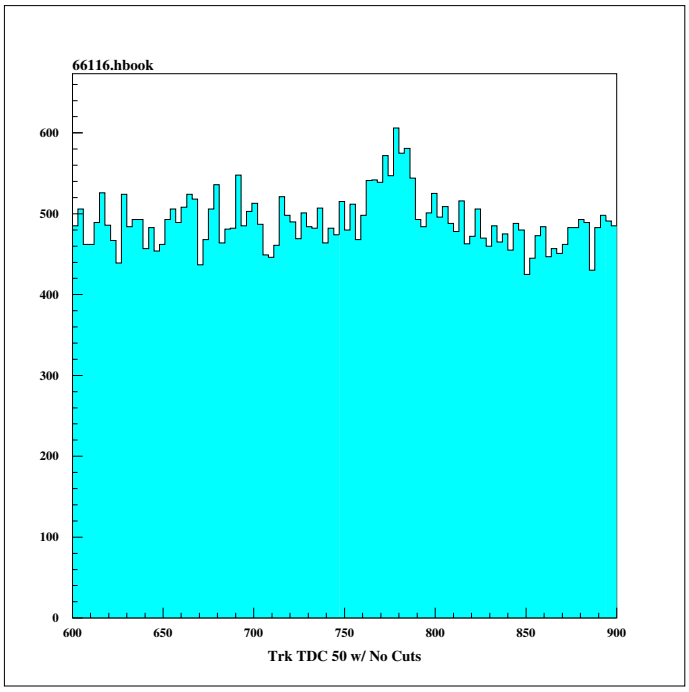


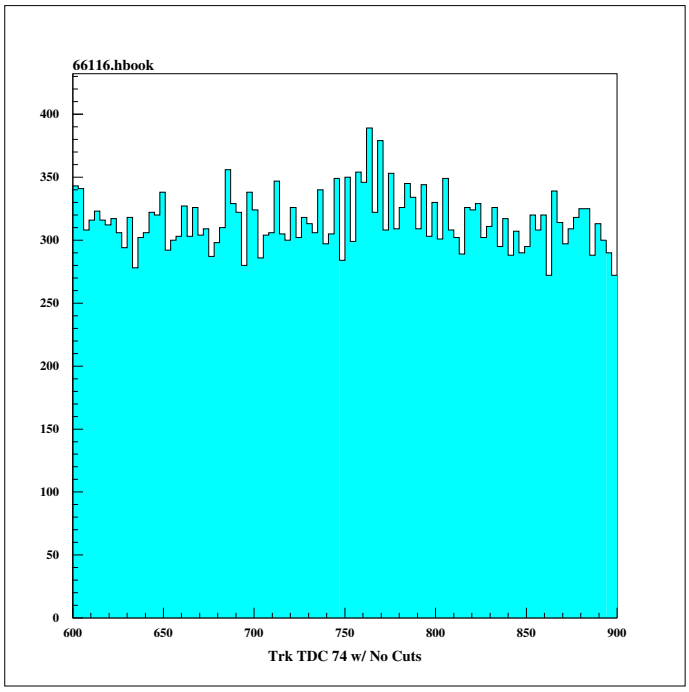
Trk TDC 59 w/ BCal Cluster Y E

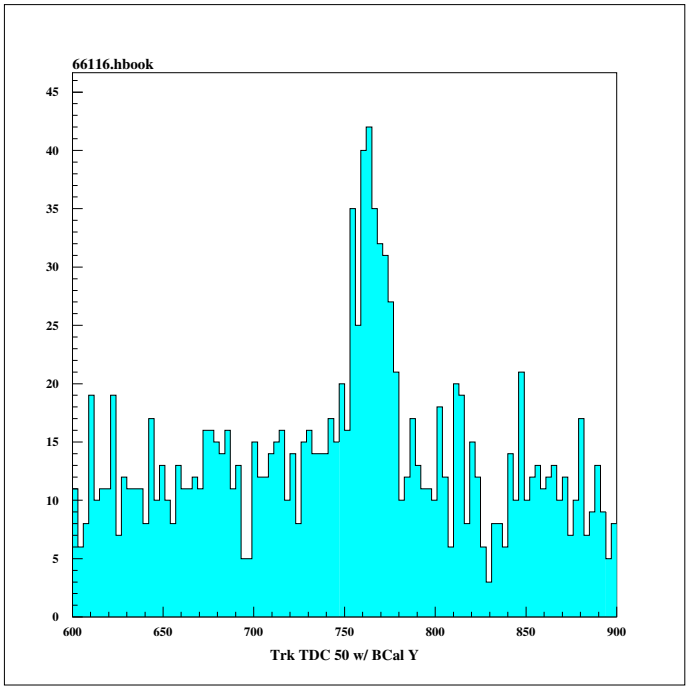


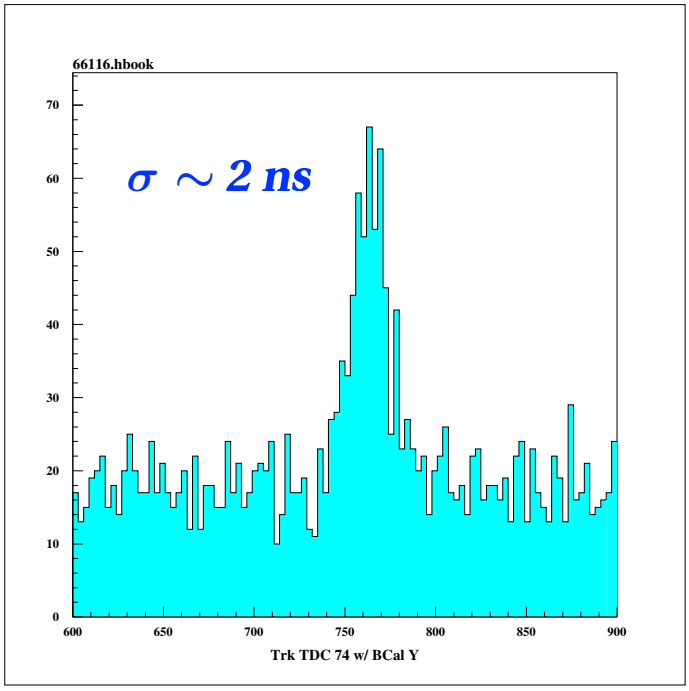
Trk TDC vs. Chnl w/ BCal Y +/- 4 cm

Single Counters w/ and w/out BigCal Y Cuts









Tracker Design and Readout Modifications

- ***Equip X-plane single counters with two WLS fibers.***
- ***Eliminate $\times 10$ pre-amplifier from readout.***
- ***Build a third Y-plane for redundancy.***
- ***Acquire additional five PMTs and reqd. number of fibers.***
- ***Continuing tracker mount and shield-box construction with designer.***