#### Straw Man Run Plan

<u>Regular calibration runs:</u> need to develop DAQ infrastructure and shifter instructions

- FEMB (charge injection / gain) weekly?
- PDs (flasher) weekly?

#### **Commissioning requests:**

- TPC wire plane bias scans for transparancy 4 hours (event display and tracks close to wire planes identified with a pair of counters)
- Counter/ TPC timing with APA crossing tracks 4 hours, need proposal
- DAQ 1 week?
- Check of pedestal mean and rms algorithm with signals (HV on and HV off) – 2 hours

DAQ studies while purity is poor, between commissioning and running!

#### Run Plan

- 1 week of horiz triggered muons for bread and butter at 250 V/cm
- 1 week for charge/light yield vs field (drift field scan)
- 1 week of "gobs of data", continuous readout, at 500 V/cm
- 1 week of high quality data with good purity to repeat bread and butter at 500 V/cm plus diffusion measurement (drift field scan)

## Running week 1...

Low purity, 250 V/cm (horiz. counters)

- APA crossers
- Gap studies
- Purity (ongoing)
- Deflector voltage scan (dedicated)

Put dedicated DAQ studies here while purity improves (add an extra week??)

# Running week 2

Charge/light yield vs voltage (includes S/N data)

- 12-24 hours of data at each voltage
- Horiz muons, triggered

Drift field (V/cm)	Drift vel (m/ms)	Drift window (us)	Drift window (ticks)	Millislice Pre+trig +post
250	~1.05	2.143	4350	5+1+9=15
300	~1.20		3800	4+1+8=13
350	1.305	1.724	3500	4+1+8=13
400	1.402	1.605	3300	4+1+7=12
450	1.488	1.512	3100	4+1+7=12
500	1.566	1.437	2950	3+1+6=10

## Running week 3

Untriggered, continuous acquisition at 500 V/cm for

- Pi zeros
- Protons
- Stopped muons
- 55

Note that 2 hours of continuous data (200 Hz) becomes 40 days of triggered data at 1 Hz.

Inability to stitch due to gaps means that there is only one usable event per millislice

## Running week 4

Diffusion measurement requires good purity

- 2 days at 3 field values 300, 400, 500 V/cm
- Horiz triggers
- Other measurements will also use this data