Run 99b

1. CHAMBER SETUP

Oleg please copy your part

2. CHAMBER CALIBRATION

1.5 keV/4mm ~ 40 e (37eV/e)

MIPS	dE	x5000	½ (diff)	Elow	Ehigh
amplitude 80mV/MeV	120 μ V	600 mV	300 mV	30 mV	< 3000 (linear preamp)
electrons	40	200 k	100 k	10 k e	
energy	1.5 KeV			150 eV	< 15 kV

3. FADC ELECTRONICS

see diagram

mu gate 40 us

drift gate 15 us

PU gate 43 us to simpify timing

1 us deadtime for mumu

3.1.sir

SIR1	master
SIR2	mu/k
SIR3	el1
SIR4	el2
SIR5	μμ
SIR6	

3.2.scalers

scaler 1	scaler 2	scaler 3	scaler 4
1 Hz	EV OR	AF	
S1	EV AND = MASTER	NAL	
S1*S2	mu/k	beam/2	
S1*NS2a	E1		
PC1*PC2	E2		
μ			

4. RUN PLAN FADC

4.0.1.chamber behaviour

4.0.2.tail cancellation

4.0.3.log amplifier

4.0.4.chamber calibration with mu, mu (85MeV/c), e (20MeV/c)

4.0.5. search for Alvarez muons

4.0.6.sensitivity to impurities

5. RUN PLAN TDC

5.1.technical

5.1.1.get tdc's running, data flow under control

5.1.2.develop software, display for tdc's

5.1.3.optimize thresholds

5.1.4.calibration and efficiency studies

5.1.5.tdc running with different rates

5.1.6.cross talk studies

5.1.7.pulser studies to determine after pulse behaviour

5.1.8.comparison MWPC vector with TPC tracking

5.1.9.

5.2.physics

some studies consist of

- tdc alone
- tdc with filter on PPC
- tdc and fadc synchronous

5.2.1.diffusion study

5.2.2.Alvarez muons (wo/with filter)

5.2.3.Impurities (wo/with filter)

5.2.4.High statistics (wo/with filter)