

UPDATE on MICE PID – U Miss.

9-25-02

DOWNSTREAM PID COUNTER

- FINE MESH HAMAMATSU R5924 PMT B< 1.0 T (Bfield Map below)
- DIRECT WINDOW HIT
 $N_{pe} = 90 \sin^2(\theta_c) \Delta L$

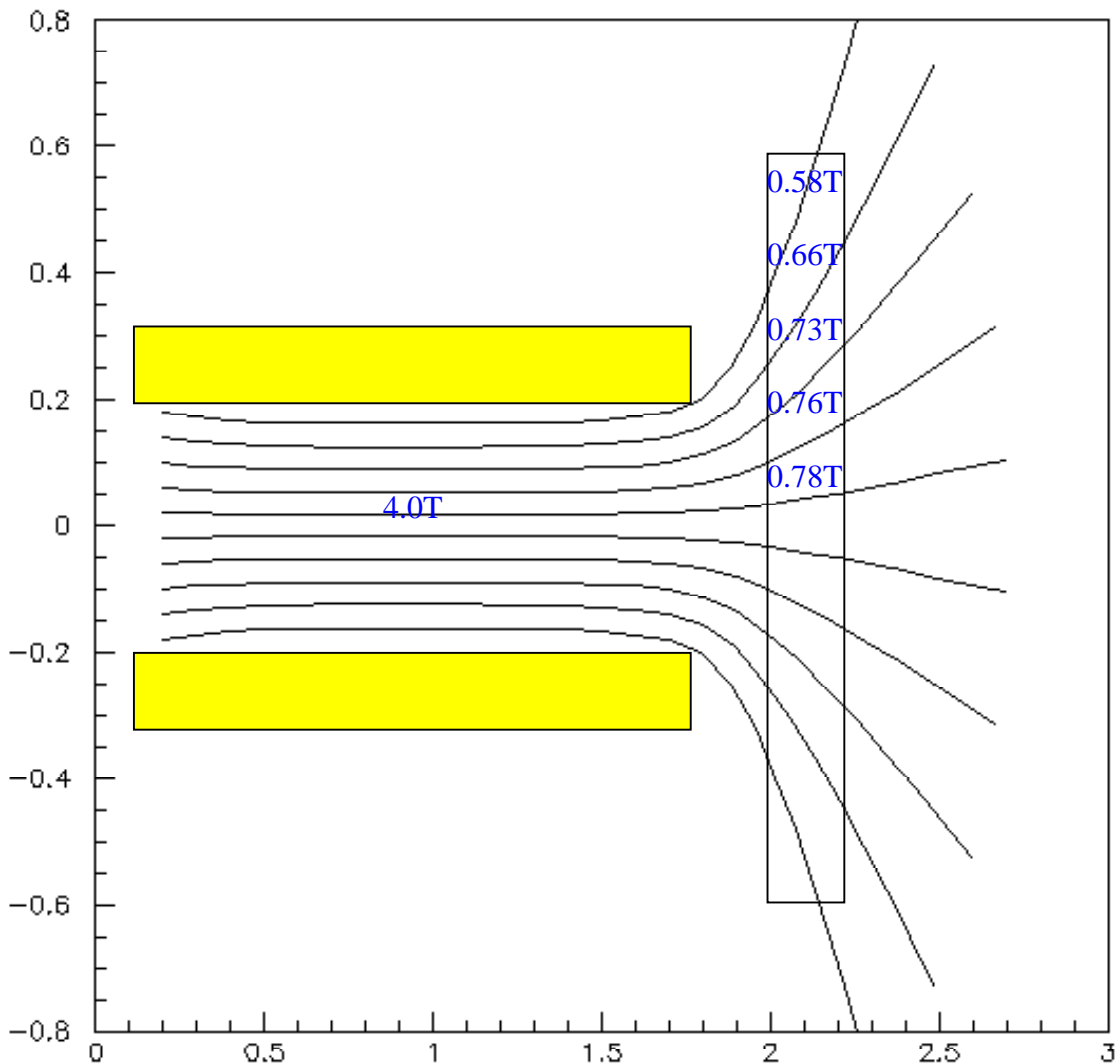
QUARTZ WINDOW $n=1.55$
L = 2mm
N_{pe}= 10.5
angle= 49.8 deg
 $p_{\mu th} = 90 \text{ MeV}$

AEROGEL $n=1.05$
L = 15cm
N_{pe}= 128
angle= 17.8 deg
 $p_{\mu th} = 330 \text{ MeV}$

AEROGEL $n=1.08$
L = 15 cm
N_{pe}= 190
angle= 22.2 deg
 $p_{\mu th} = 260 \text{ MeV}$

- SERVICE & POWER REQUIREMENTS
100 tubes @ 2ma (2500-3000)V < 100W
Cooling Fans
2 Racks

MICE DOWNSTREAM SOLENOID & PID



UPSTREAM COUNTER

Radius	15cm
Thickness	5cm
Radiator	FC n=1.28
n pe's	170
angle	38.6 deg
p_{μ} th	133 MeV

- SERVICE & POWER REQUIREMENT
4 tubes @ 2ma (2500-3000)V < 10W

