Solenoid Capture

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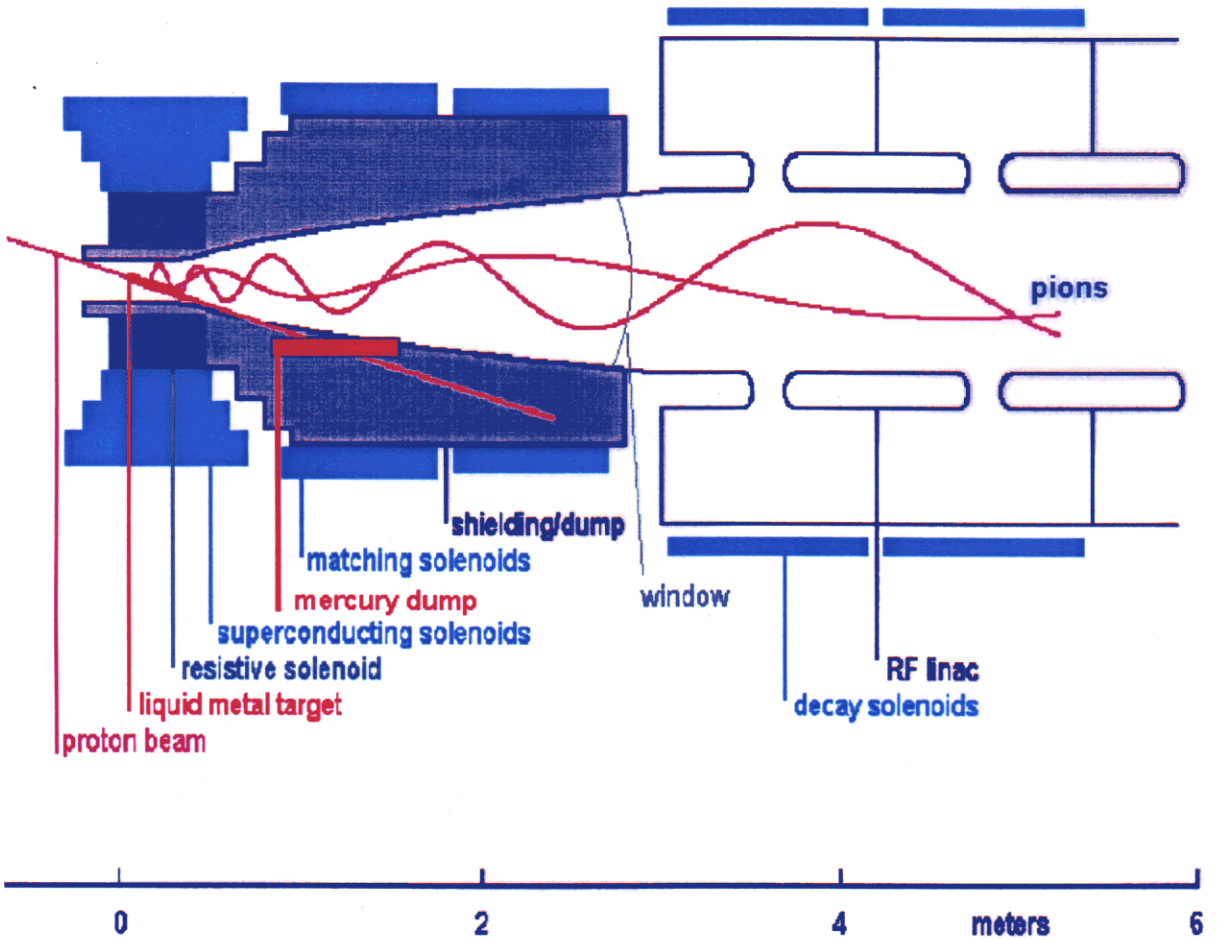
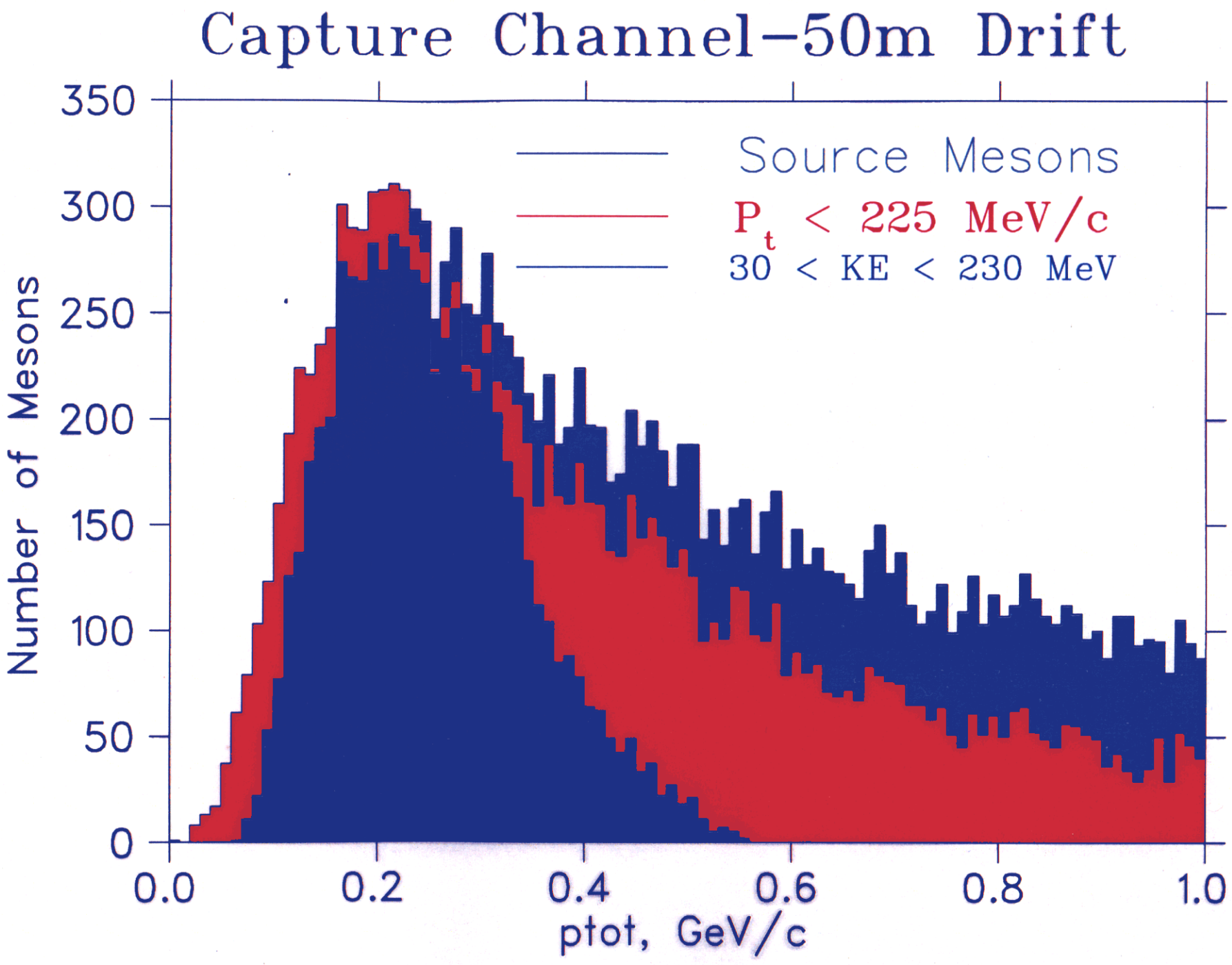
TARGET, CAPTURE & DECAY



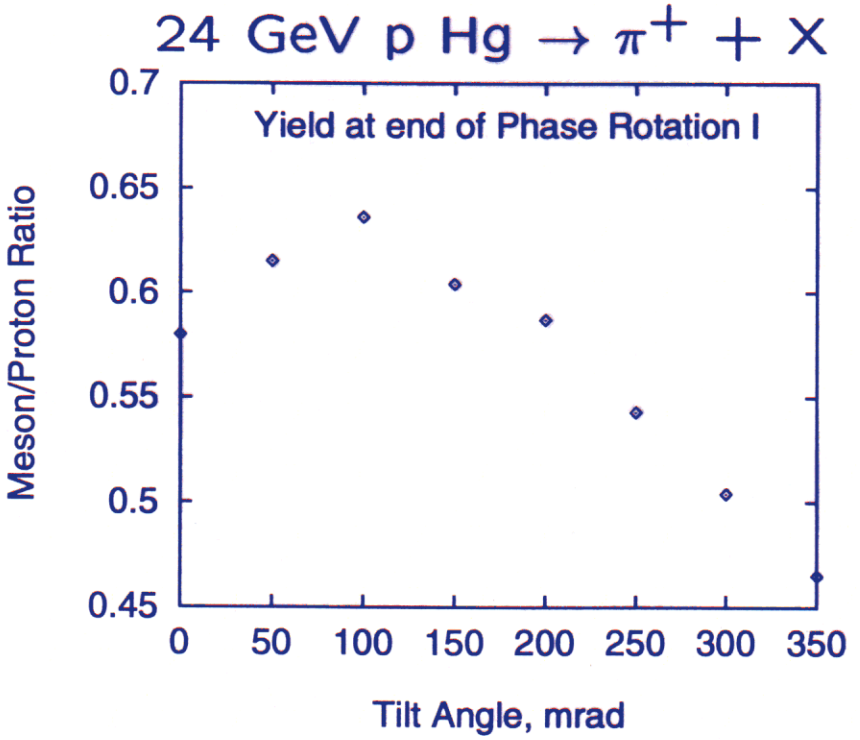
- TARGET:Liquid Metal Jet
- CAPTURE:20 T Solenoid
- BEAM DUMP
- MATCHING
- DECAY & PHASE ROT:1.25 T


Capture Channel–50m Drift
Source Mesons
P_t < 225 MeV/c
30 < KE < 230 MeV
Number of Mesons
0
50
100
150
200
250
300
350
0.0
0.2
0.4
0.6
0.8
1.0
ptot, GeV/c

Variation of target tilt angle

- 1.0cm diameter target
- proton beam $\sigma_x = \sigma_y = 0.15$ cm
- proton beam KE = 24 GeV

Results at end of Phase Rotation I



Pion Production/Capture

	Meson/Proton Yield	
16 GeV Protons	Carbon	Mercury
π^+ (30 <KE<230MeV)	.182	.309
π^- (30 <KE<230MeV)	.153	.315
24 GeV Protons		
π^+ (30 <KE<230MeV)		.469
π^+ (190 <P<390MeV/c)		.636