

MIPP Update

Durga Rajaram

University of Michigan

All Experimenters' Meeting

April 18, 2005

Last Week..

- Not much beam last week
- Completed $+20$ GeV running on LH_2
- Switched tune to -20 GeV, Friday p.m.
- Currently taking data at -20 GeV, LH_2

- Flammable gas permit module went bad → replaced
- Brief glitch with JGG → magnet stable since Saturday
- Detectors working well

Data at +20 GeV

- LH_2 -target: 396,249 interaction triggers
 - K 142,101
 - π 126,621
 - p 127,527
- Empty-target: 72k interactions
 - K 22k, π 25k, p 24k

Summary of LH_2 data

- 209,587 spills (11,095 empty)
- 2.79×10^6 interaction-triggers to DAQ

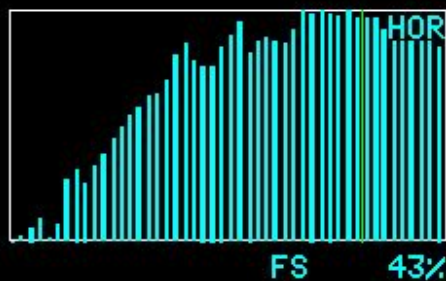
Momentum (GeV)	Target	# Spills	# Interactions
+85	LH_2	24813	409,266
+85	empty	4809	67,449
-85	LH_2	27679	374,256
-85	empty	6532	83,279
+59	LH_2	42155	519,789
+59	empty	17880	236,168
-59	LH_2	135308	341,265
-59	empty	56259	139,228
+20	LH_2	27116	396,249
+20	LH_2	27116	396,249
+20	empty	5310	71,681
-20	LH_2	7386	113,921
-20	empty	816	5,574

Beam Tune

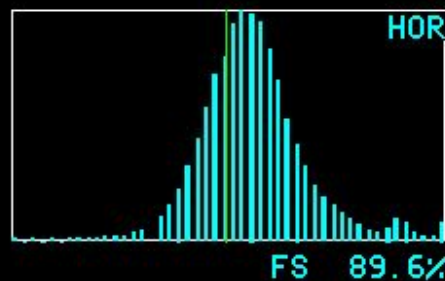
- Tune has been largely stable; thanks to MCR and Carol J.
- some spill-to-spill variations
- seeing more halo with the -20 GeV tune

Events: 34

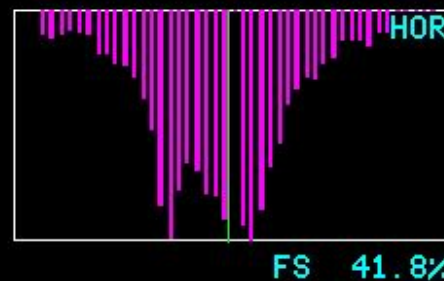
18-APR-2005 14:30:00



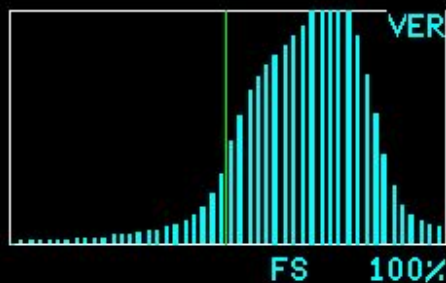
HORZ



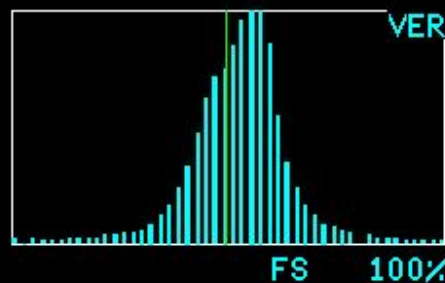
HORZ



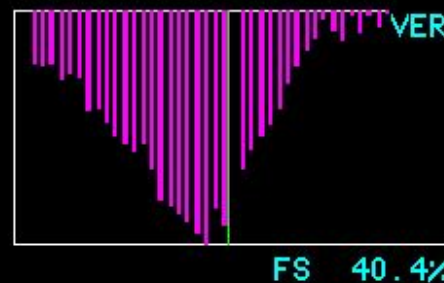
HORZ



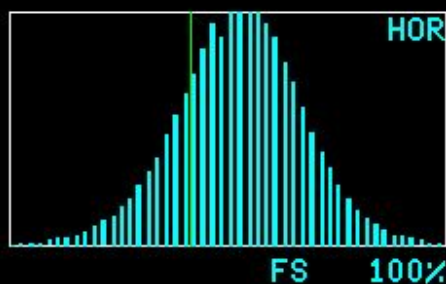
VERT



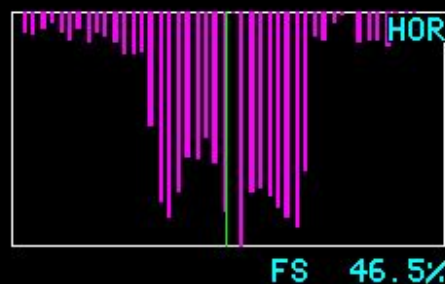
VERT



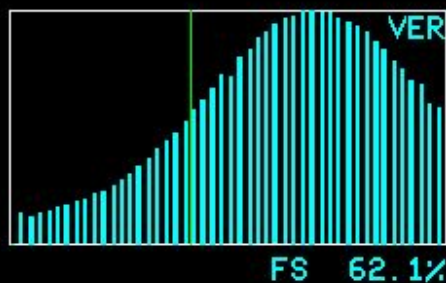
VERT



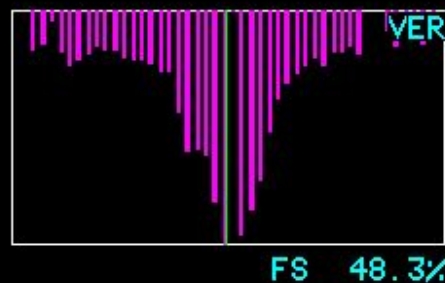
HORZ



HORZ



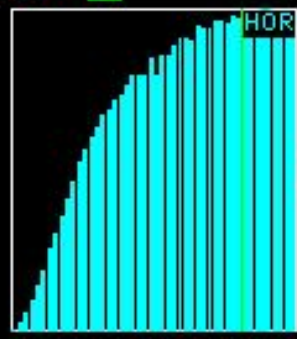
VERT



VERT

Events: 34

13-APR-2005 04:58:33



FS 34.5%

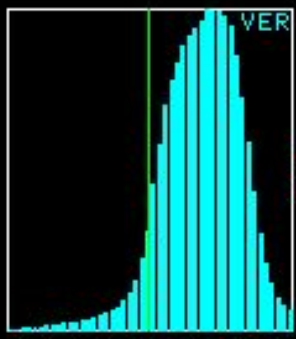
A-3.1/12.7

HORZ



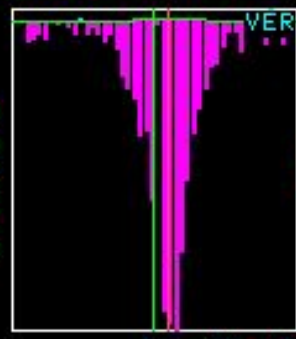
FS 11.9%

HORZ



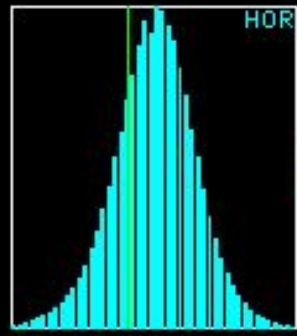
FS 88.3%

VERT



FS 20.4%

VERT



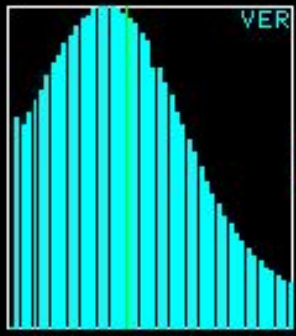
FS 62.6%

HORZ



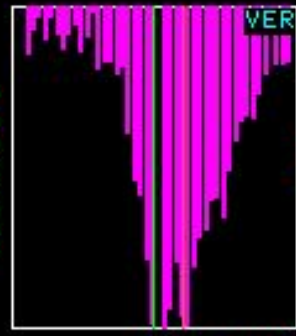
FS 12.5%

HORZ



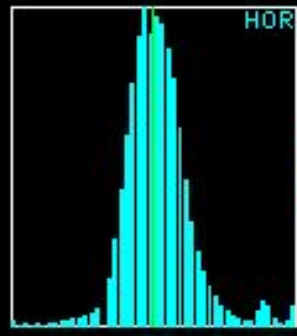
FS 33%

VERT



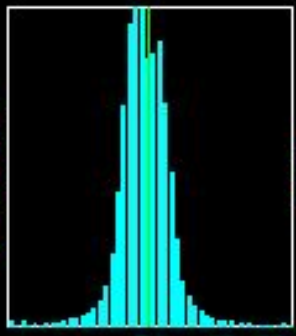
FS 7.81%

VERT



FS 81.9%

HORZ



FS 28.9%

VERT

A-1.3/3.1

Plans

- Complete -20 GeV, LH_2 in ≈ 2 days
- Switch to solid targets
- Plans underway for 120 GeV beam and NuMI-target running