Fermilab Testbeam Update

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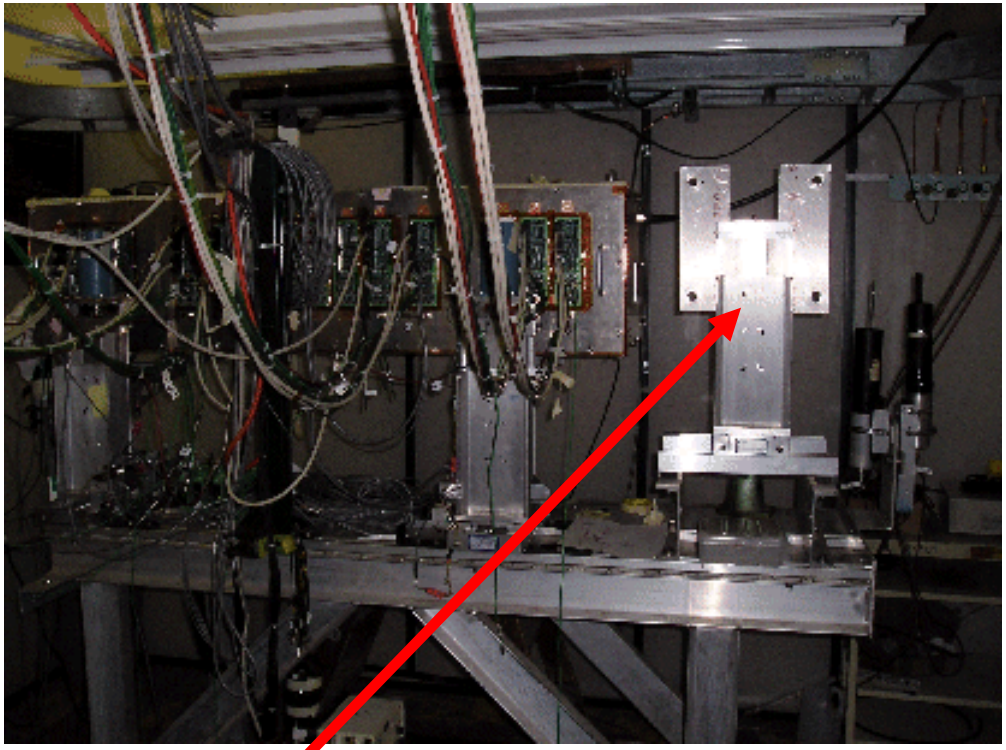
Side view, beam from left

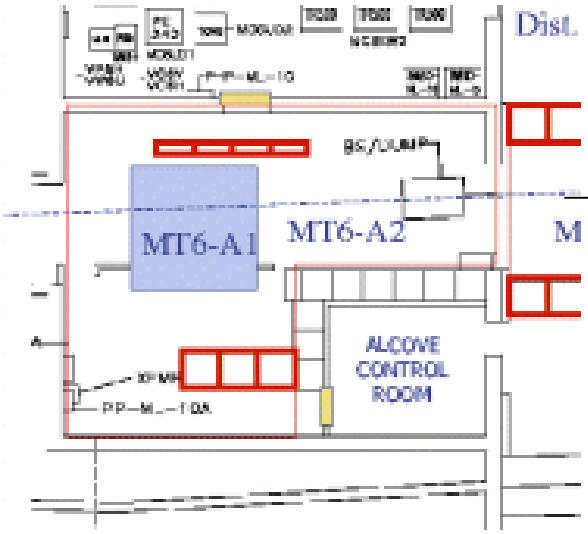


Fermilab Test Beam ... Erik Ramberg in charge

http://www-ppd.fnal.gov/MTBF-w/

Up to 120 GeV protons
Up to 200K/spill (more than enough!) over ~ 5 mm x 5 mm

Beam diagnostics: 3 MWPC profile monitors
4 layers x-y Silicon strip detectors
Cerenkovs (but we don't care about that)
(can be read out into each event)



BTeV pixel & CMS pixel current users of area A

MT6-B ... another area behind

Proposed (Fermilab) test beam scenario:

Integrate with the BTeV/CMS tracker in place, with its readout
Mount prototype vacuum chambers with modest vacuum:
Microstation (Helsinki) and Hamburg Pipe (Louvain)
with a BTeV tracker layer installed to test motion, reproducibilty and find problems to solve with mechanics, vacuum etc.

More ambitious:
Use 3D Si detectors bonded to BTEV R/O (pre shutdown?)
Test also new TOF prototype

Summary

- Date still uncertain: expect shutdown date from director soon. Nominally Mar. 1 2006.

  No beam for ~14 weeks of shutdown.
- Need MOU with Fermilab to get beamtime
- Reading out BTeV detector straightforward: they will give us data
- Adding new readout to data stream can be problematic
- UTA grad student will go to Fermi for training in December, March, and then will analyze data in summer

  (Alberta will help if TOF tests); if 3-D silicon, need extra manpower
- Fermi guys very supportive of effort, not yet beyond consulting role