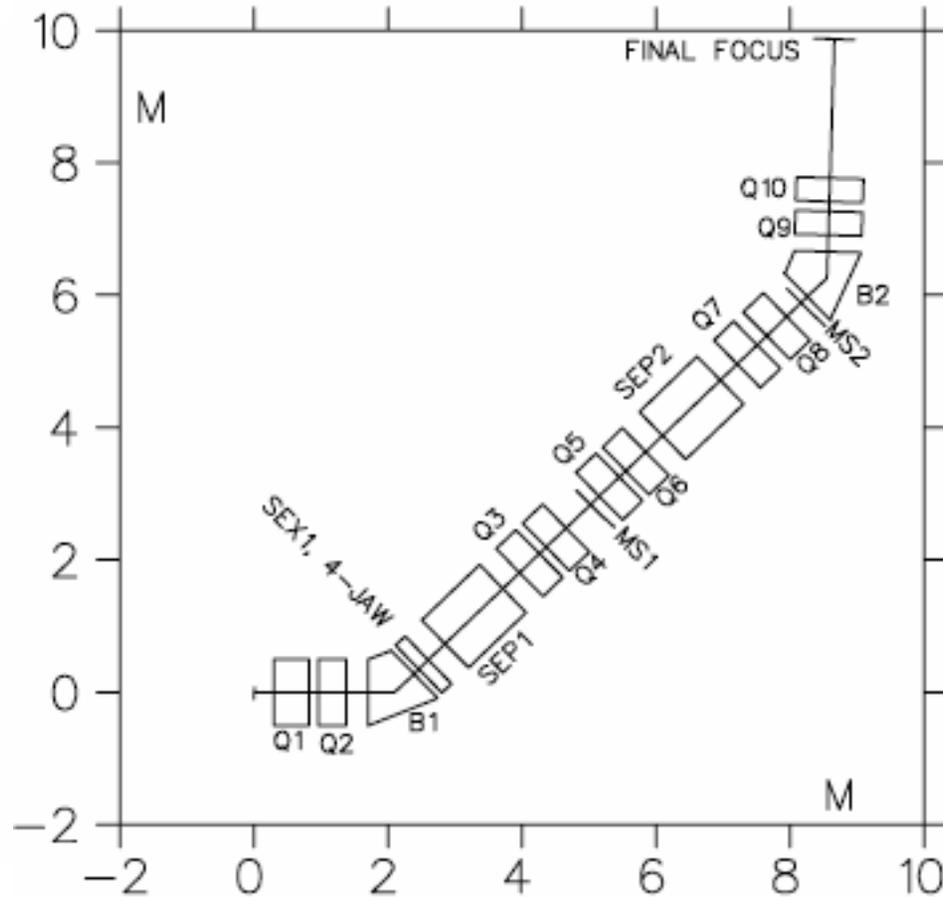


Common Target for Charged and Neutral Kaon Experiments?

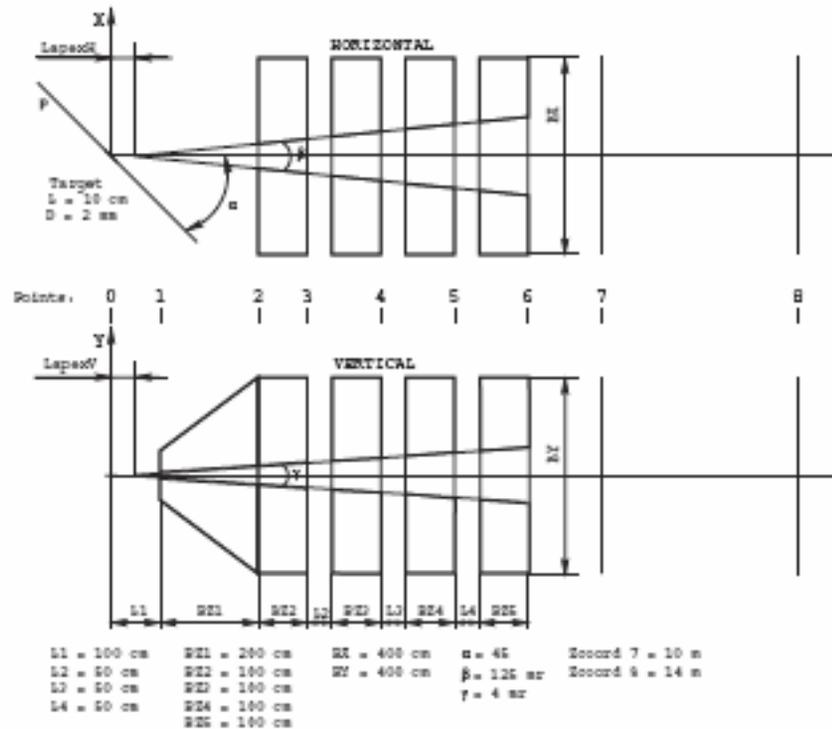
- Proton Economics
- (cost)

- First Review Secondary Beams
- Layout/Compromises?
- Common /Proton intensity (targetting angle, access, repairs, backgrounds, future flexibility)

Separated K^+ Beam - Doornbos K550

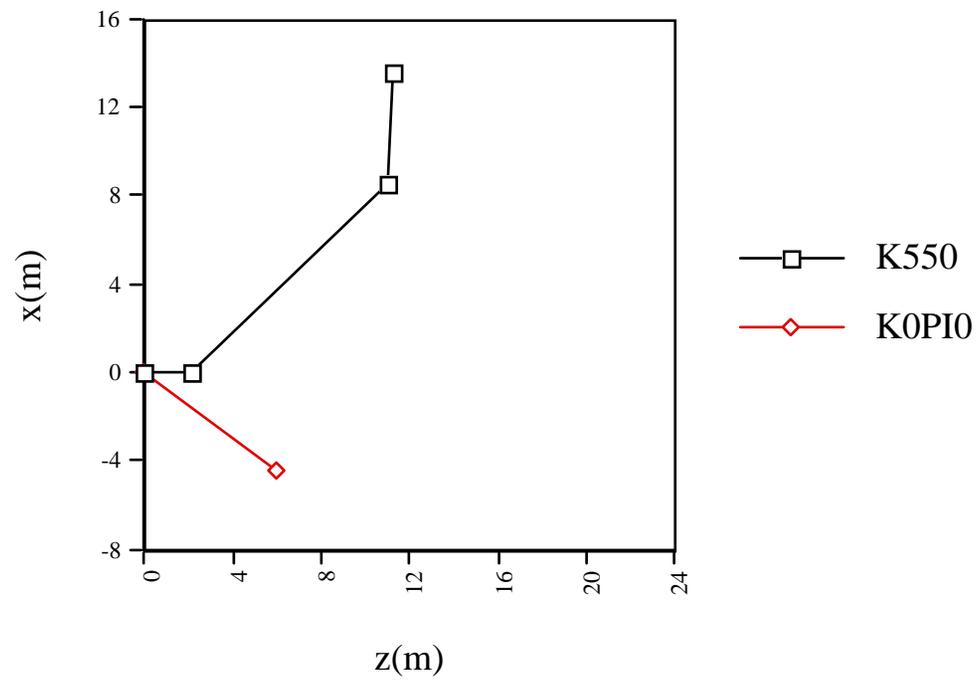


Neutral K0PI0 proposal



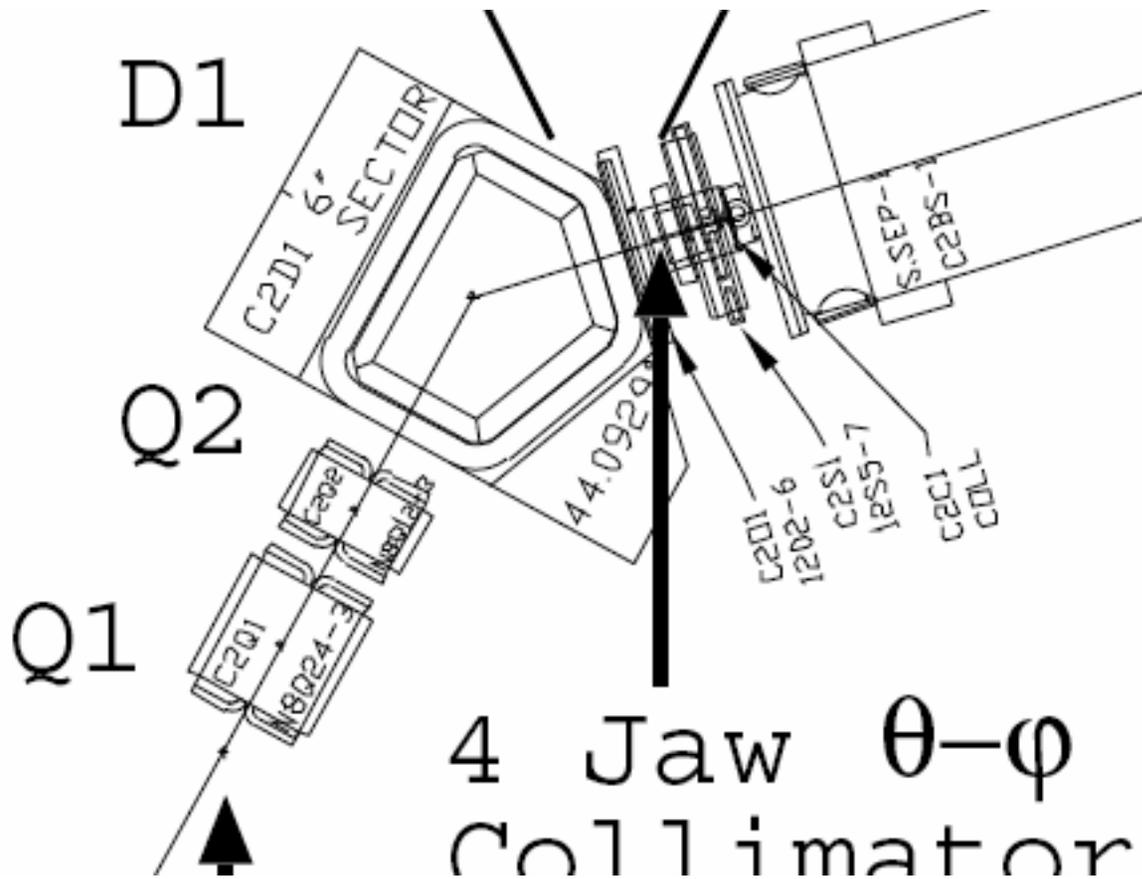
Targets at 45 degrees, 5.2 mr (V) x 96 mr (H) = 500 uster.

Layout Charged and Neutral Kaon Beams

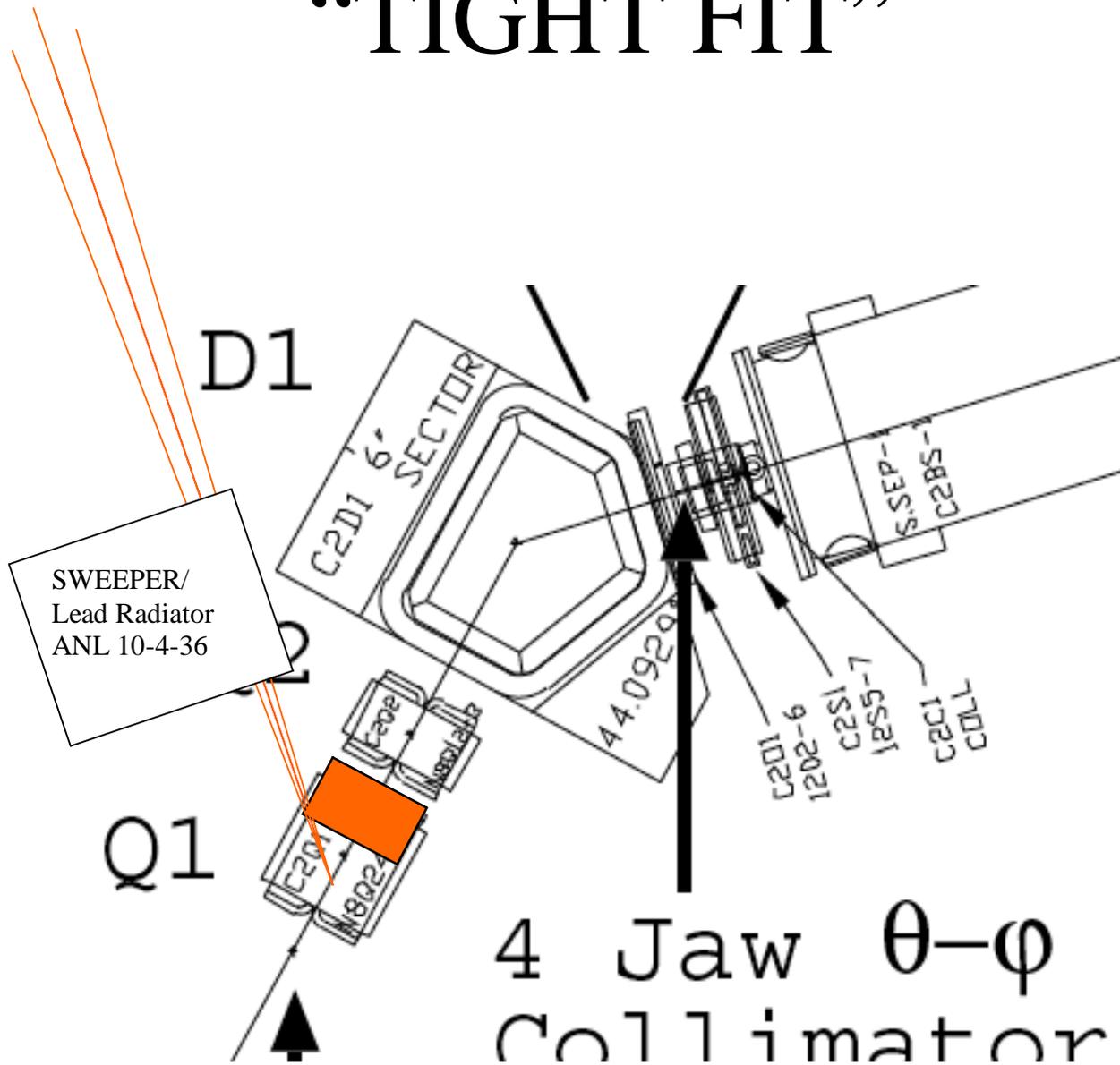


“TIGHT FIT Region”

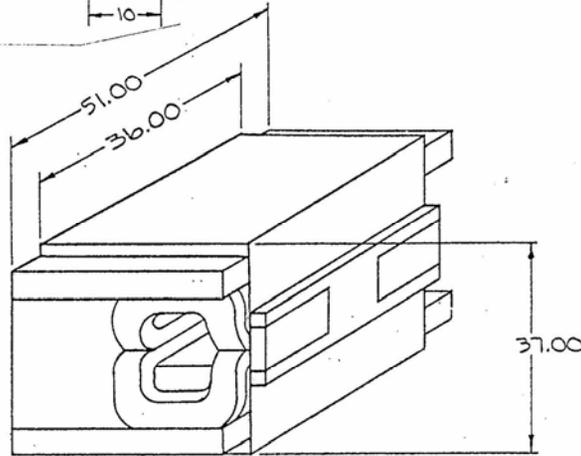
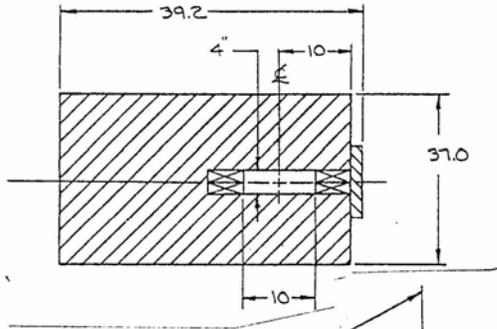
use LESB3 layout



“TIGHT FIT”



Possible sweeper that "fits"
 (Not needed if "pencil" beam is used)



10-4-36

ANL 10 IV 36

Current (RMS)	<u>3000</u>	Amps
Volts	<u>75.0</u>	V
Magnetic Field	<u>20.55</u>	kG
Cooling	<u> </u>	gal/min water
Gross Weight	<u> </u>	lbs

Feb. 3, 1983

Boek

Pros

- Proton Economics
- Cost

Cons

- Proton intensity (collimate K^+ beam, K^0 variable collimation ?)
- Future Flexibility
- (Proton target angle)
- (Access/repairs)
- (Backgrounds?)

References

(1) E949 Beamline (LESB3)

<http://www.phy.bnl.gov/e949/detector/beam/lesb3/>

Nuclear Instruments and Methods in Physics Research Section A, v. 444, iss. 3, p. 546-556.

(2) Calculations for the Design of a 550 MeV/c Kaon Beam, J. Doornbos, TRIUMF, Aug. 18, 1997.

(3) KOPIO proposal

(4) High energy neutron halo simulation, A. A. Poblaguev and M.E. Zeller, status report, July 16, 2001.

(5) KOPIO Technical Note #123 Survey of Simulation Needs for Understanding Neutron Interactions in the KOPIO Experiment
A.L. Hanson, Dec 13, 2004.

(6) Poblaguev talk at Frascati, May 2-27, 2005.

Q1, Q2 LESB3

