

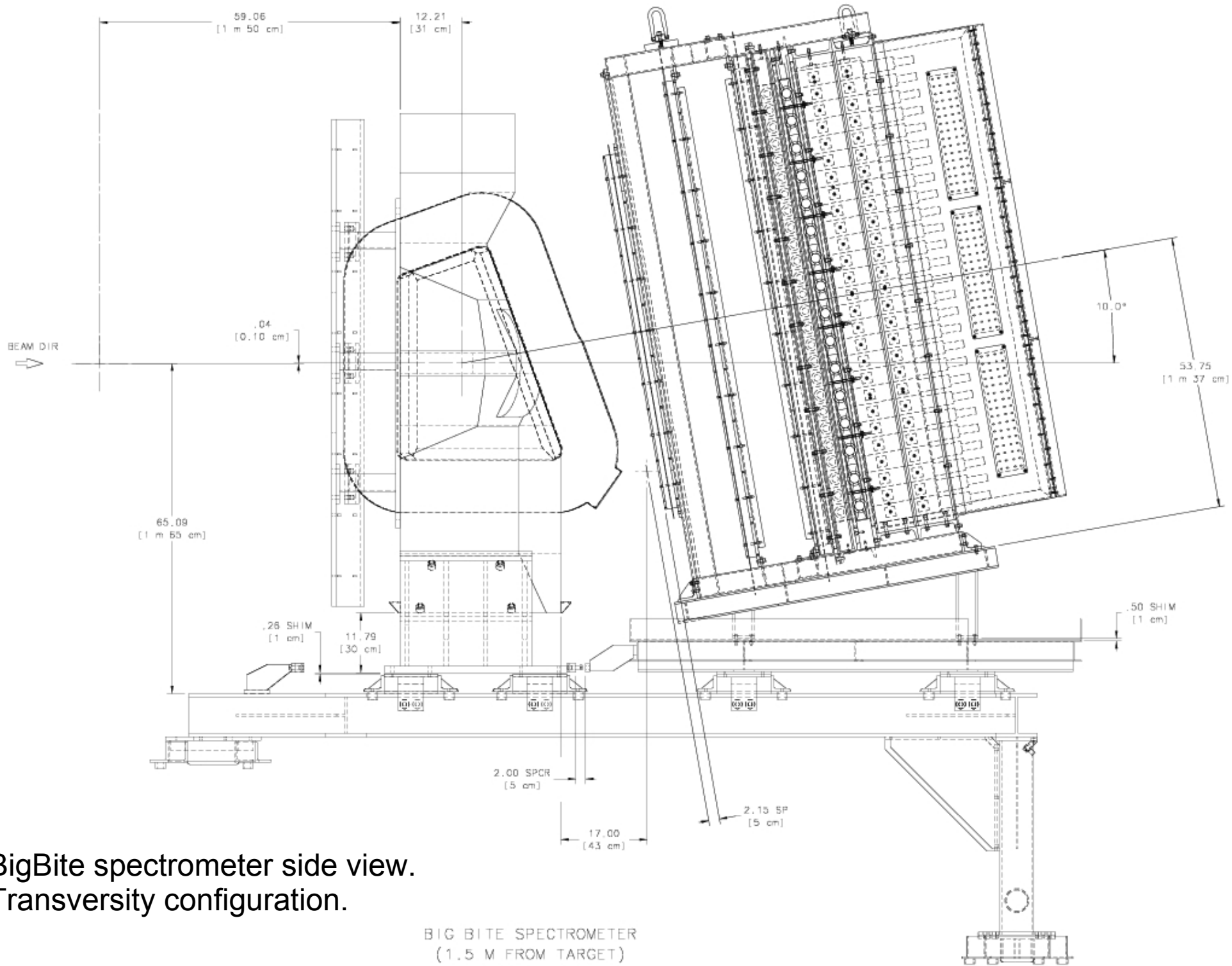
# BigBite Magnet Collimator Design Progress

Xiaodong Jiang    Aug 30, 2006.

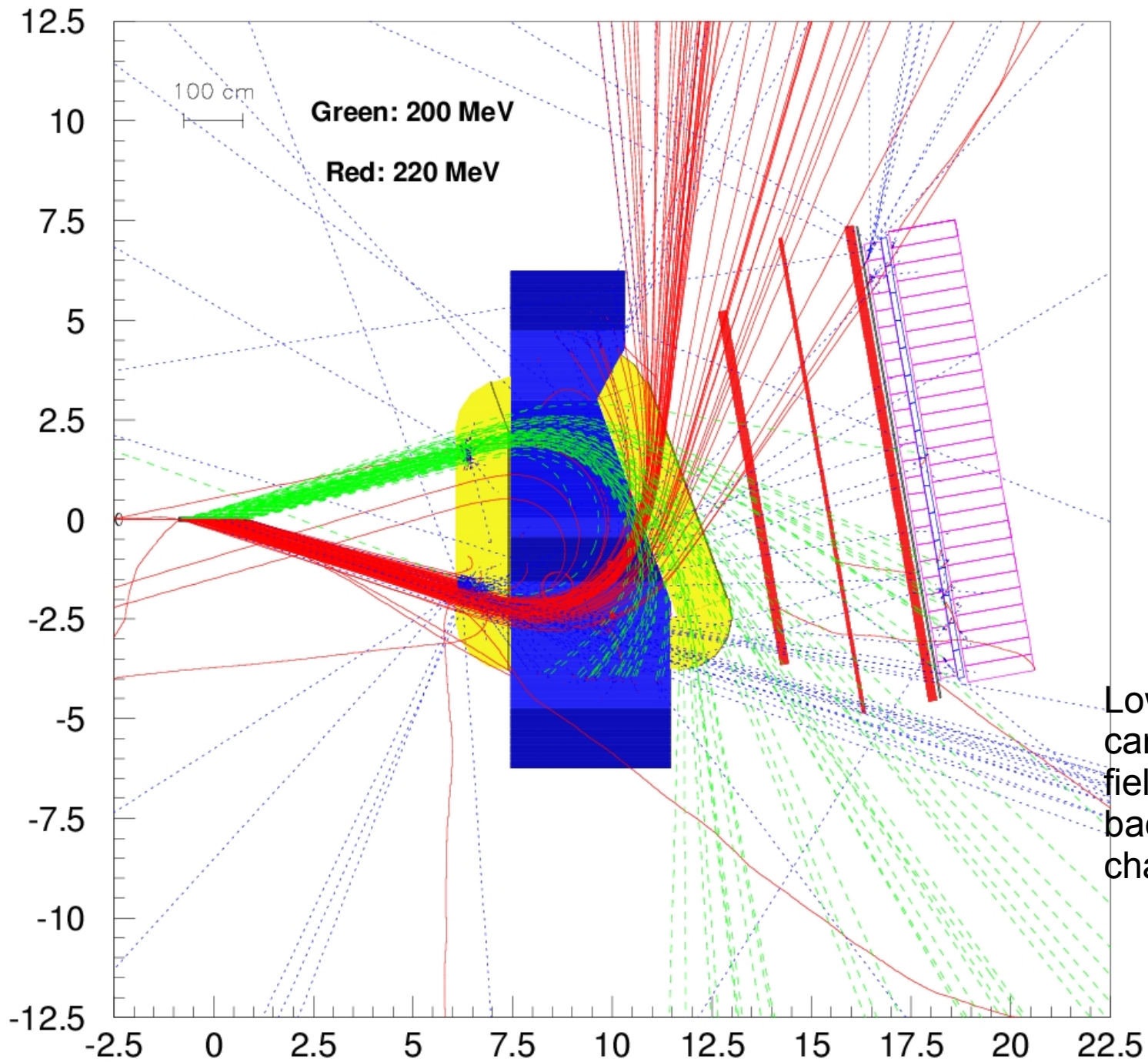
Design needs: to reduce  
background at the wire chambers.

Specifications.

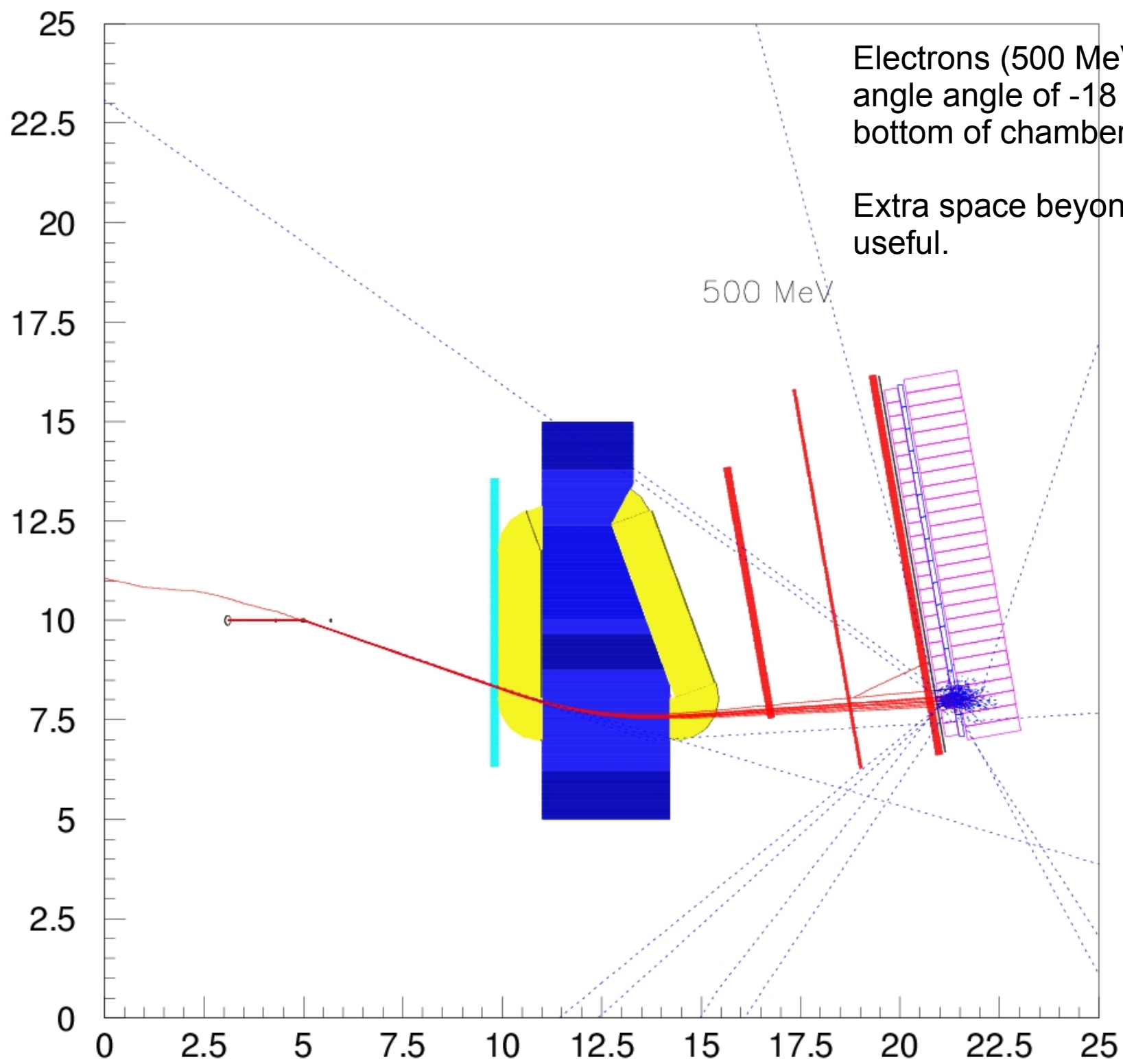
Progress.



BigBite spectrometer side view.  
Transversity configuration.



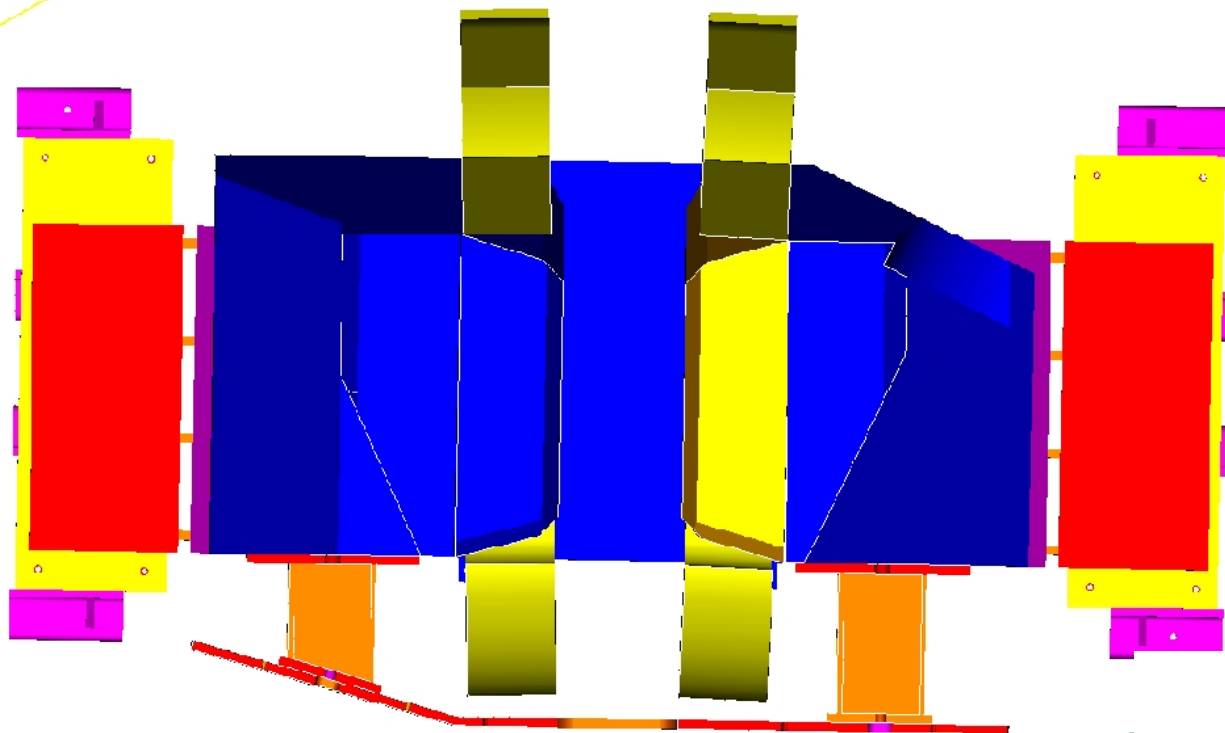
Low energy particles can pass through low field region generating background hits at wire chambers.



Electrons (500 MeV) at a verticle angle angle of -18 degree hit the bottom of chamber-1.

Extra space beyond this point is not useful.

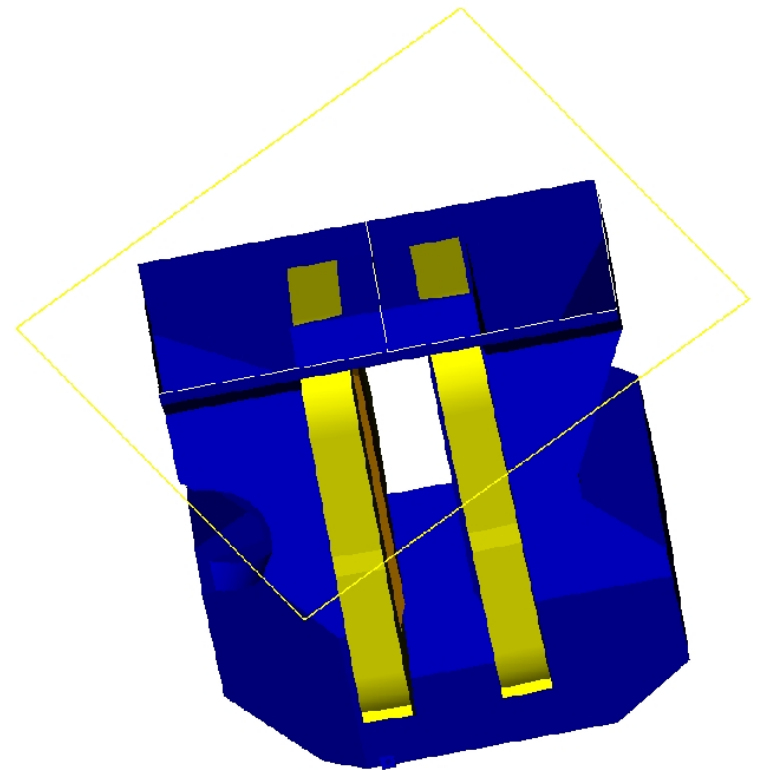
500 MeV



Fill the empty space:

beyond +/- 18 degree at the top and the bottom  
from the back of the magnet to the front magnetic  
shield plate.

2 inches of lead on top followed by Aluminum.



Progress:

Ravi has the preliminary design done at the end of July.

However, he has been away from the Lab and can not make a presentation on the design.

When Ravi comes back, we still need one-two weeks to finalize the design.