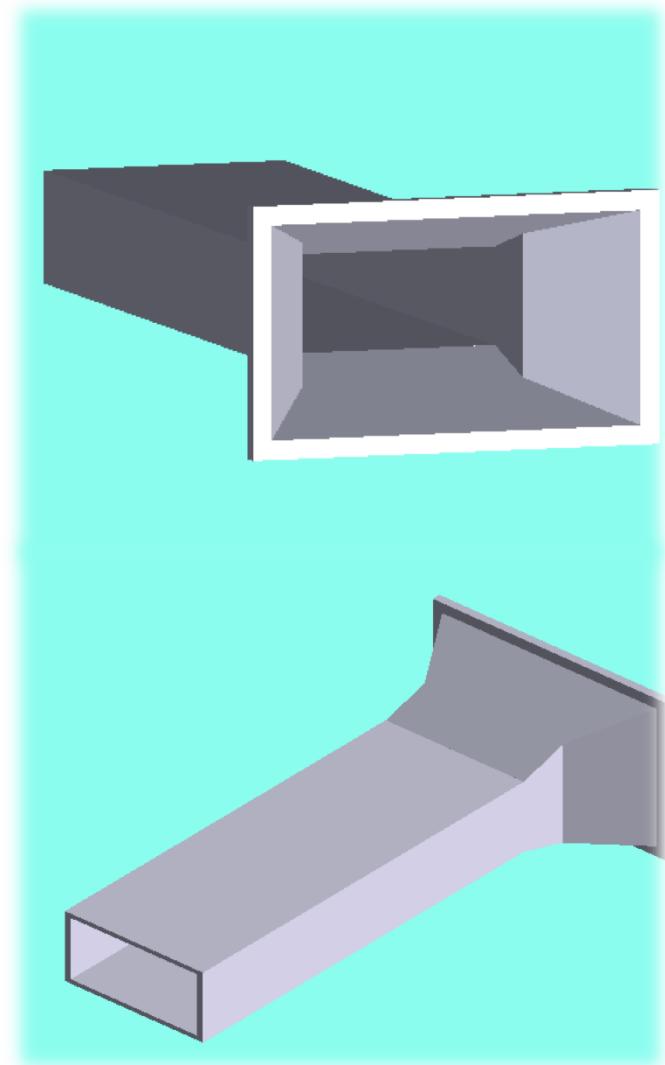
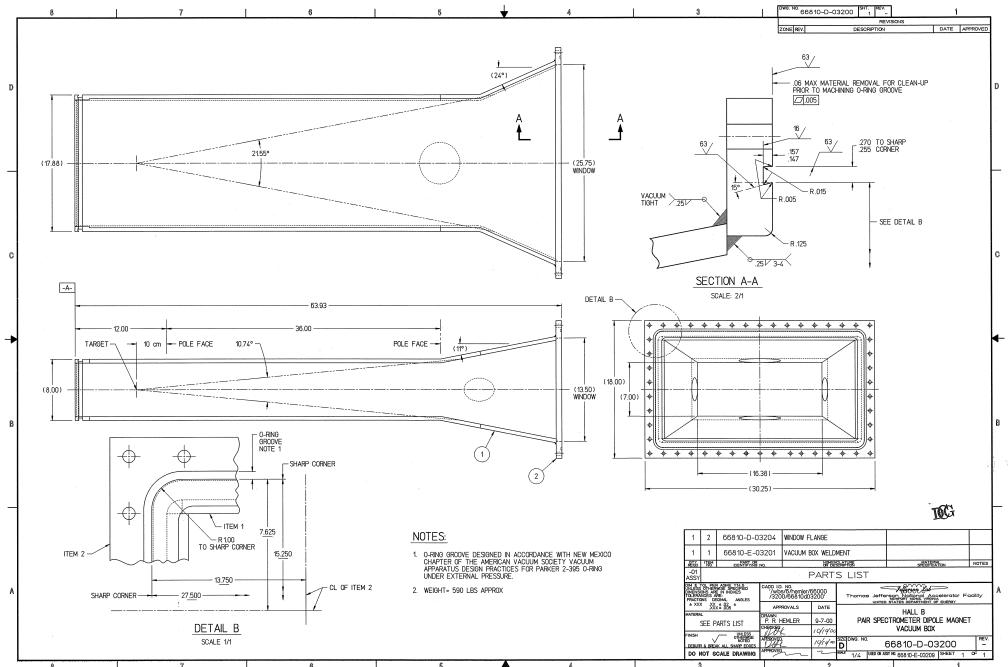
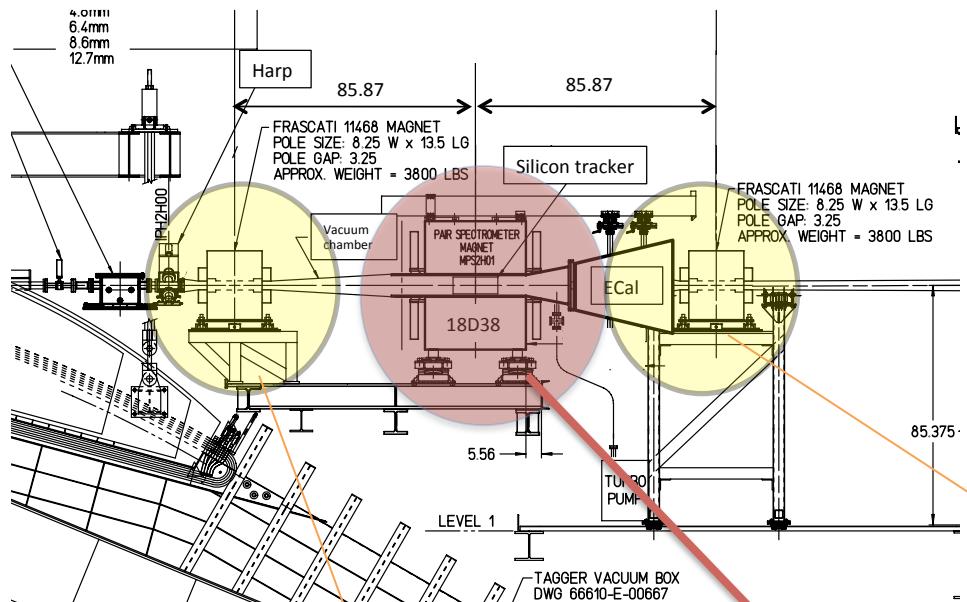


# HPS Test Vacuum Box

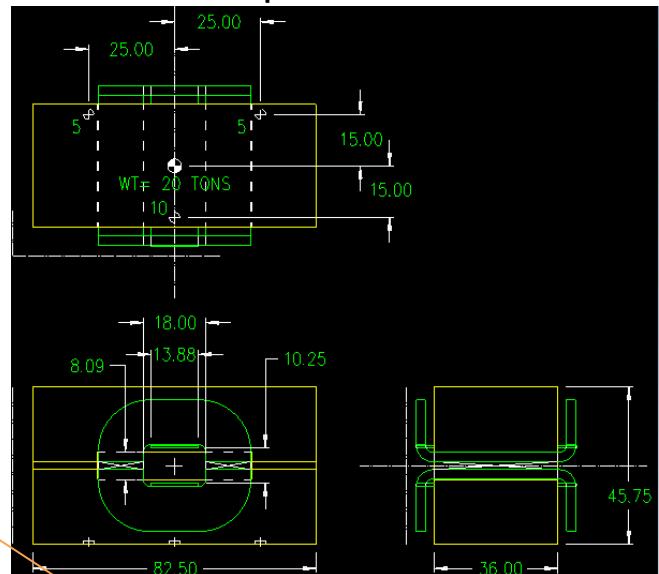


**Stainless Steel 304**  
 ½ inch thick (x)  
 ¾ inch thick (y)  
 63.93" long  
 Flange:  
 1" thick

# HPS Test Magnets



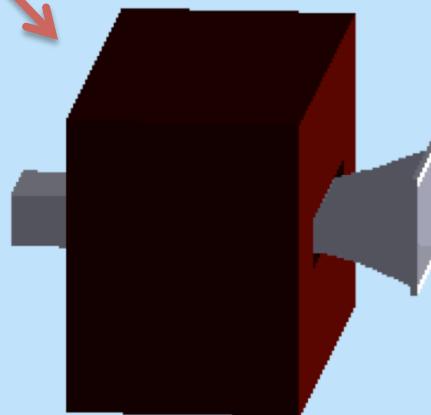
Pair Spectrometer



Frascati Magnets  
Pair Spectrometer



Frasc. Magn 1



Pair Spect

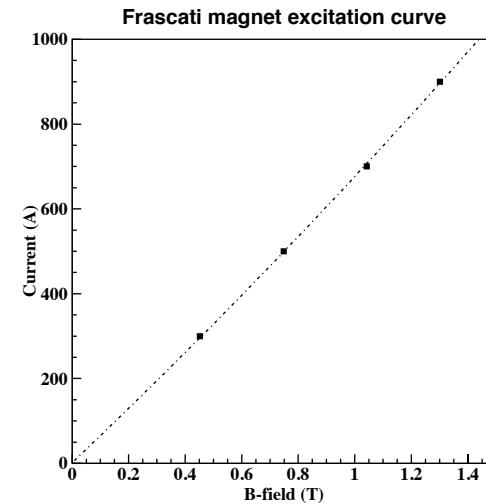


Frasc. Magn 2

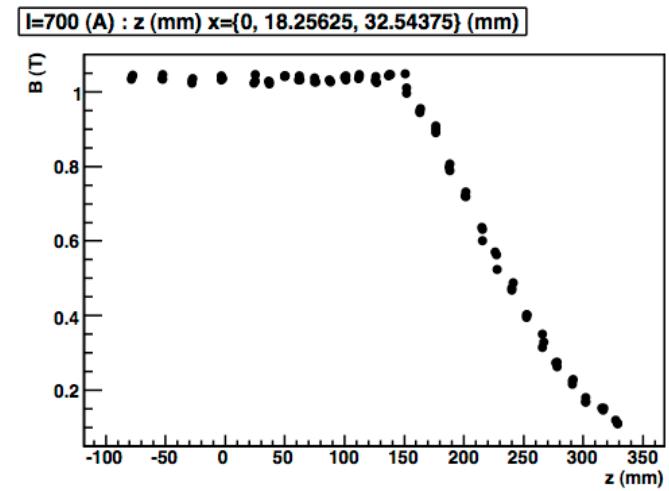
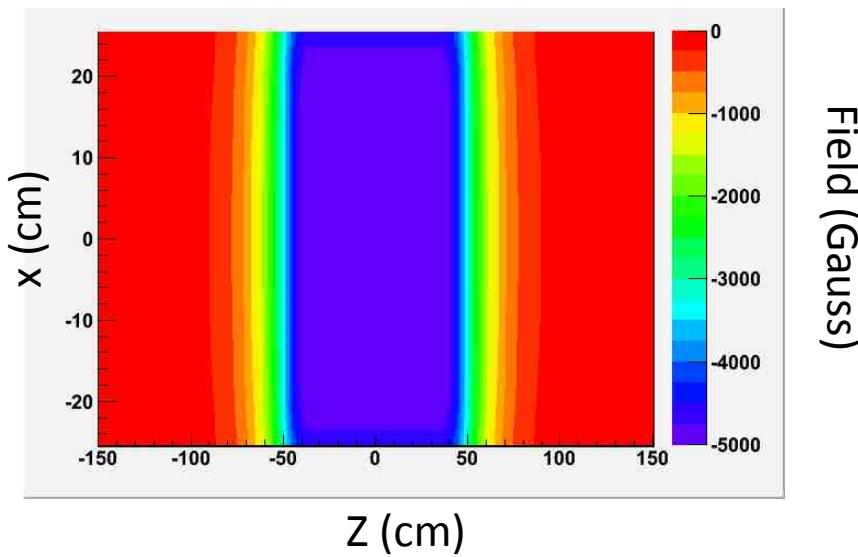
# HPS Test Magnets Field Maps

Provided by Stepan, CLAS Note 2011-2  
Measurements of Frascati, PS Magnets

Frascati Magnets Current for 0.25 Tm:  
335.9 A (based on max field value)

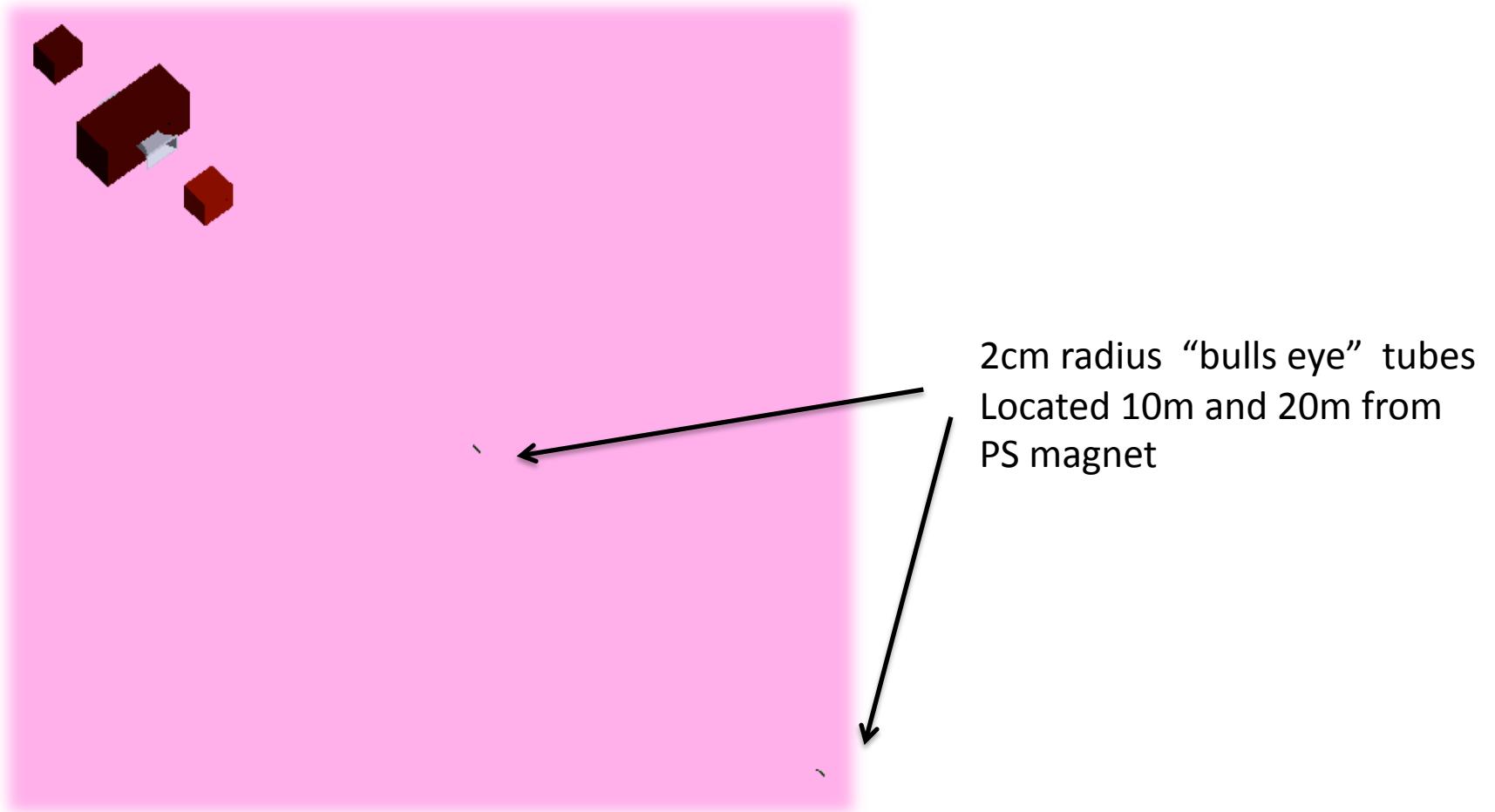


Pair Spectrometer Field: 0.5 T field

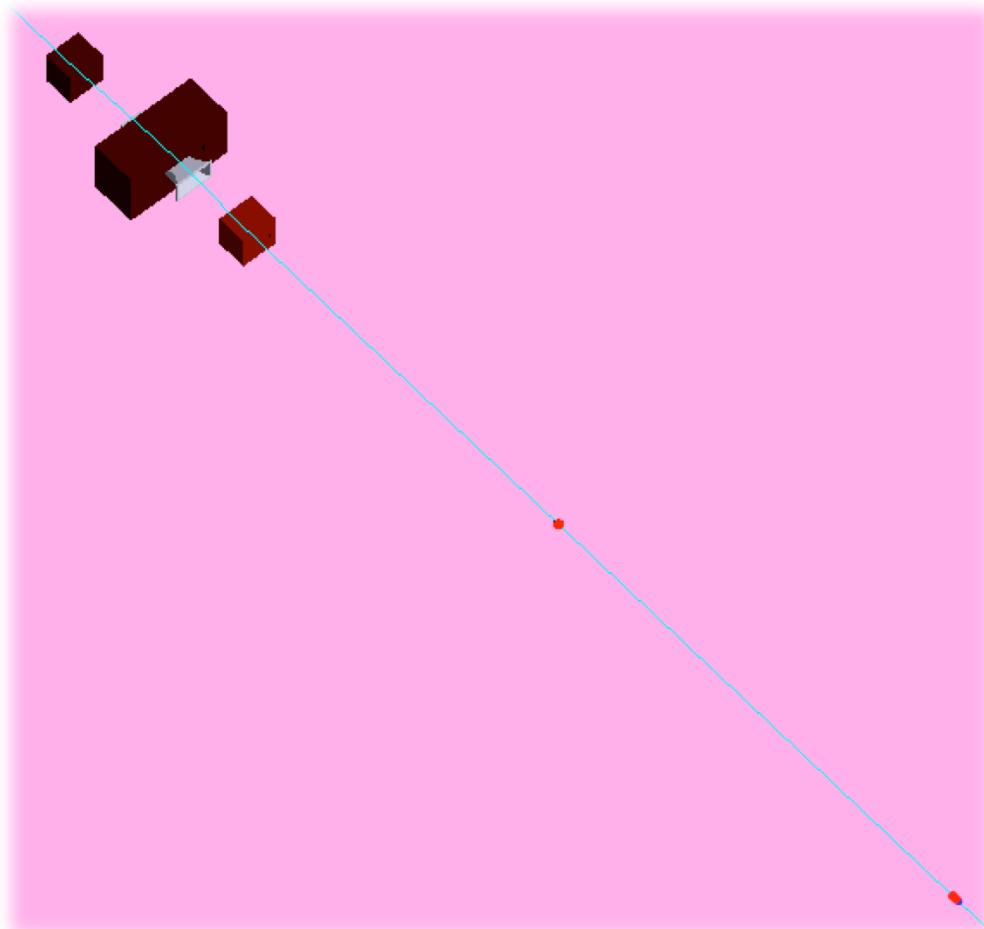


Frascati Magnet Measurement

# HPS Test Chicane Alignment



# HPS Test Chicane Alignment



2.2 GeV Electron (cyan)

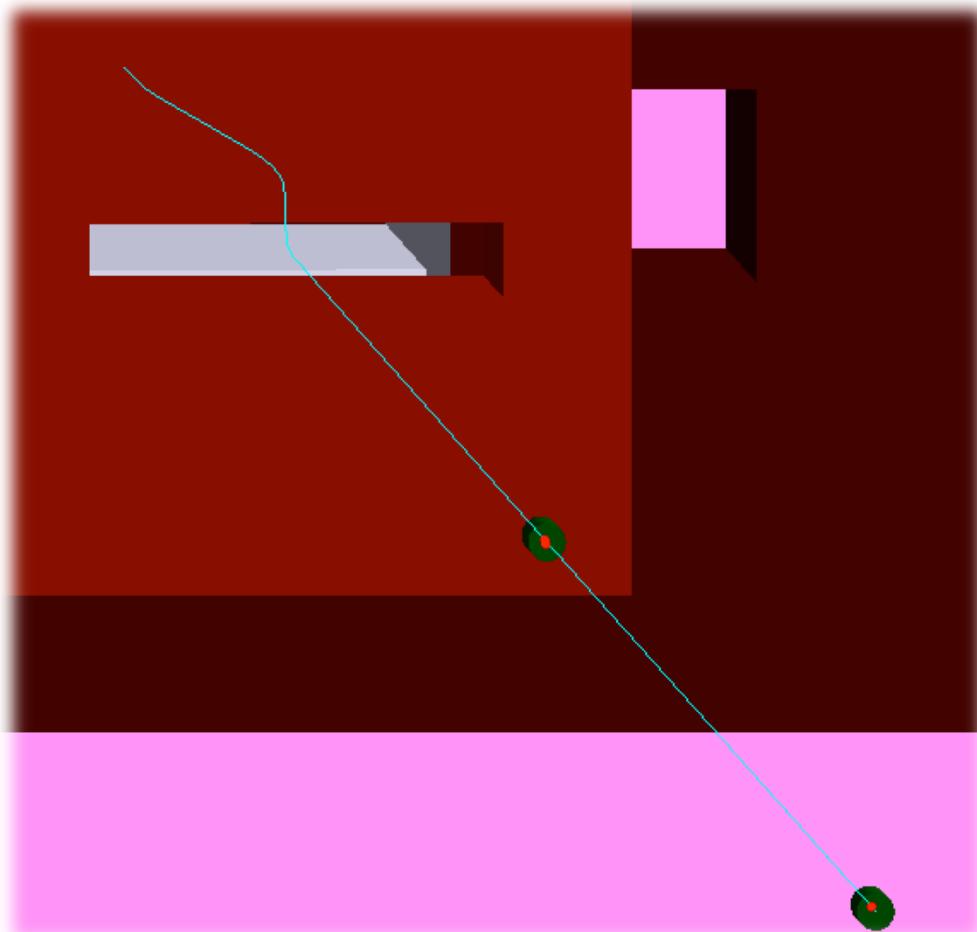
2cm radius “bulls eye” tubes  
Located 10m and 20m from  
PS magnet

2.2 GeV electron (cyan)

Red Dot = hit

**To achieve alignment:  
PS Strength: 88%**

# HPS Test Chicane Alignment



2.2 GeV Electron (cyan) Zoomed in

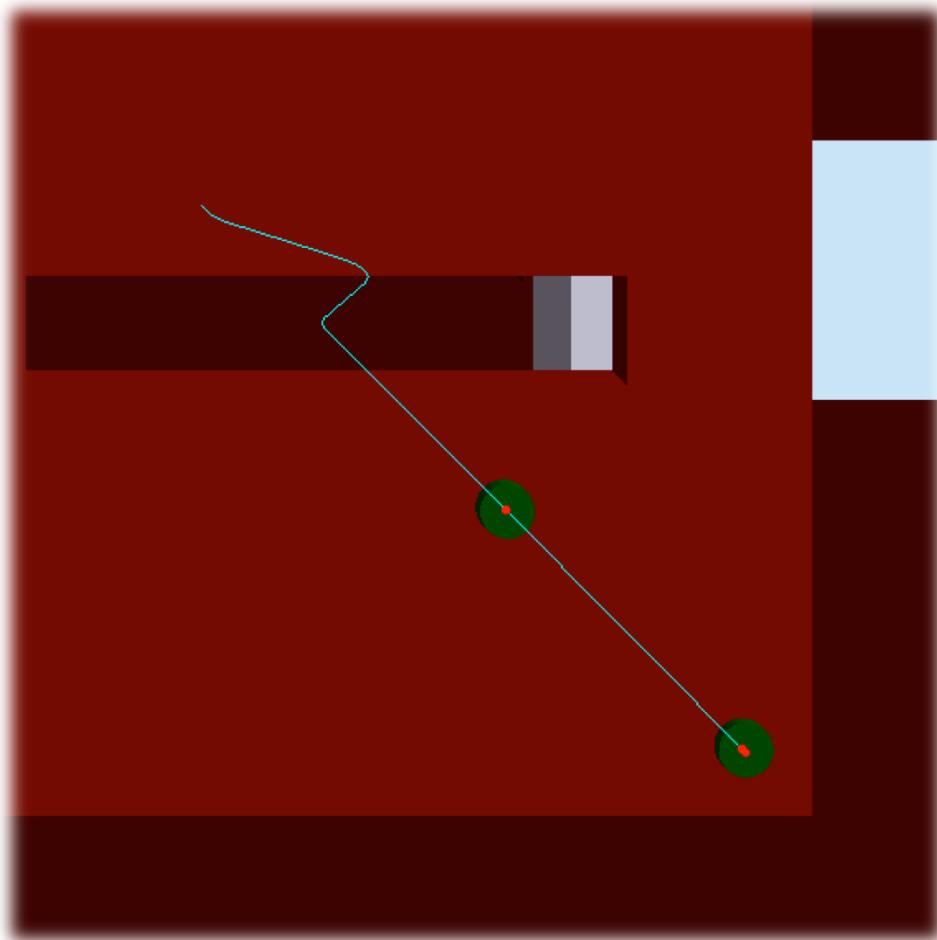
2cm radius “bulls eye” tubes  
Located 10m and 20m from  
PS magnet

2.2 GeV electron (cyan)

Red Dot = hit

**To achieve alignment:  
PS Strength: 88%**

# HPS Test Chicane Alignment



2.2 GeV Electron (cyan) Zoomed in

2cm radius “bulls eye” tubes  
Located 10m and 20m from  
PS magnet

2.2 GeV electron (cyan)

Red Dot = hit

PS at 0.5T

**Frascati Magnet at 1/0.88  
Or 114%**