

## BFS detector layout

### Platform:

- Length following shield of D4 = 130" (331cm)(possible another 1-1.5")

11/22 we measured 131 and 1/4" from back platform to center of D4. It is noted according to C.Pearson that D3 D4 have NOT been surveyed in to proper position on platform. Therefore the reference ray is crucial to get established.

### RICH

Do not have final drawing set. Based on top view drawing (enclosed only). Exterior size

- Flange -> flange 63" (160 cm)
- Window->Window 66.5" (168.91 cm)
- Window width 18" (45.72cm)
- Box (flange width 93.9 cm)
- Need 8" for PMT mount. This looks more like about 12" (30.5cm) considering the cabling considered, and following discussions with C.Pearson.
  - ➔ Set aside 14" from end of tilted flange i.e. 10"-4.5cm = 12" from end of box.
- Need clearance at backend
  - In original layout was given 9.5" from extruding corner.
  - ➔ Set aside 4" (10 cm).

Total space needed for RICH (from end of platform)

➔  $10+168+30 = 209$  cm. (82.4")

- Available space for H2 and DC (T5) thus  $331-209 = 122$  cm ( 48")

### H2

Slats support are 6 cm , but supporting frame 18 cm at the far-side extruding about

5cm free space should be enough . 6 cm front 4 behind.

➔ Allocate  $18+6+4$  cm = 28 cm (11.8")

- Available space for T5 thus  $122-28 = 94$  cm (37.1")

## T5

The support frame length is at present (from drawings) 66.7 cm (26")  
17 cm free space front + 67 cm +10 cm = 94 cm (37.1").

The stand T3 leg has a distance of 22" (55.88) (perpendicular to ref ray)  
And a length distance of 70.72 cm  
For T4/T5 the numbers are 25-15/16" (65.88 cm) 24-9/32" (61.67cm)  
respectively.

Positions along reference ray.

<b>Detector</b>	<b>Front position</b>	<b>Center position</b>
T5	17 cm	50.35 cm
H2	--	109.0 cm
RICH	130 cm	214 cm

<b>Detector</b>	<b>Active width</b>	<b>Ref ray offset</b>
T5	50 cm	-2 cm
H2	48 cm (32*1.5)	-2 cm
RICH	45 cm	-2 cm
T4	50 cm	-2 cm
T3	40 cm	-2 cm