

TOF Inner Region Upgrade Plans

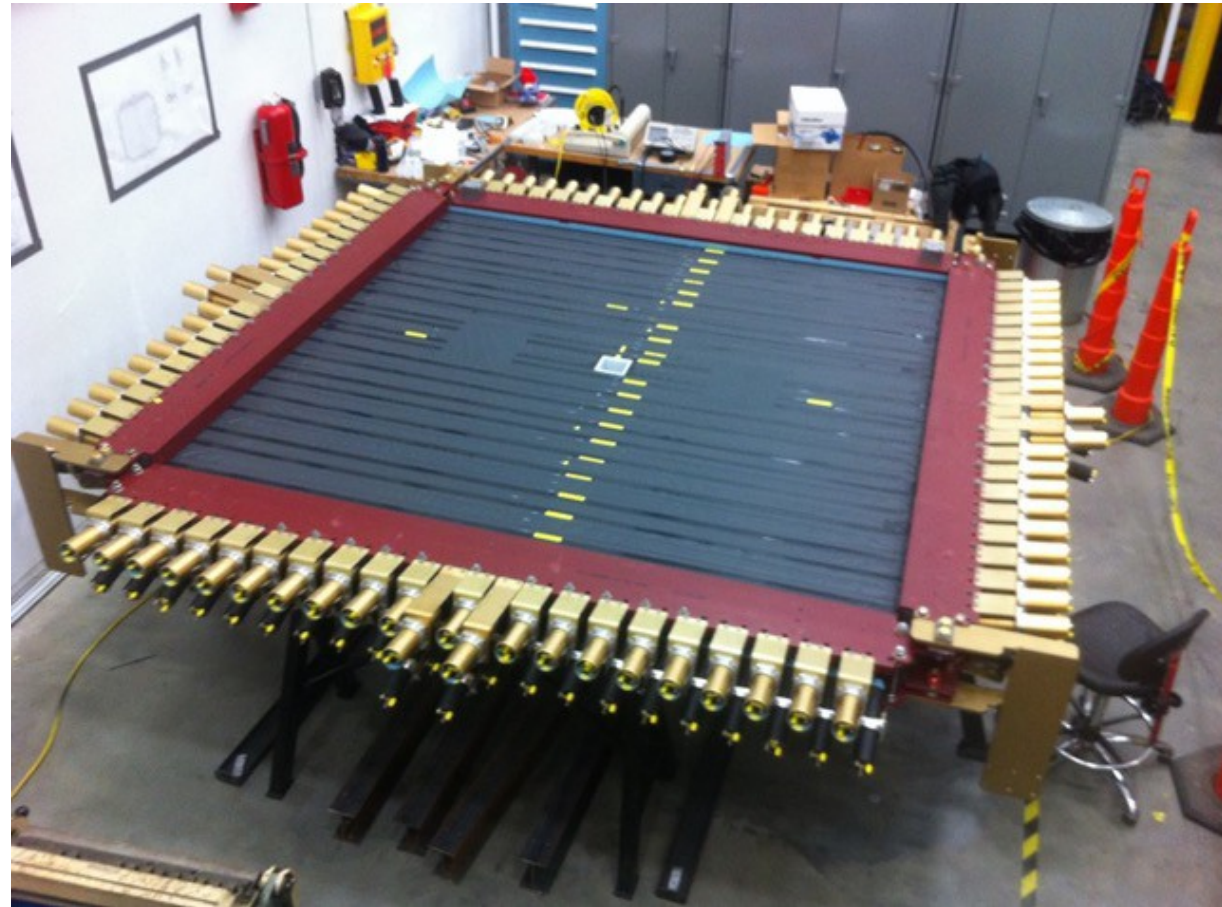


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TOF Meeting

Moving & Lowering the TOF

REQUEST SAME ORIENTATION



- When? (next week?)

Disassembly & Reassembly



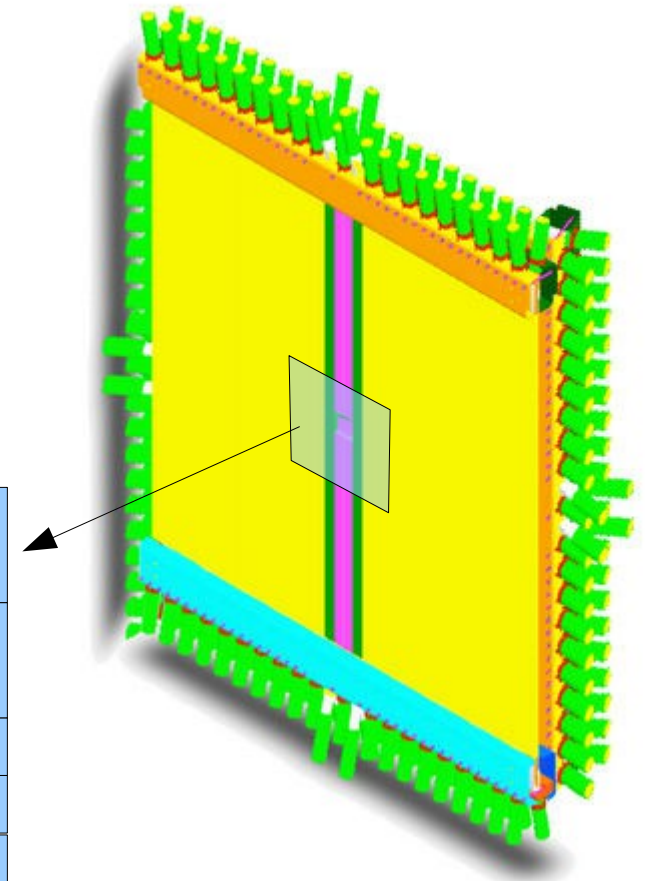
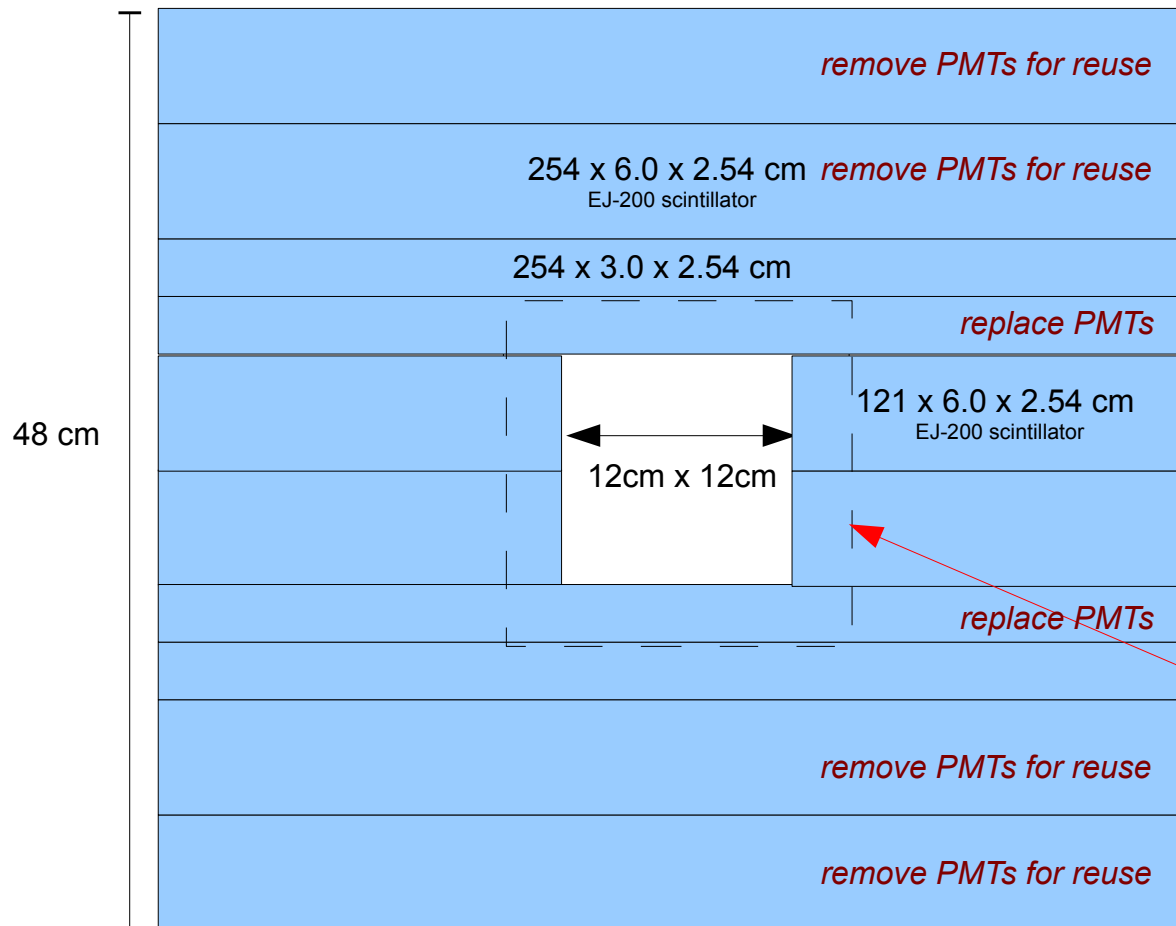
Existing Inner Region

Remove 8 modules per plane (16 total)

- 4 full length modules
 - remove 8 PMTs for reuse
- 4 short modules

Relocate/Replace 4 narrow modules per plane (8 total)

- 3 modules replaced with new
- new PMTs on inner most modules



expand beam hole to
18cm x 18cm

PMT Replacement Plan

*	4.5 cm
*	4.5 cm
	3 cm
	3 cm
	4.5 cm
	4.5 cm
	4.5 cm
	4.5 cm
	4.5 cm
	3 cm
	3 cm
*	4.5 cm
*	4.5 cm

18cm x 18cm

PMTs required in the Inner Region

- **48 PMTs total**
 - 32 PMTs for 4.5 cm modules
 - 16 PMTs for 3 cm modules

New module fabrication at FSU

- 38 PMTs installed
 - 32 PMTs for 4.5 cm modules
 - 6 PMTs for 3 narrow modules

Reused/Recycled PMTs

- 10 recycled PMTs (5 modules)
 - 3-7 reused PMTs installed at JLAB
 - 7-3 PMT on recycled modules

Allocation plan for new PMTs

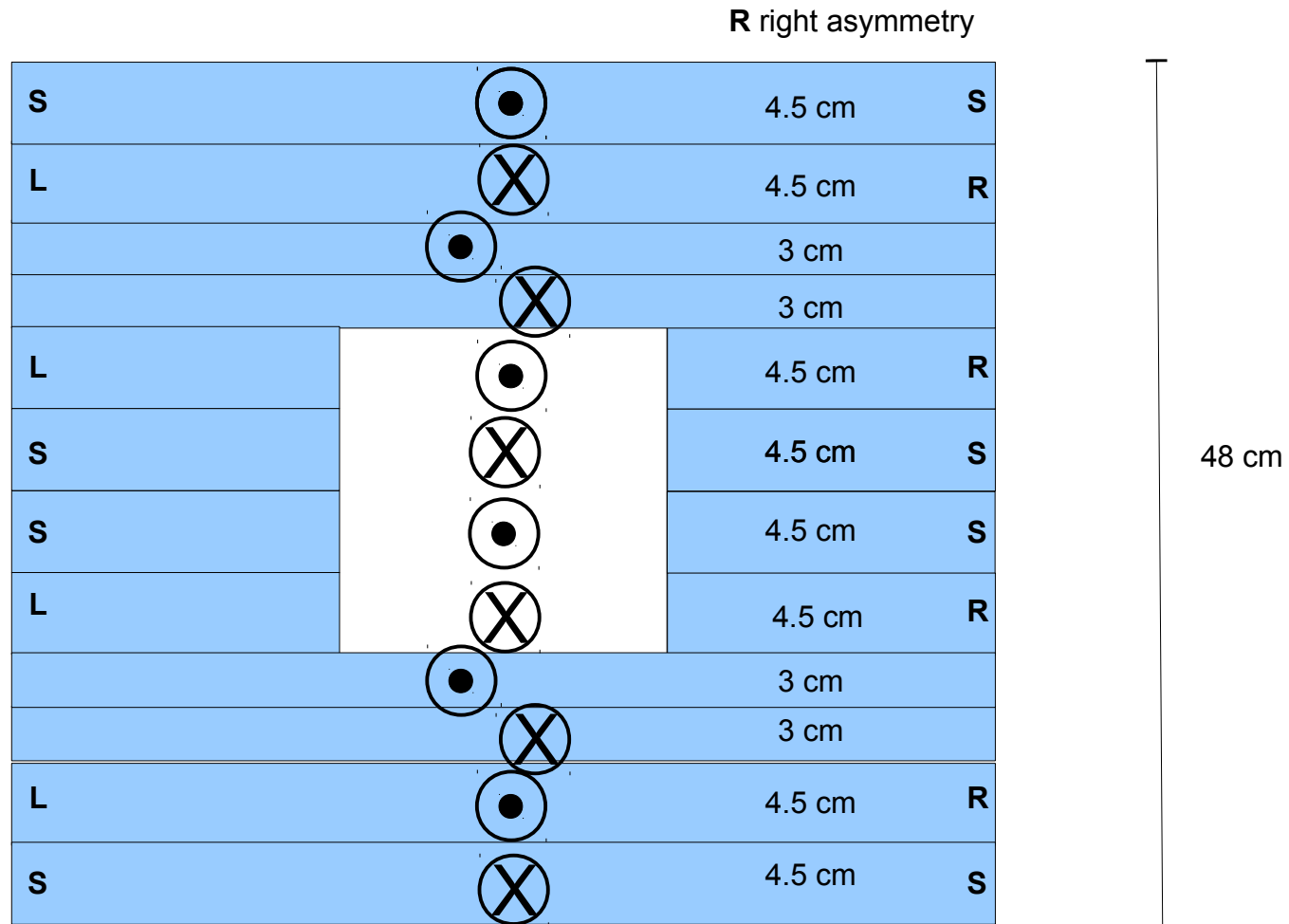
- 16 on single sided modules
- 8 on 4 Asymmetric double sided

PMT source

- **25 new @ FSU**
- **4 from Mini-TOF (?)**
- **16 removed from TOF***
- **3-7 PMTs reused (narrow)**

TOF Inner Region Module Layout

inner region segmentation with 3 cm & 4.5 cm wide modules



PMT up



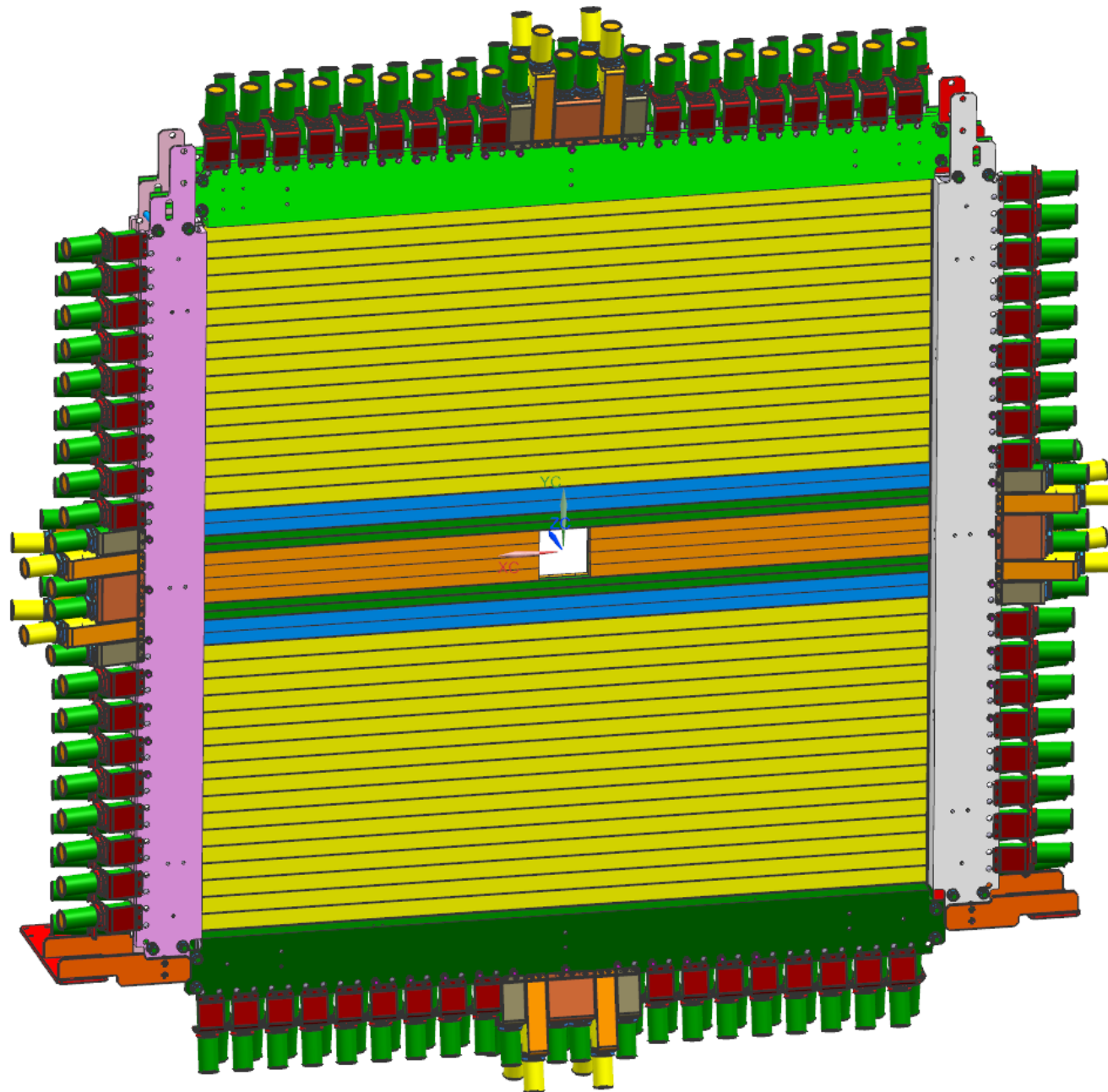
PMT down

L : left asymmetry

R : right asymmetry

S : straight/symmetric

Single TOF Plane Upgrade



Outer Region Modules

■ 34 6cm x 254cm

Inner Region Modules

■ 4 4.5cm x 254cm

■ 4 3cm x 254cm

■ 8 4.5 x 118cm

50 modules per plane

42 double ended

8 single ended

92 channels per plane

TOF 2 Plane Totals

100 modules

184 channels