

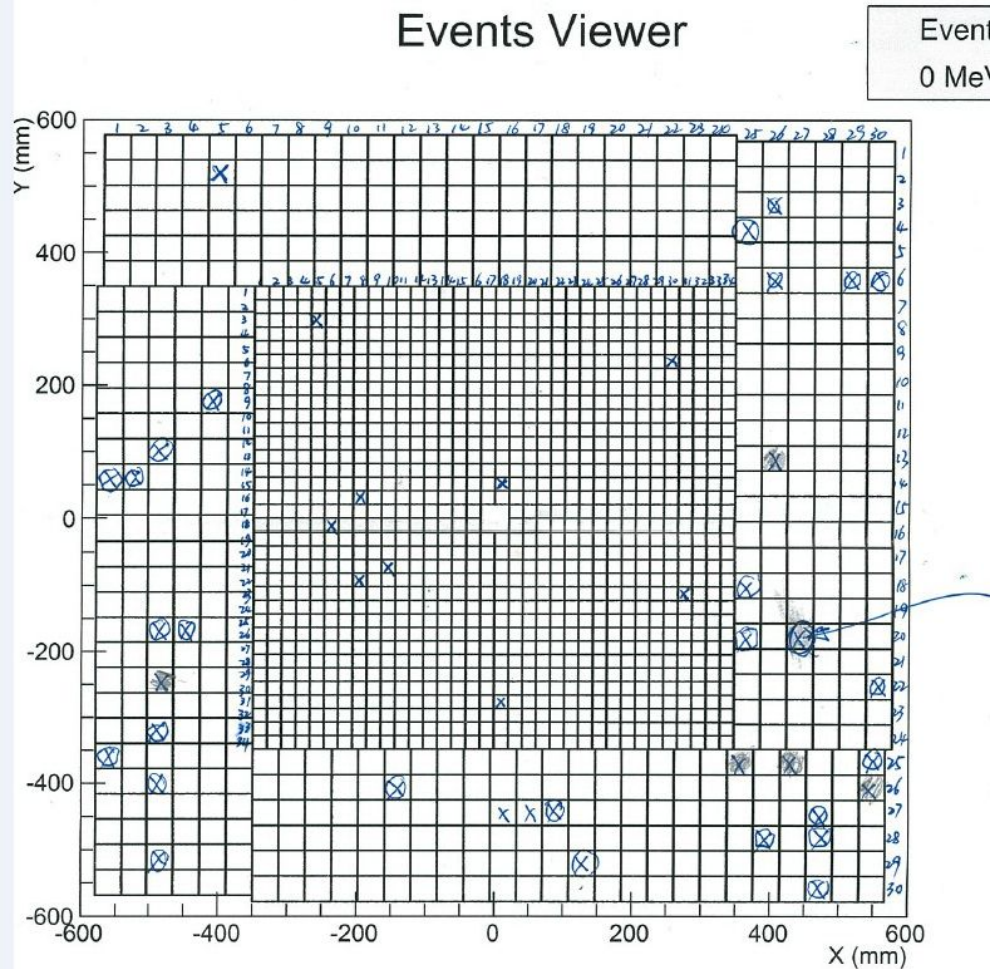
# HyCal Status Update

Li Ye , Mehdi , Weizhi Xiong , Kris , Mikhail

PRad weekly meeting

07/25/2014

# HyCal LMS fiber repair

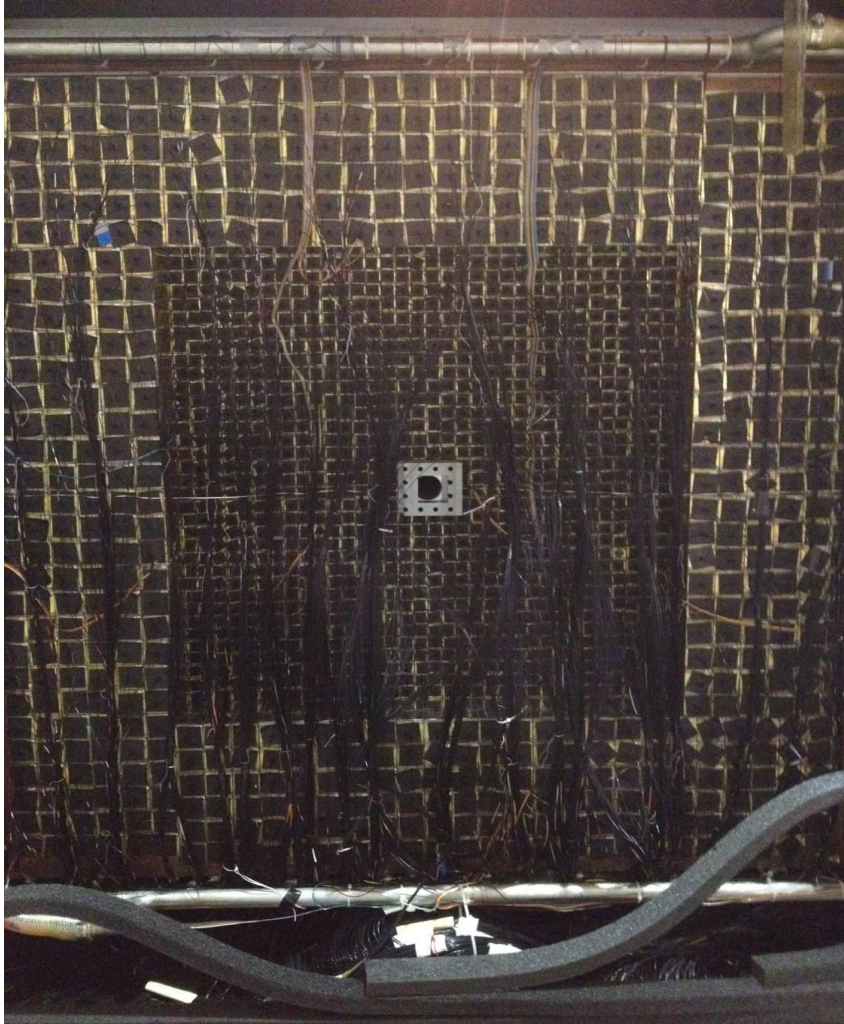


49 modules has been repaired

- reglue
- replace the filter
- recut the fiber
- recover

visual inspection of  
connection parts with  
PMTs -- 49 are all good

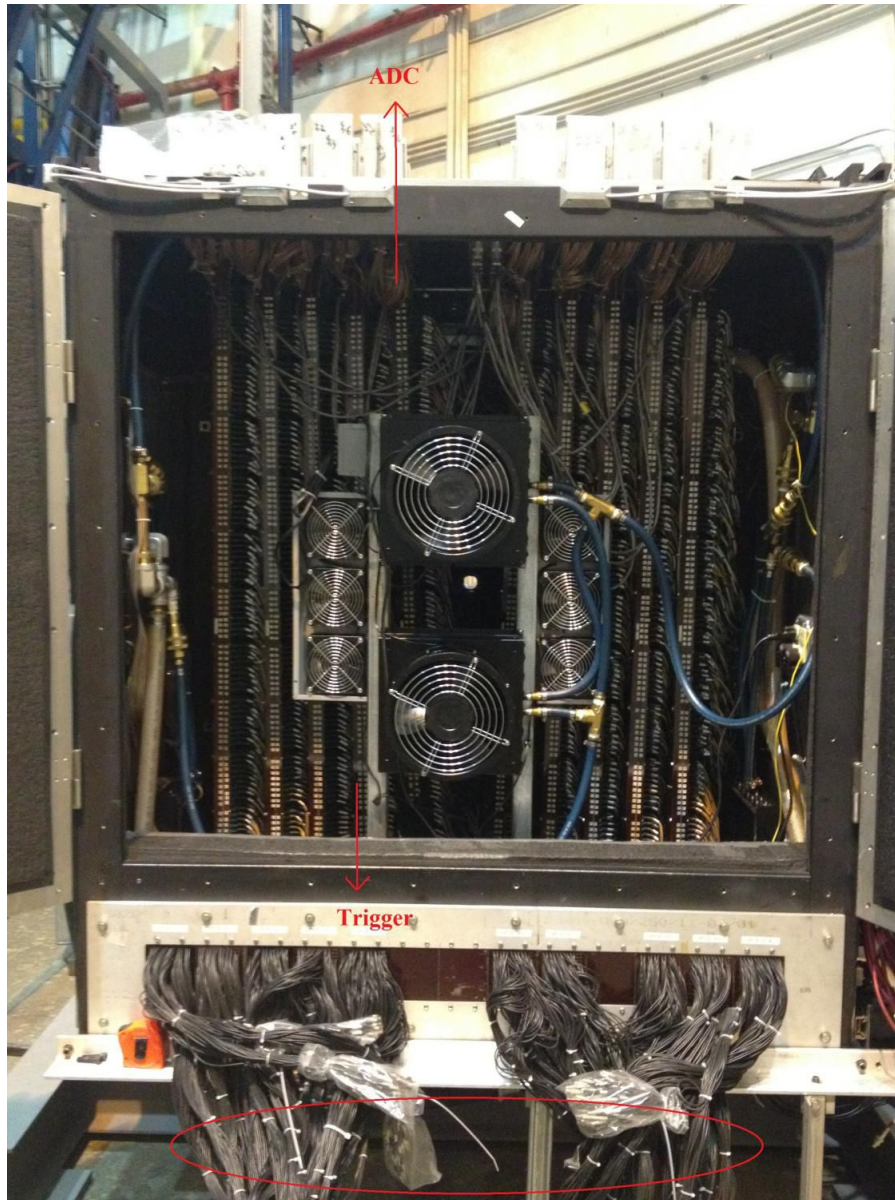
# HyCal LMS fiber repair



front view



zoom in

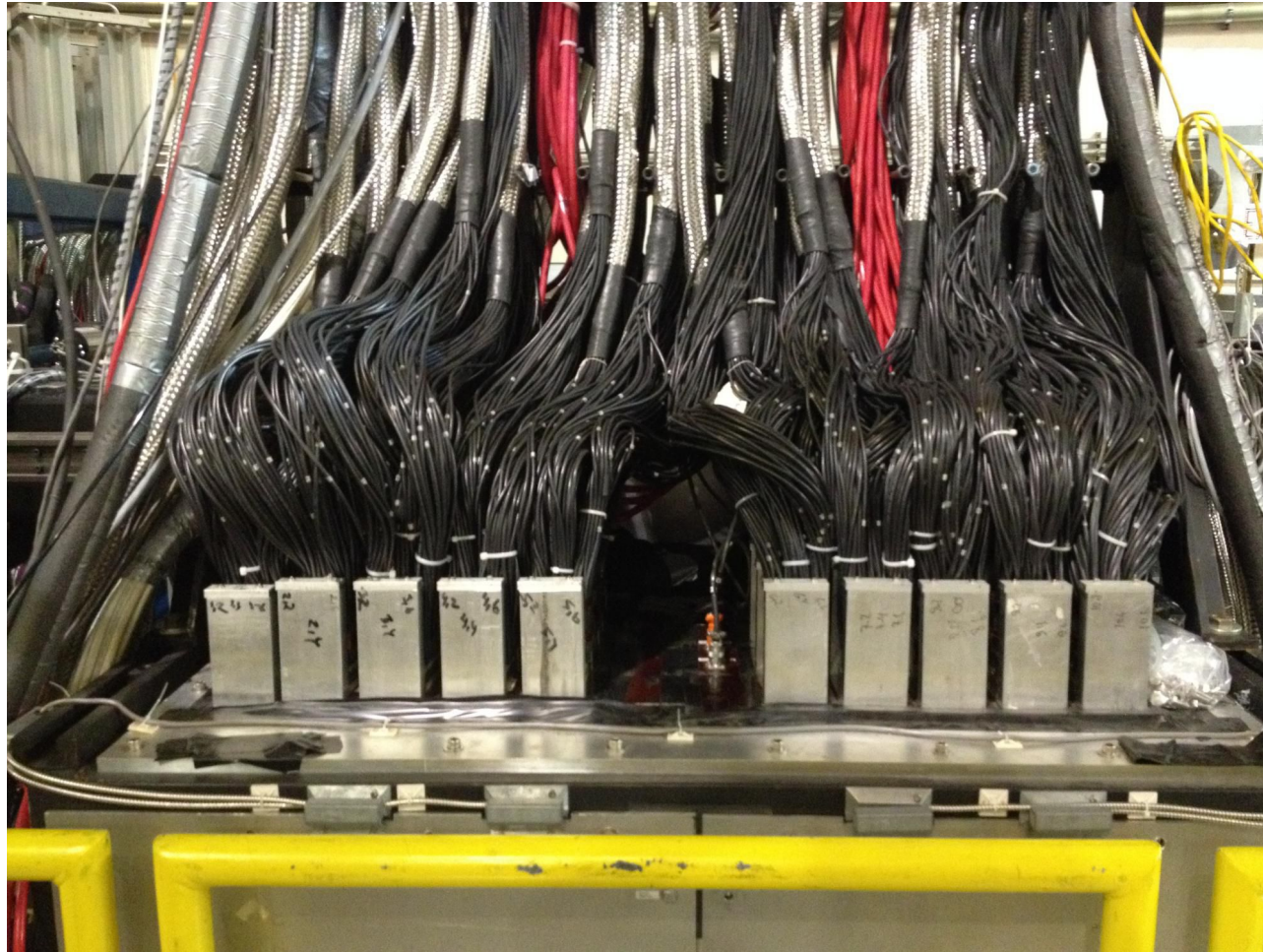


## Work of Doug's group

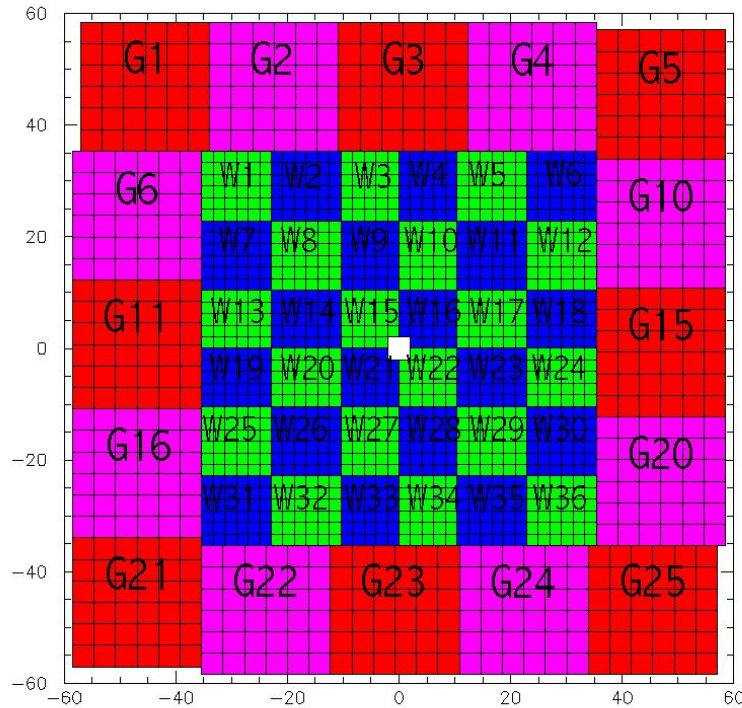
- cooling system has been tested
- frames for holding UVA modules and crates are added at the bottom
- HyCal is installed on transporter

# Top of HyCal

All ADC channels and high voltages are connected and double checked.



# HyCal Trigger



Regroup (G1,G2 ...W1 W2 ... 52 total)

- 36 (30,24) PMT channels go to 1 UVA module

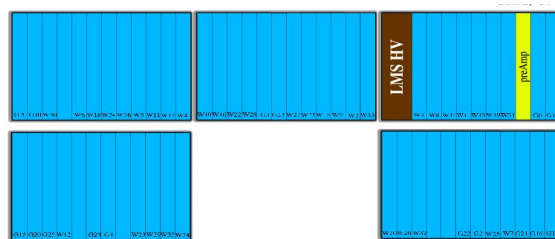
Rebundle (R1 R2 .. L1 L2 .. 8 total)

- 104 outputs (out-bar) rebundle to 8 bundles

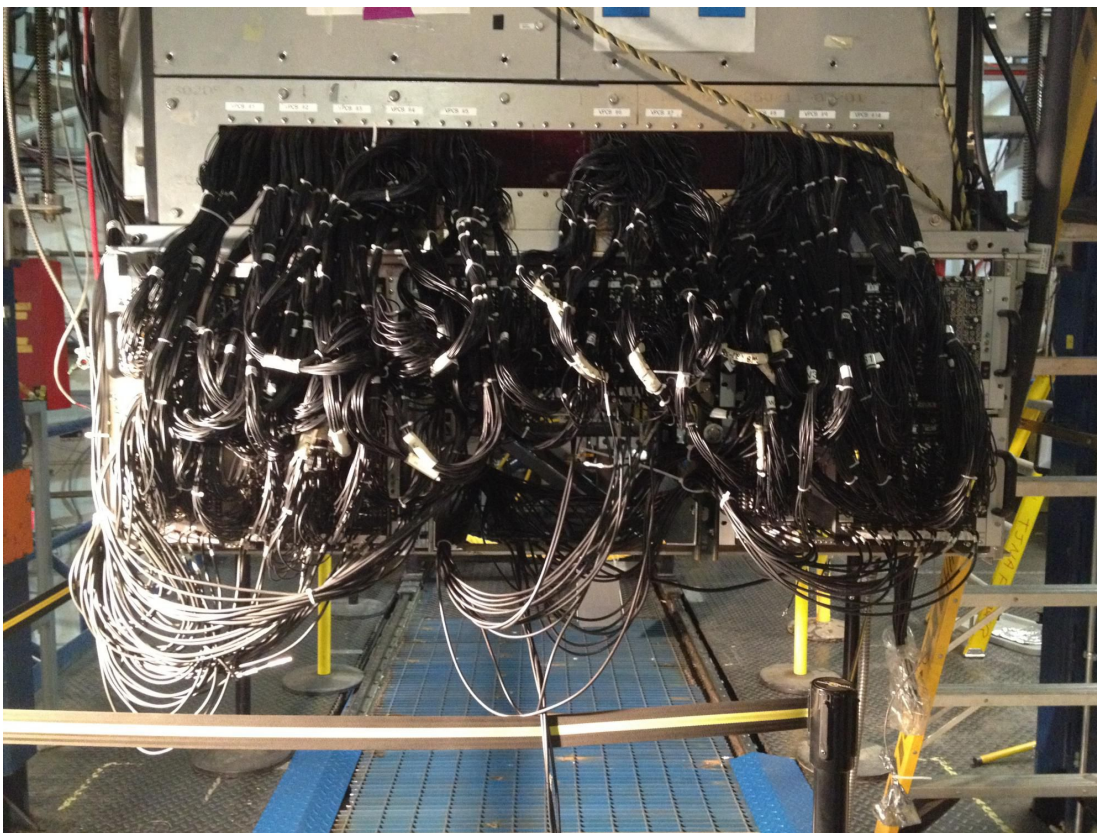
## FAST TRIGGER CABLE BUNDLES

- R1: TG5H, TG10H, TG25H, TW18H, TW6H, TG4H, TW11H, TG5V, TG10V, TG25V, TW18V, TW6V, TG4V, TW11V
- R2: TG15H, TG20H, TW30H, TG24H, TW12H, TW36H, TW24H, TG15V, TG20V, TW30V, TG24V, TW12V, TW36V, TW24V
- R3: TW4H, TW10H, TW16H, TW22H, TW28H, TG3H, TG23H, TW4V, TW10V, TW16V, TW22V, TW28V, TG3V, TG23V
- R4: TW17H, TW35H, TW5H, TW23H, TW29H, TW34H, SPR3, TW17V, TW35V, TW5V, TW23V, TW29V, TW34V

- L1: TW9H, TW15H, TW21H, TW33H, TW27H, TW8H, TW20H, TW9V, TW15V, TW21V, TW33V, TW27V, TW8V, TW20V
- L2: TW3H, TW2H, TW14H, TW26H, TW1H, TW7H, SPR2, TW3V, TW2V, TW14V, TW26V, TW1V, TW7V
- L3: TW32H, TG2H, TW13H, TW25H, TG22H, TG11H, SPR1, TW32V, TG2V, TW13V, TW25V, TG22V, TG11V
- L4: TG1H, TG6H, TG16H, TG21H, TW31H, TW19H, SPR4, TG1V, TG6V, TG16V, TG21V, TW31V, TW19V



# HyCal Trigger



- 5 crates and 52 UVA modules have been tested, G22 channel 24 is broken.
- Replaced G22 module.
- Repaired some Nim connectors.
- All trigger channels and outputs are well connected and double checked.

## Next Move

- 1) temperature sensors are connected and tested.
- 2) start the chiller and cool the HyCal of symbolical 0.5 degree.
- 3) interlock system need to be connected and tested.  
Will ask Kristor for help.
- 4) after that try to apply the high voltage.