



Point 1 DPS/FEX Installation

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- Rack space
 - DPS
 - FEXes
- (Not) Removing current system?
- Cables and Fibres

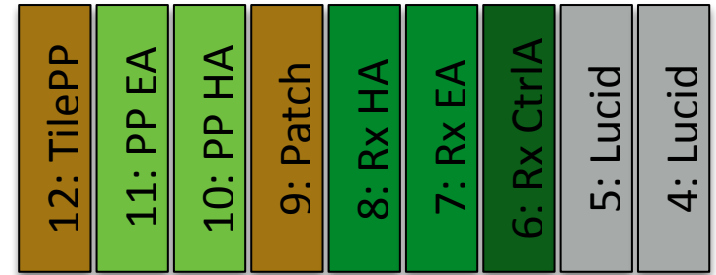
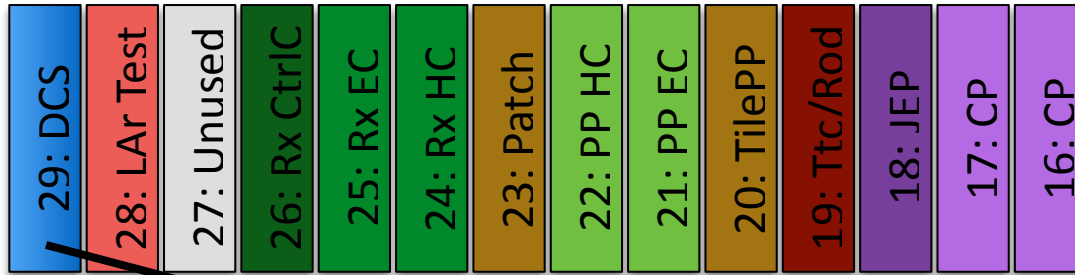


Current Rack Usage Plans

- Default proposal for rack space in Run 3
 - Diagram on next slide
 - Assume DPS+FEX can fit in four adjacent racks
 - Hopefully also FOX, but maybe FOX and be slim addition to end of row?
 - Clear two ~unused racks previously used for 6U receiver control VME crate and various monitoring kit
 - Receivers now controlled from rack mount PCs in other racks
 - Move DCS PC + screen + monitoring PCs to A side receiver control rack
 - Current LAr DPS test rack is part of future DPS allocation
 - There is one currently unused rack
 - Gives total of four adjacent racks (2 for DPS, 2 for FEXes)
 - Reserved by email to Philippe Farthouat (who didnt reply)

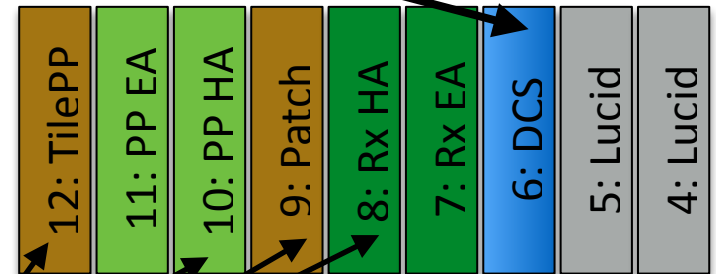
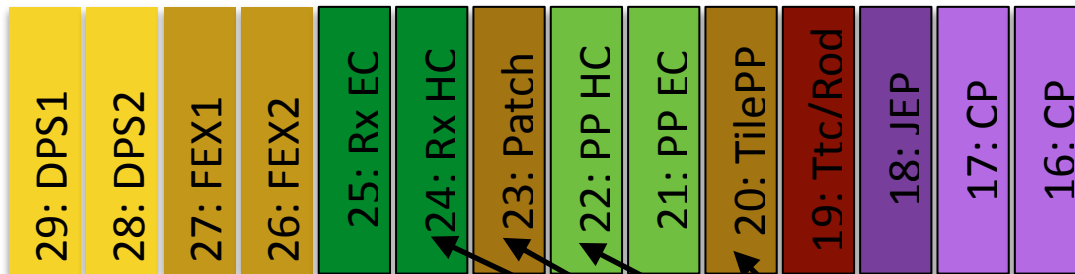


Rack Space: Run 2 to Run 3



Clear/move four adjacent racks

Move DCS PC to cleared receiver control rack



Racks used for Tile until Run 4



DPS/FEX Rack Usage

• DPS

- Three ATCA crates => one and a half racks
- Space left for some FOX and/or LAr FELIX/GBT?

• FEXes

- Two eFEX crates, one jFEX crate, mini crate for gFEX
 - Assume horizontal cooling: can be under vertical cooling column?
- Still leaves a bit of room for FOX in one rack?

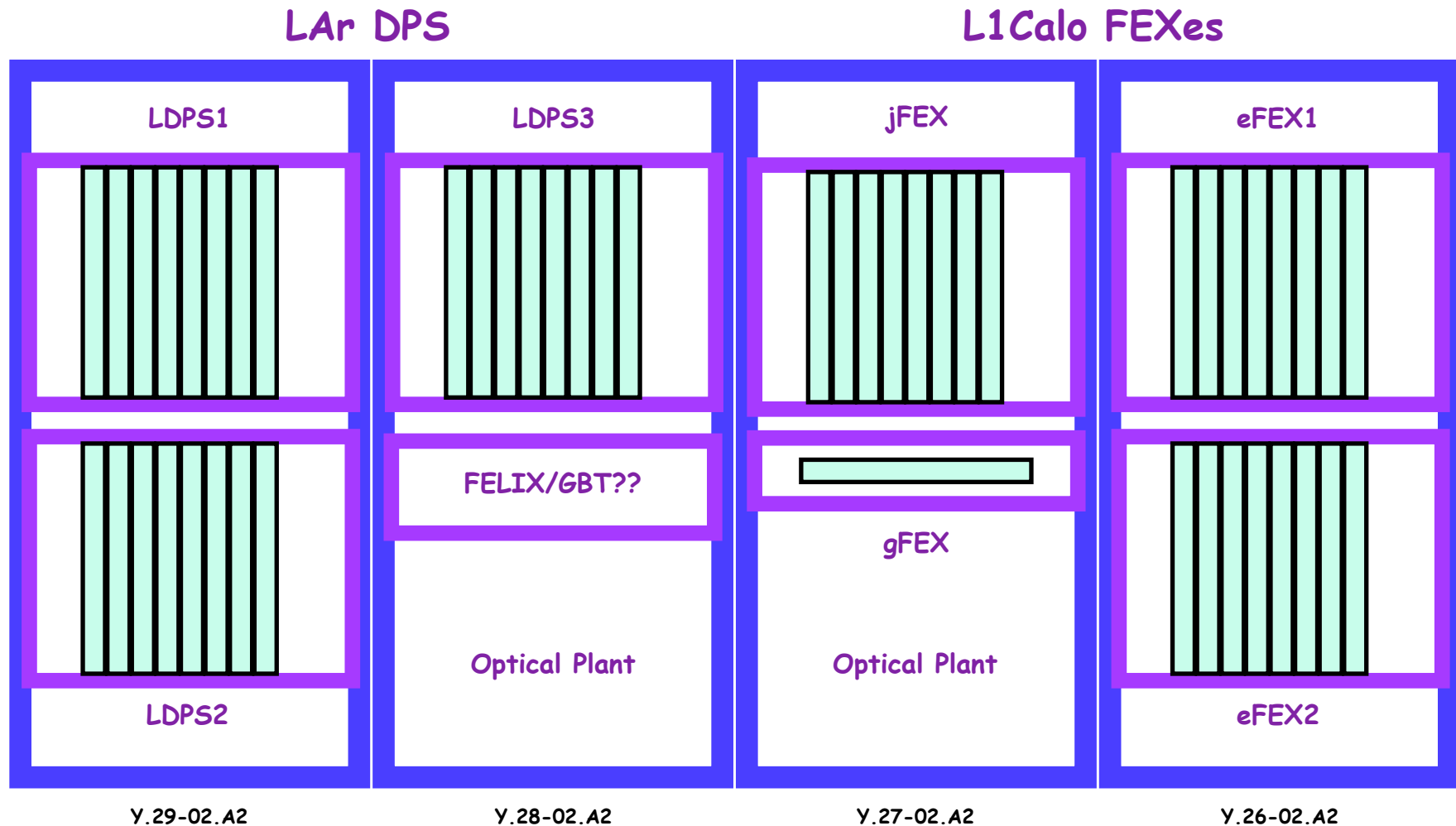
• Will be a tight fit?

• If it does not fit...?

- Think again!
- Seems to be one empty rack on the floor below
 - Unpleasant, separating systems, and it might actually be allocated?



Rack Space Suggestion



Not sure how much space LAr want for GBT/FELIX: can it be moved further away?
Suggestion to put a tall slim FOX on the (left) end of the racks: may not satisfy OPM/TC?



Removing the current system?

- When do we remove the present system?
 - It must be kept for at least the first year of Run 3
 - Run both old and new systems in parallel for a while
 - We still need the infrastructure for Tile until Run 4
 - Receivers, PPMs, two sets of patch panels
 - Analogue cables are interleaved and heavy
 - May not be easy to remove just the LAr ones
 - I suggest we leave everything untouched until the long shutdown between Run 3 and Run 4



Cables and Fibres

- Hope to leave existing cabling untouched
 - Apart from moving DCS CANbus to new DCS rack
- No existing cabling to 4 proposed racks
 - But fairly full cable trays from holes in the shielding wall so need some care in routing fibres from LAr front ends to DPS
 - I believe there should still be space in the shielding wall holes
 - Something for agile people to double check in the end of year shutdown?
 - We need a scheme for routing all the new fibres
 - Front end to DPS
 - DPS via FOX to FEXes
 - Readout, TTC, network