



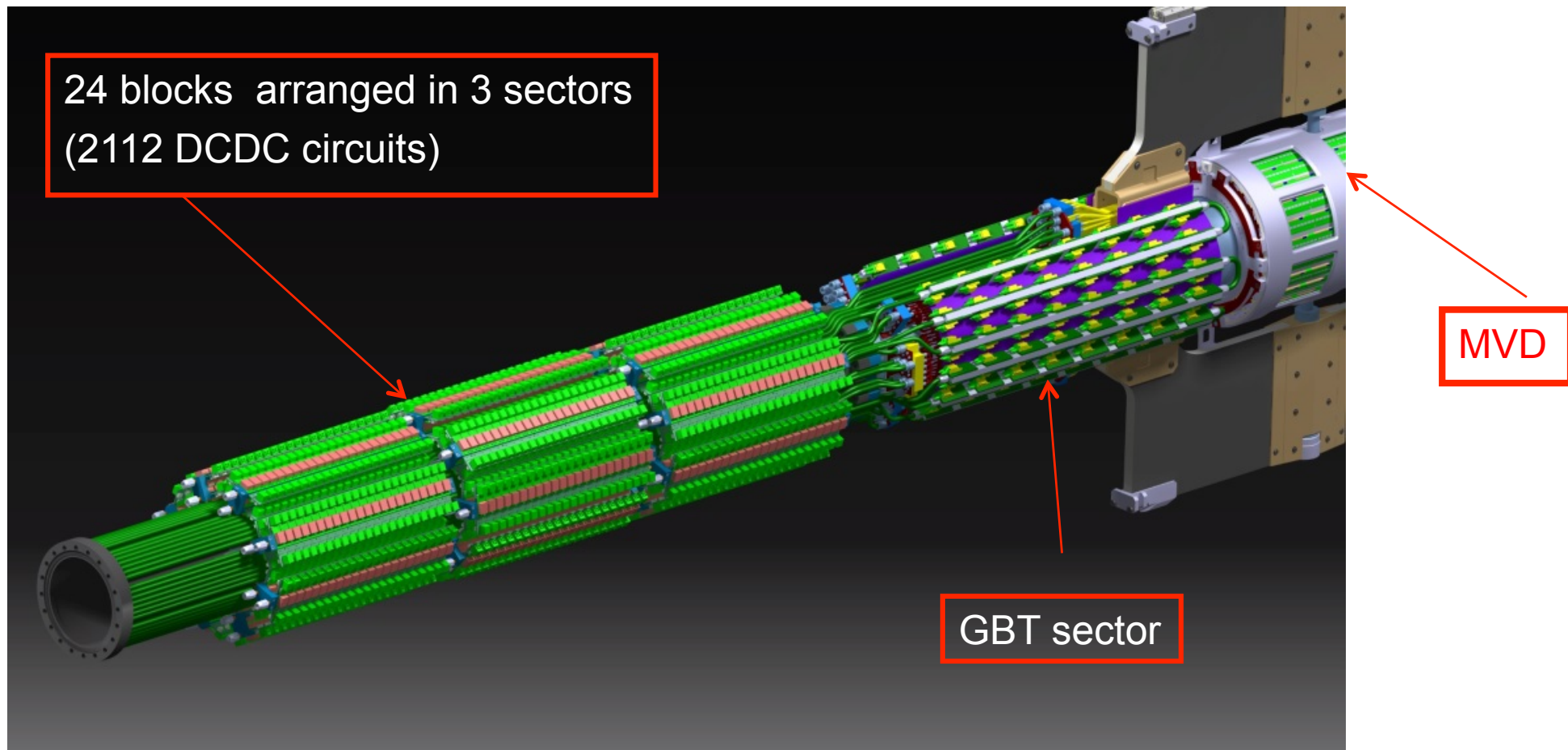
Updates on MVD Mechanics and 3D Model of Services

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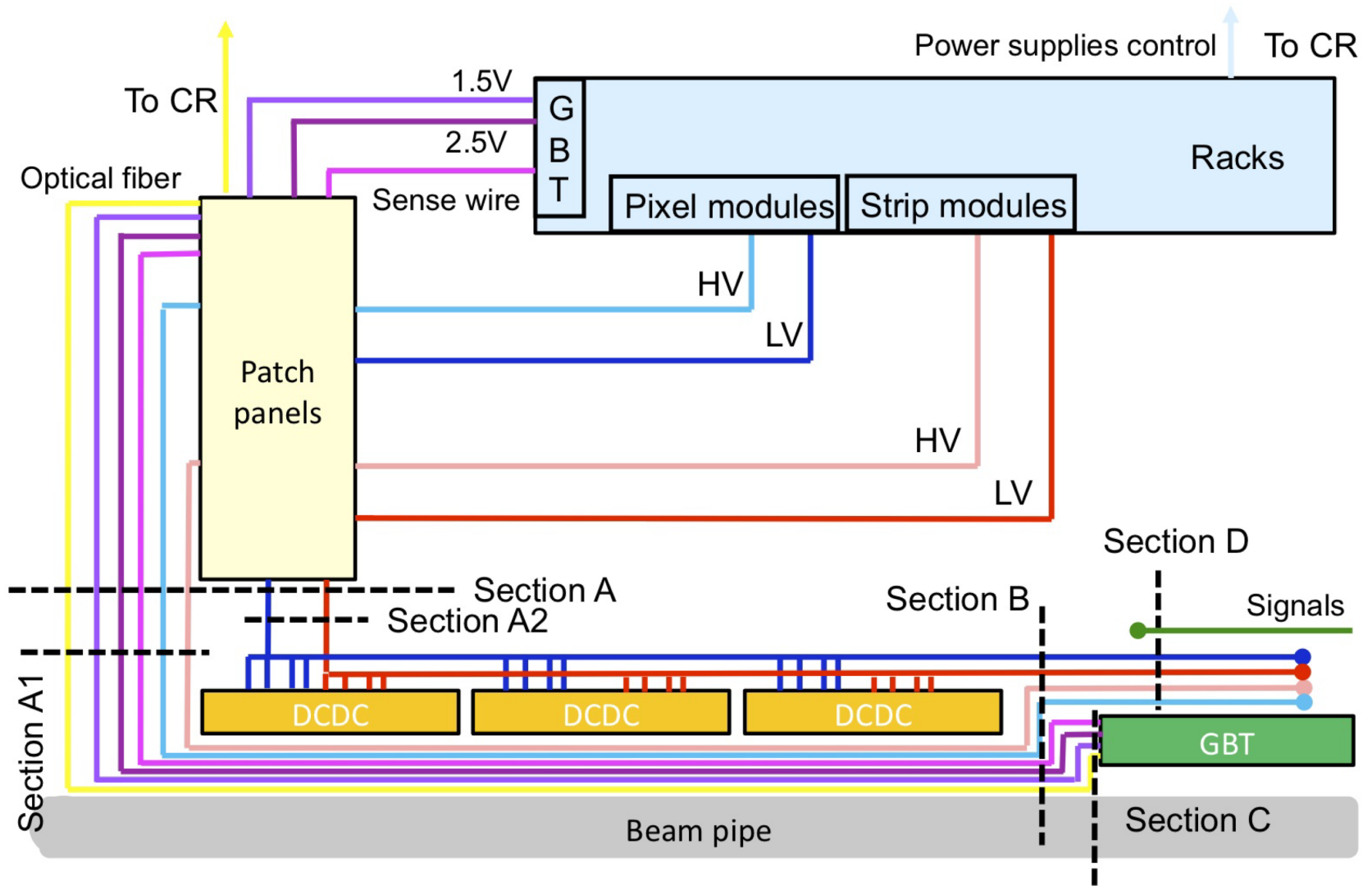
Outline

- Services tables
- MVD services update and 3D model

MVD services



MVD services



MVD services

Section name	HV	Optical fibers	Signal	LV GBT	LV FEE	Total
A1	768 1298	428 3852		81 5850		1277 11000
A2					300 16840	300 16840
A (A1 + A2)						1577 27840
B	768 1298	428 3852		81 5850	3584 3284	4861 14284
C		428 3852		81 5850		509 9702
D	768 1298		230 640		3584 3284	4582 5222

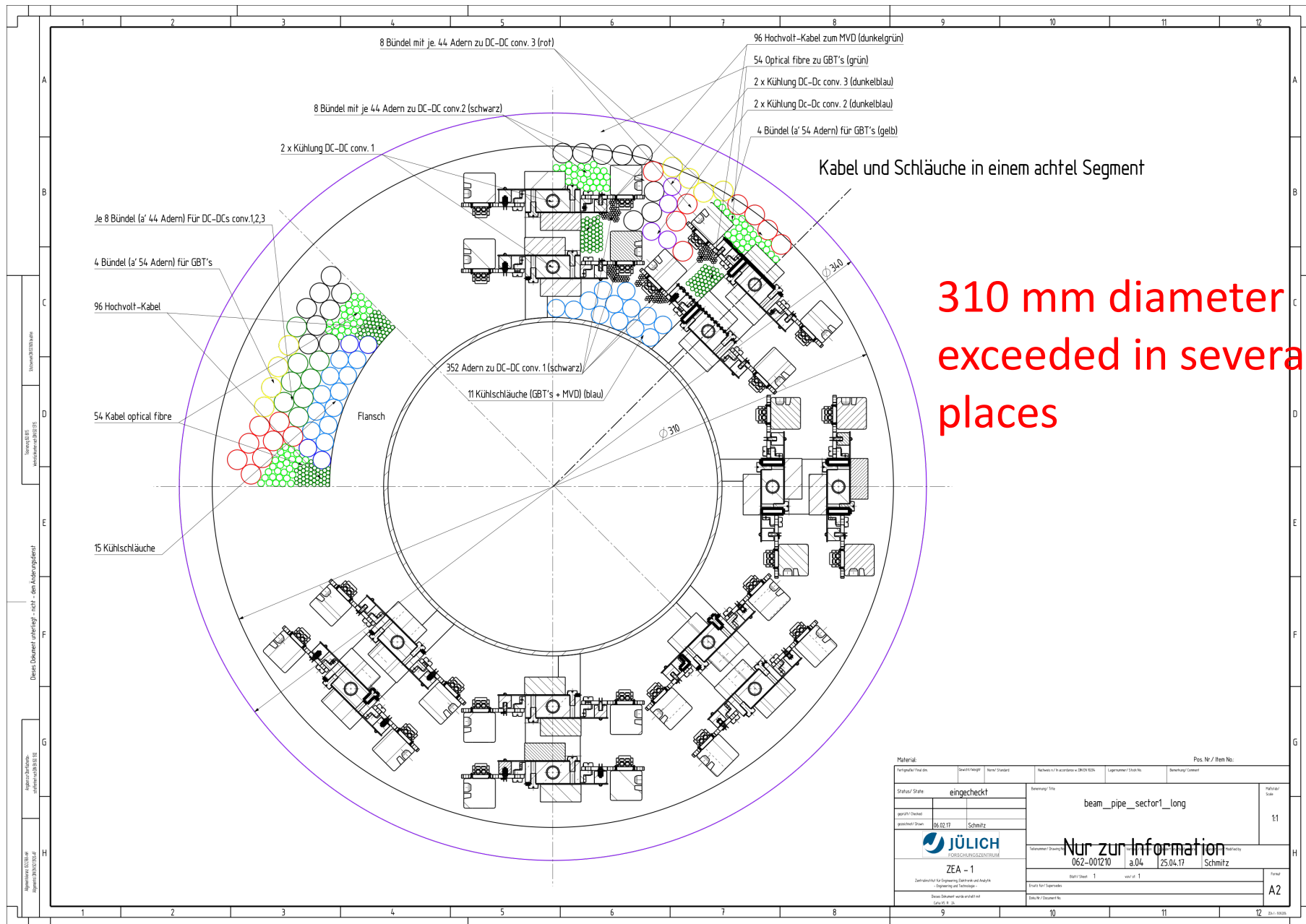
Some updates:

Cable number

Total cable section $\times 4/\pi$ [mm²]

- Optical fibers in use have a diameter of 3 mm
- HV cables have a diameter of 1.84 mm

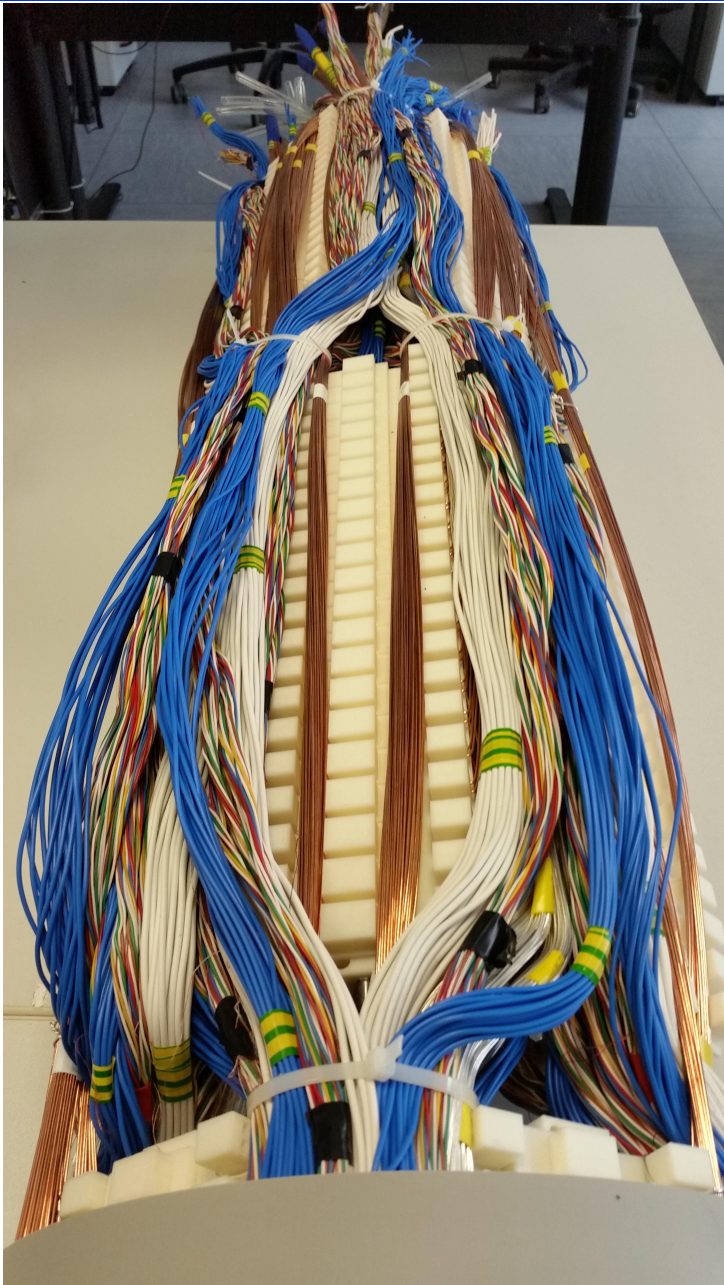
Services Cross Section (DC-DC sector)



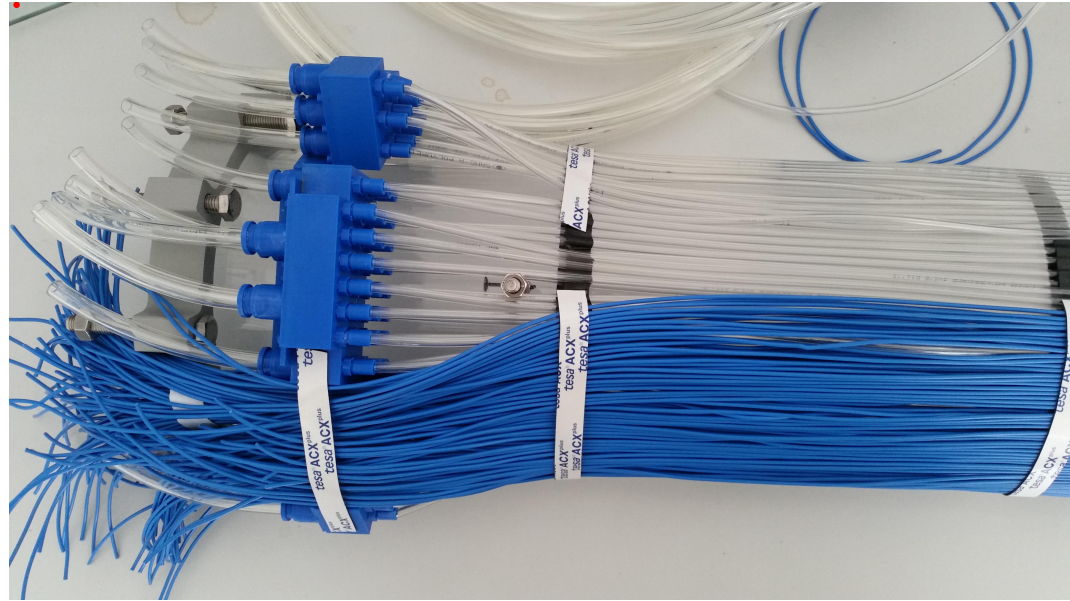
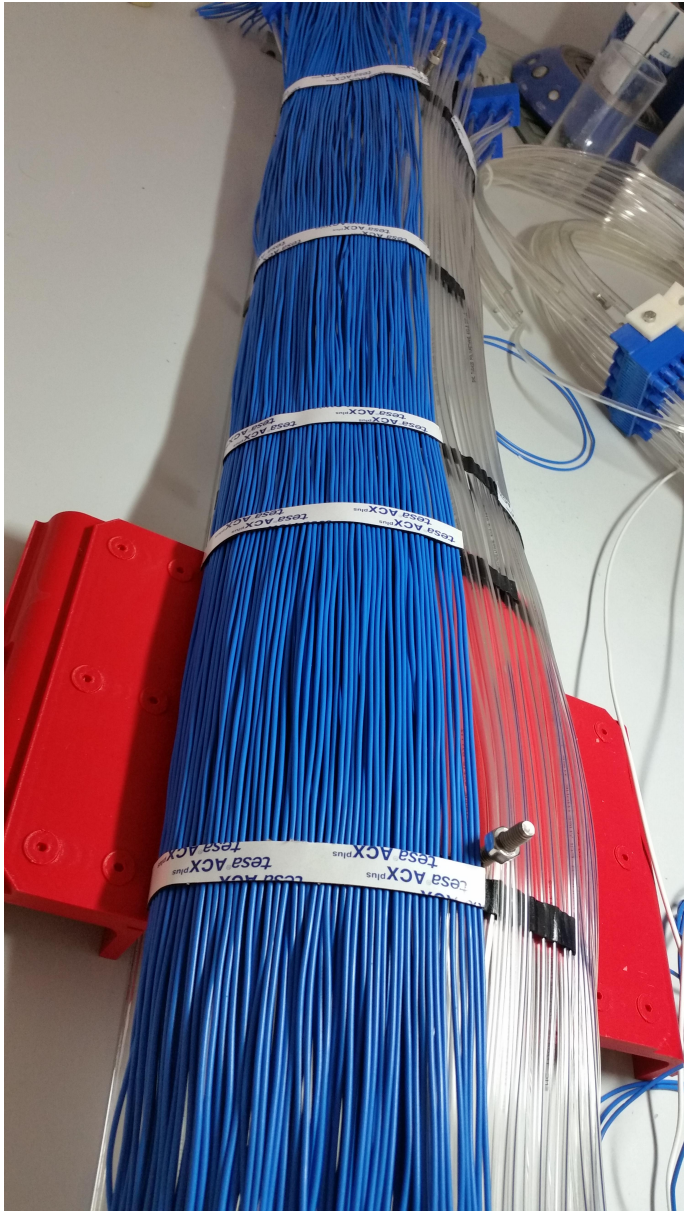
3D Model of services

- Work of R. Schmitz, E. Rosenthal, D. Grunwald (FZ Jülich)
- More accurate feasibility test of the service region
- DC-DC region: complete (March meeting) and updated with new cables (HV, fibers and DC-DC input cables)
- GBT region: work in progress
 - GBT boards with actual dimensions implemented
 - HV/LV cables implemented
 - Data cables missing

3D Model of services

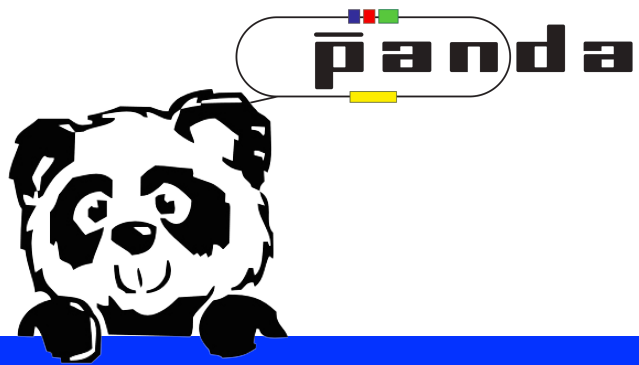


3D Model of services



Work ongoing

- Updated design of GBT sector in progress:
 - Evaluation of possible solutions to accommodate more, larger boards
 - Increase of outer diameter to 340 mm seems until now unavoidable
- Mechanical tests of silicon strip sensors ongoing (IKV, stave producer) to established minimum required robustness of stave



Thank you for your attention!

