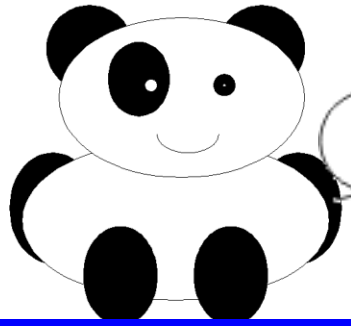


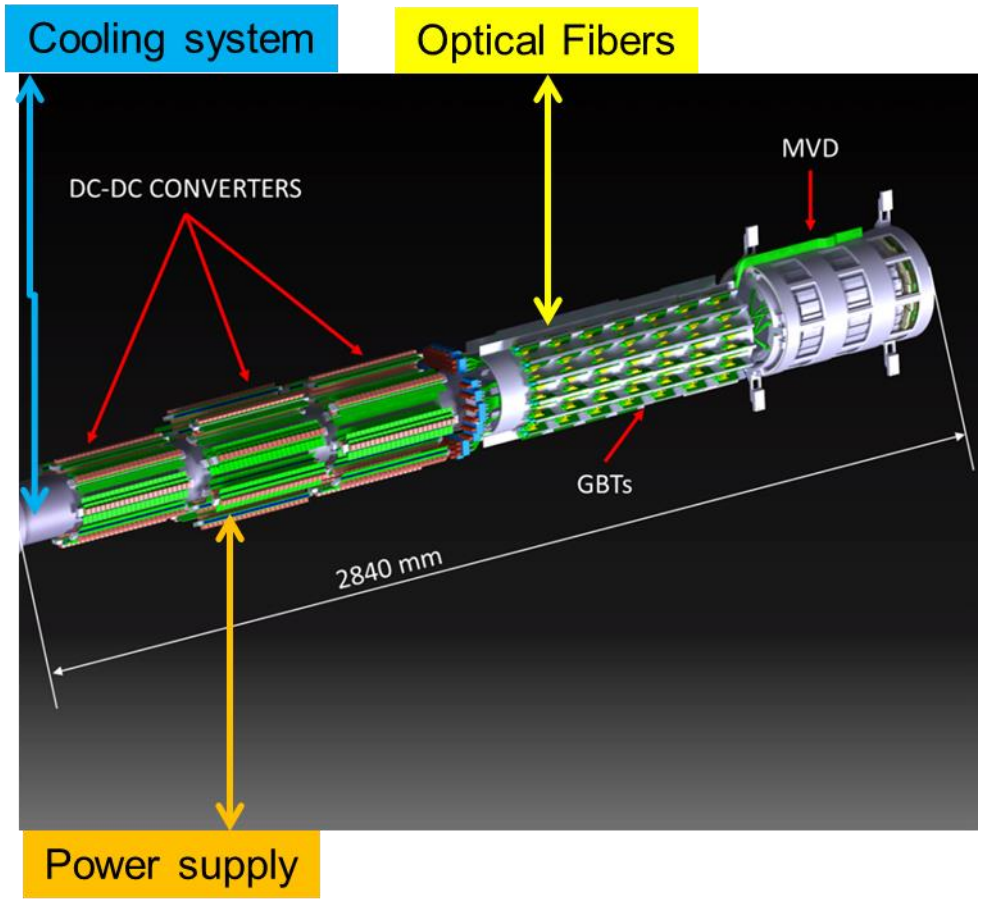
Integration – preliminary ideas on routing and tests

Technical Board, GSI, June 11 2014, D. Calvo

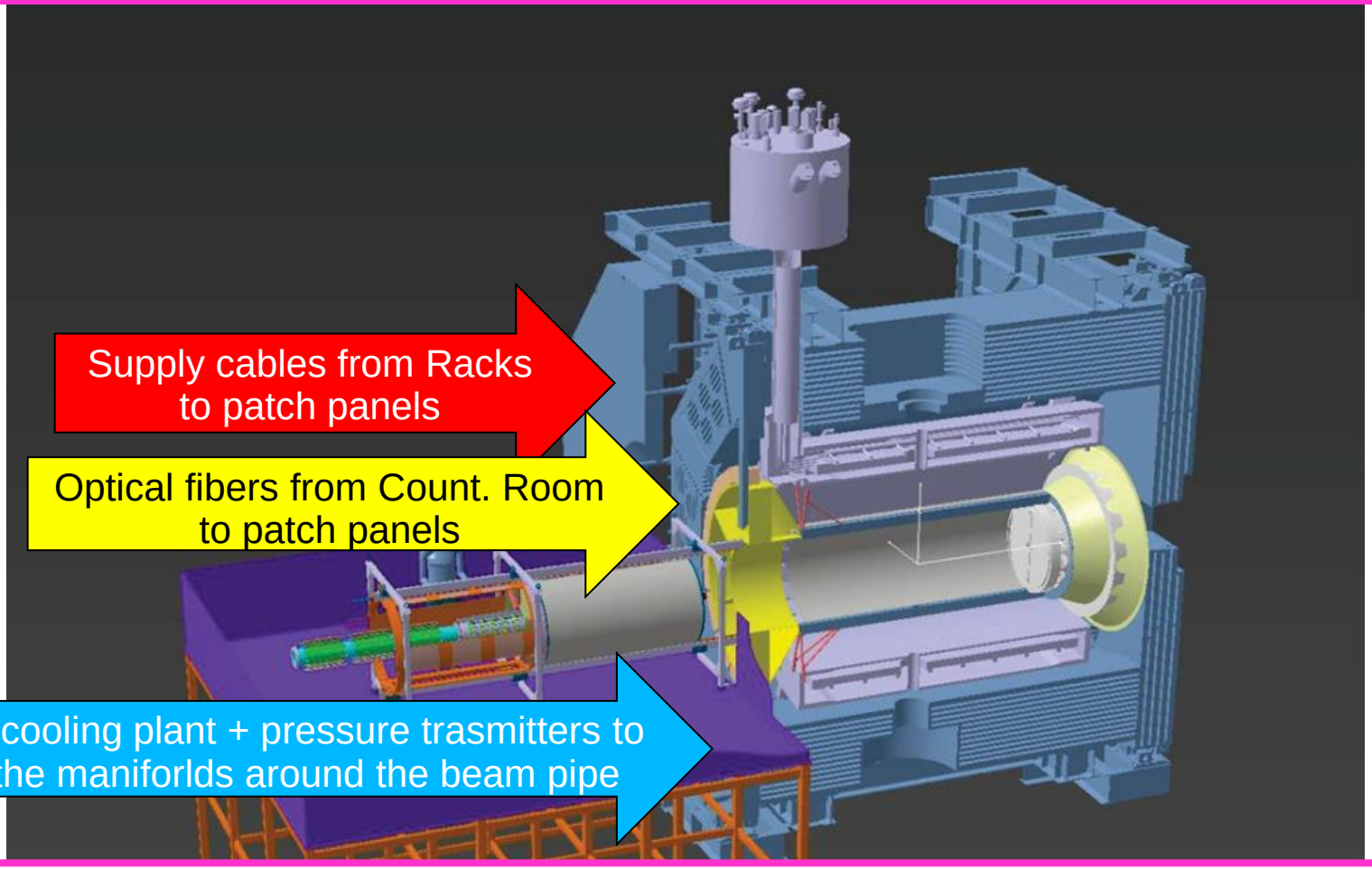
MVD installation – ...

- ✓ Connection of optical fibers, supply cables, cooling lines following the
  - SCENARIO 1
  - SCENARIO 2

MVD test



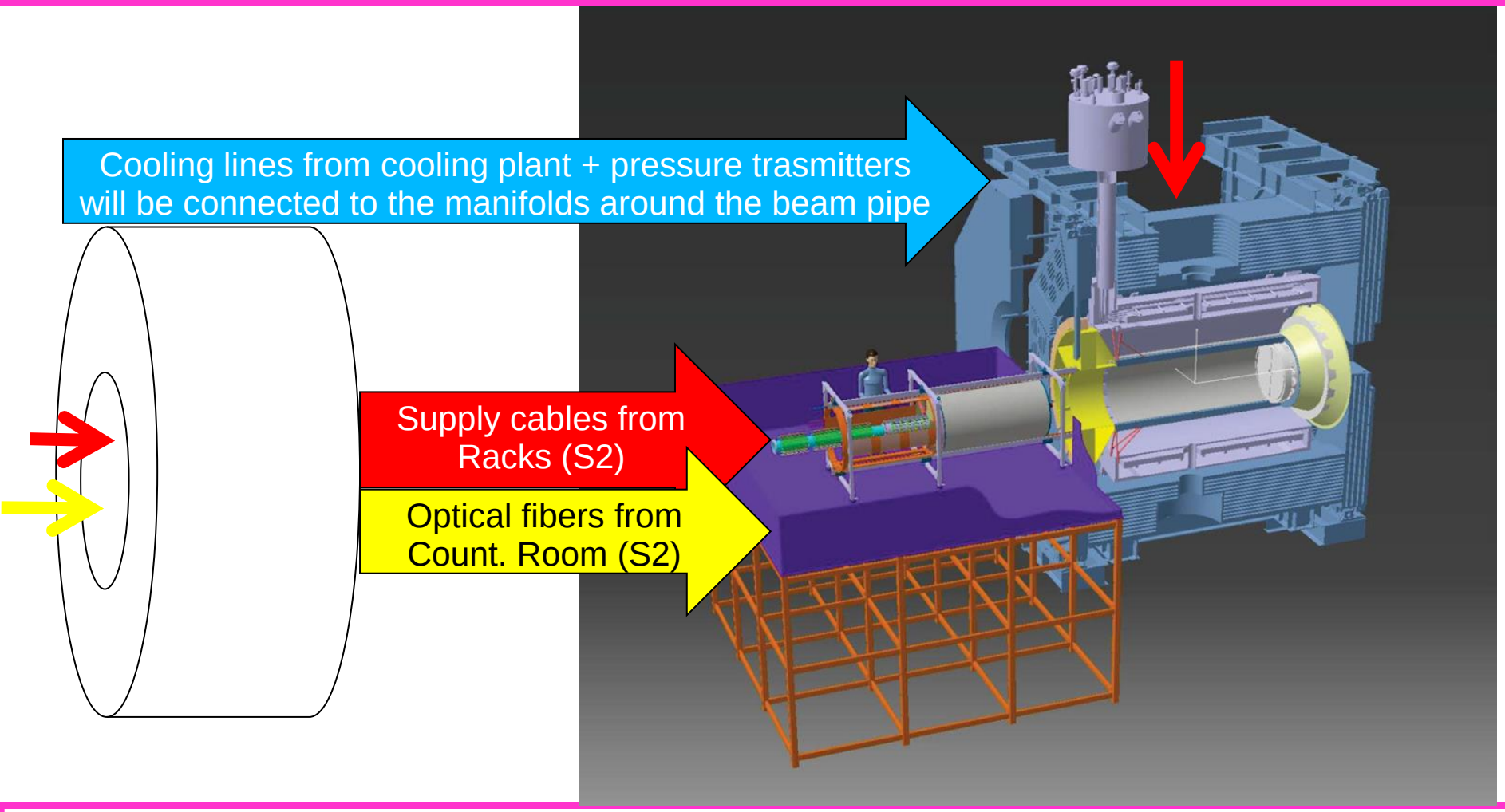
MVD installation – SCENARIO 1



- – Intermidiate patch panels are installed in front of the magnet
- – Issue with the optical fibers intermidiate connections (?)
- – Supply cables and cooling pipes are disconnected after the test for the sliding in the magnet of only the tracker
- \+ More convenience in the test phase and in the installation because the supports are limited
- \+ The voltage drop of the short cables from patchpanels to the DCDC is perfect

✓ All parts have to be arranged to avoid conflit with the phase of the calorimeter installation

MVD installation – SCENARIO 2



+ No interruption of the optical fibers and of the supply cables. No additional patch panels
– Long optical fibers and long supply cables (higher vol. drop) to handle with supports
– Calorimeter already in front of the tracker platform to fulfill the routing operation
– Optical fiber and supply cables spares have to be routed from the beginning.

✓ All parts have to be arranged to avoid conflit with the phase of the calorimeter installation

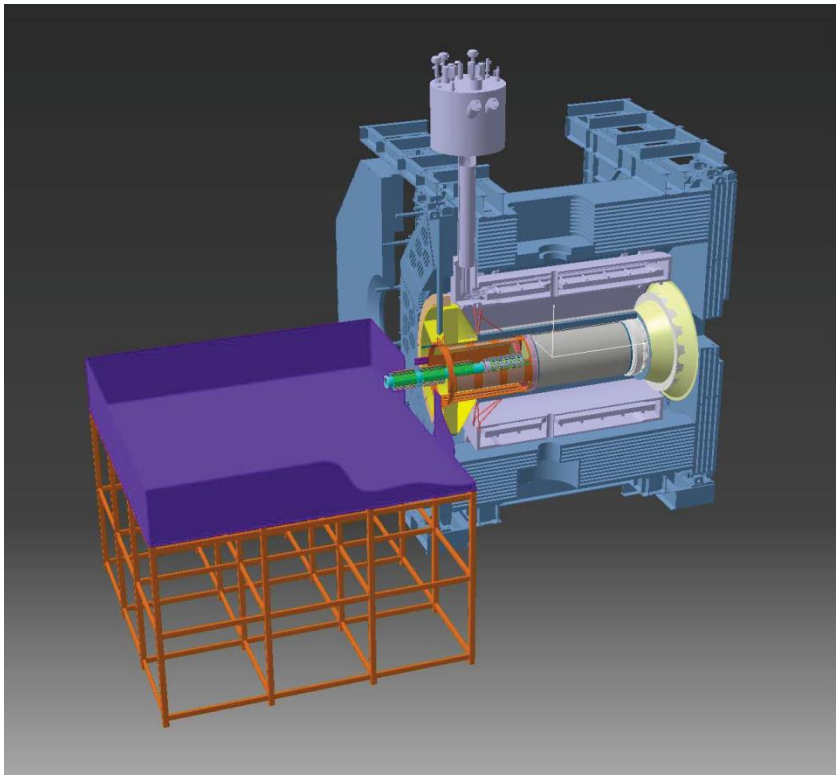
MVD installation – IV step

The tracker slides in the magnet

- ✓ Connection of the cooling lines
- ✓ Connection of fibers and supply cables at the patch panels in the SCENARIO 1

MVD test

- ✓ disconnection of the cooling lines
- ✓ and of fibers and supply cables at the patch panels in the SCENARIO 1



MVD installation – V step

After the calorimeter installation

- ✓ Connection of the cooling lines
- ✓ Connection of the optical fibers and supply lines (SCENARIO 1)

MVD test

Supply cables from racks + patch panels in front of the magnet(S1)
Supply cables from racks (S2)

Optical fibers from c.r. + patch panels in front of the magnet(S1)
Optical fibers from counting room (S2)

Cooling lines from cooling plant connection + pressure transmitters in front of the magnet