Test beam setup: status report 20/01/2009

M. Alfonsi (CERN)

Outline

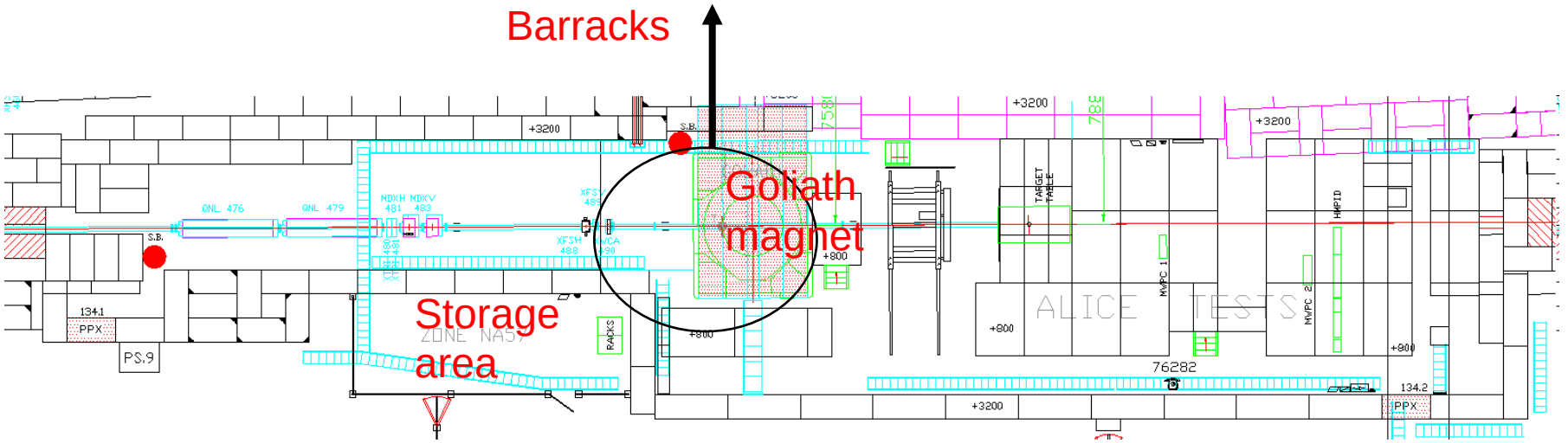
- Test beam location & schedule
- Infrastructures
- Magnet
- Support mechanics
- Trigger/Tracker position

Test beam location & schedule

- H4A area @ SPS assigned to RD51
- Interferences with other area users are to be understood (we want a semi-permanent setup)
- Original summer period overlapped with Crete..
  → is ok the new proposal, from 25 June to 13 July?

•The fall campaign is foreseen (not yet official) from 22 to 31 Oct

Infrastructures

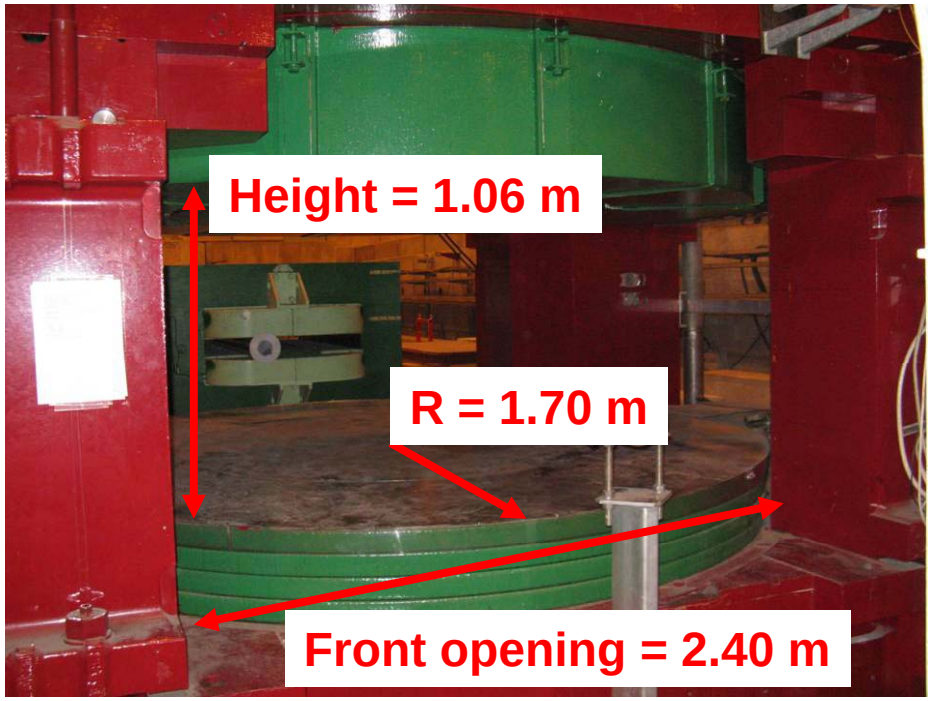


- We can build our setup upstream and inside the GOLIATH magnet
- About 30m cables required to reach barracks (space available and former occupants are to be understood)
- The storage area is close (can we ask, temporarely for the first period in June, for having there gas bottles?)

Goliath dipole magnet

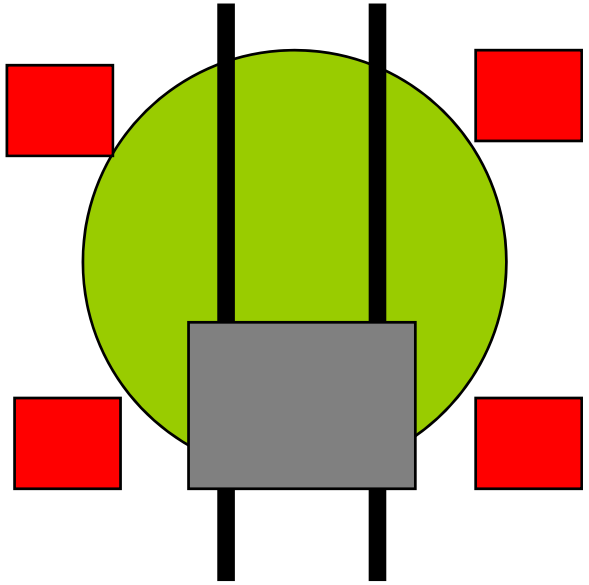
Several open question:

- Maximum field supported to the actual PS (magnet itself can arrive to 1.5T)
- Feasibility in field tuning
- An accurate field map → requested to previous users
- The fringe field.
  → At which distance can stay PMTs, electronics racks, computers, or any other sensible devices?

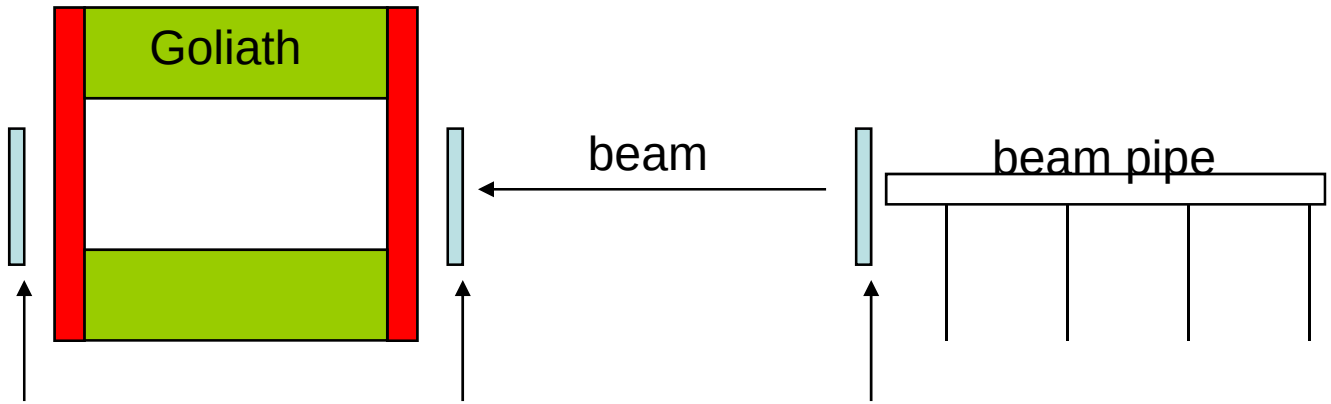


Support mechanics

- For the installation inside Goliath, a table over rails will be provided by the GDD group
- The table can be machined with a grid of holes, where users can fix their setups
- The table could go out of the magnet:
  - From the front
    → interferences with other setup elements (tracker/trigger devices)
  - From the side
    → more space constraints
- The rails and table thickness reduces the space available between the magnet poles
- Feedback from users is required to understand size and contraints of the mechanics



Trigger/Trackers position



Proposed position for the 3 Trigger & tracking stations

Lot of space also upstream Goliath

→ Can be used for testing devices outside Goliath

→Trigger/tracker stations can be placed in the 3 positions in the picture

Conclusions

- The next SPS meeting at the end of January will fix the test beam schedule
- Preliminary equipment will be prepared for the June test beam, then the setup will be upgraded in time
- Feedback from users are of primary importance