

# 2021 detector survey

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**CHARLES UNIVERSITY**  
Faculty of mathematics  
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- Fiducial marks on detector frames are surveyed.
- Conversion of the measurements in the system used in `detectors.dat` is up to the detector experts.
- Stefano has contacted the surveyor Pascale Sanvitu.
- First phase (approx. 10. 5. – 31. 5.)
  - LAS before SM1
  - SM1-RICH + MWPC behind RICH
  - the rest of SAS not attached to SM2.
- Beam telescope + Inner veto: after the platform is installed (mid- to end-of-June).
- connected to SM2: after SM2 movement (mid-June)
- Calorimeters: only ECAL1 is usually surveyed.



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- SciFi in LAS and SAS:
- Reiner not able to come for just 1 day (quarantine in Germany).
  - We should manage with the people here.
  - We'd need a list of the points to be surveyed, how to find them.
  - Other instructions...
- Micromegas:
- Same situation, Saclay not allowed to travel.
- DCs:
- Probably the same situation.
  - Vincent present for DC5.
  - Will be re-surveyed after GEMs are centered to the beam.
- Straw:
- Vincent present, Kamil can do the conversion.
  - Common spacer with DCs.
- RICH:
- Many people on site, schedule flexible...
- GEMs:
- Not surveyed, they are fixed to the chambers.
  - They will be centered to the beam (moving the whole chamber).
- MWPC:
- Expert needed for PAs (difficult access to the survey points).
  - Some PAs are fixed to SM2.
  - PBs should be easy to access.



- W45:
- Aveiro group is new to this responsibility.
  - Materials still in Annika's old office.
  - Not really a priority.

- Hodoscopes:
- Some surveyed recently, not needed now (H2, HO04, HI05).
  - Vetos: VI together with beam telescope, other vetos not surveyed.
  - H1: installation end of May.
  - HO3: attached to SM2.
  - HM, HL: never surveyed, Moritz will make markings.

- Muon walls:
- To be clarified with the experts.

## Conclusions for the first phase

- Some experts not available on site, we need instructions (at least the locations of marks).
- Conversion for `detectors.dat` are up to the experts.
- Nobody communicated particular time restrictions to us so far, so we have enough flexibility.



## Beam telescope

- Target platform → concrete blocks: mid-June or before the end of June.
- Draw zero line on the blocks + measure height of the beam above the blocks.
- Installation of Silicones and SciFis – end of June or beginning of July.
- Real survey: beginning of July.

## Detectors attached to SM2

- SM2 movement: preliminarily around mid June.
- Survey: after, maybe together with the beam telescope.



And now something completely different...

Schedule delayed, still I would like to know the opinion of the TB.

Dry run (31. 5. – 27. 6.)

- Proposal:
  - **1 local day shift** (8–16, 1 person)
    - 2 checklists (morning, afternoon).
    - Help with DAQ commissioning.
  - **2 remote night shifts** (16–24, 24–8)
    - Watch the target and DCS.
    - The target is loaded and the load on the PT group is heavy (they share it between CERN, US and Japan, but still few people).
- After discussion:
  - No standard shifts.
  - Only booking system for DAQ usage.

Commissioning and data taking (28. 6. – 6. 10.)

- **Standard  $3 \times 8$  h shifts/day.**
- 1 remote shifter during the days only (8–16), otherwise **on site**.
- Weekly coordinators – as usual.