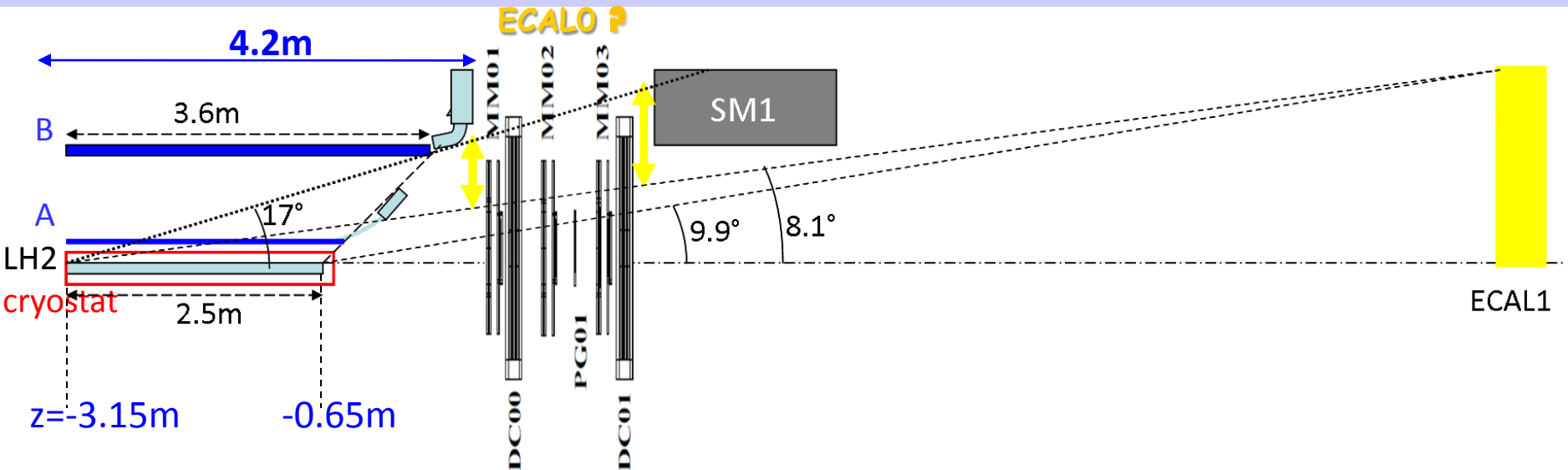


First design of the RPD design in the COMPASS setup



How to install a 2.5m long LH2 target in the RPD?

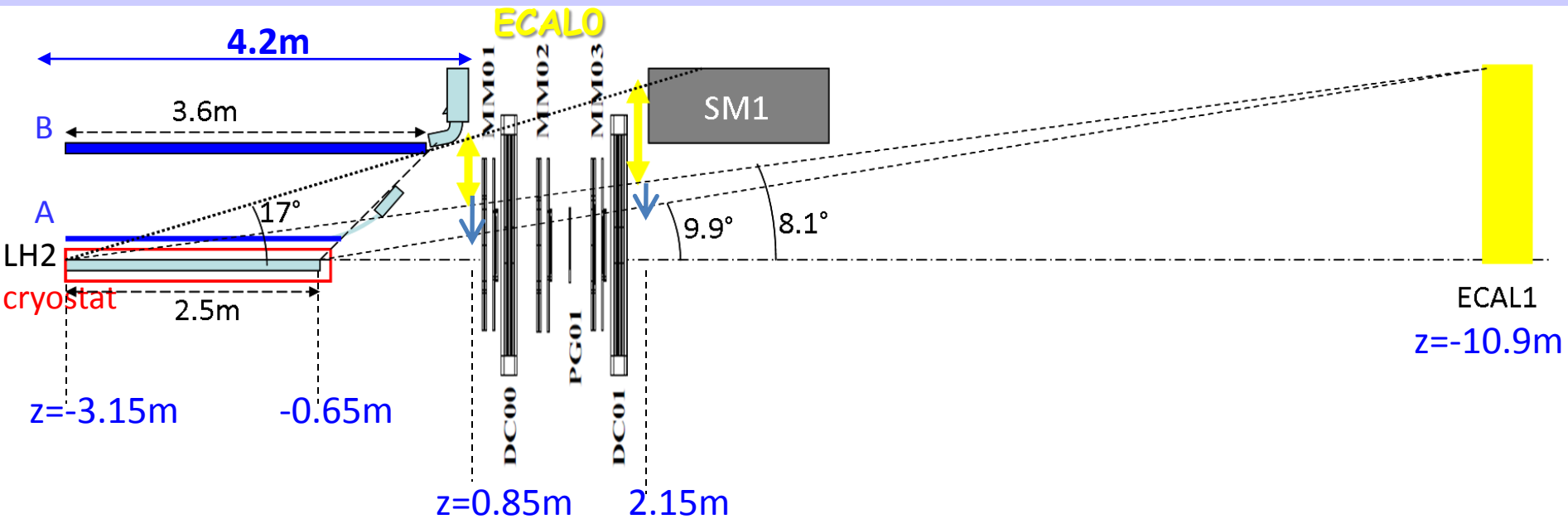
- Either the target can be inserted by a longitudinal movement or the RPD should be opened in 2 pieces to insert/extract the target by crane?
- One part of the RPD can be moved on the present rails?

Size of the cryostat wall: minimum thickness (1.8mm Al, $\varnothing=40\text{cm}$) for the interception of forward outgoing particle

(maximum γ absorption at 5° (2% in target, 16% in cryostat, 8% in scint) to be added to 24% in all the COMPASS trackers and 10-18% in the RICH)

- Can we use the cryostat wall to fix the A layer?

Possible Sizes for ECALO



External size $1.22\text{m} \times 2$ $1.62\text{m} \times 2$



Hole large H: $0.57\text{m} \times 2$ $0.75\text{m} \times 2$
 V: $0.41\text{m} \times 2$ $0.54\text{m} \times 2$

it exists a hole between ECALO and ECAL1



Hole small H: $0.26\text{m} \times 2$ $0.48\text{m} \times 2$
 V: $0.19\text{m} \times 2$ $0.35\text{m} \times 2$

there is no hole between ECALO and ECAL1
 but the tracking of charged particles is
 considerably reduced

If ECAL1 at 14m , the holes for ECALO should be still smaller

Simulations in progress

New kinematic coverage in (Q^2, x) with ECAL0

Impact on B t-slope determination

Impact on C1 coefficient extracted from the Beam Charge & Spin Asymmetry or Diff

Simulation for the Transverse Target Polarisation:

An important point for a NH₃ target:

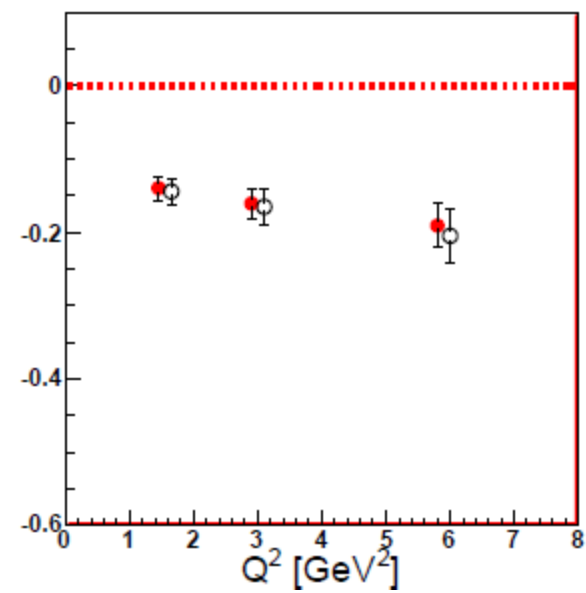
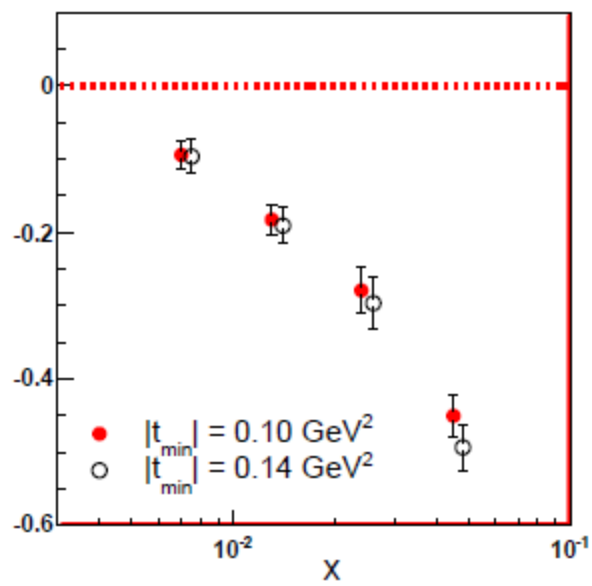
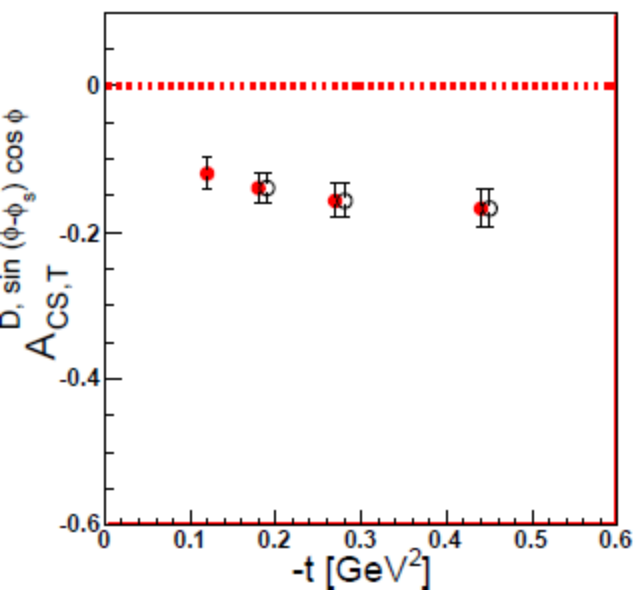
- for inclusive measurement

The dilution factor is the number of polarized protons to all nucleons $f= 0.17$

- for an exclusive measurement with recoil proton detection

The dilution factor is the number of polarized protons to all protons $f=0.26$

The insertion of the predictions in the proposal is almost done



From Andrzej Sandacz