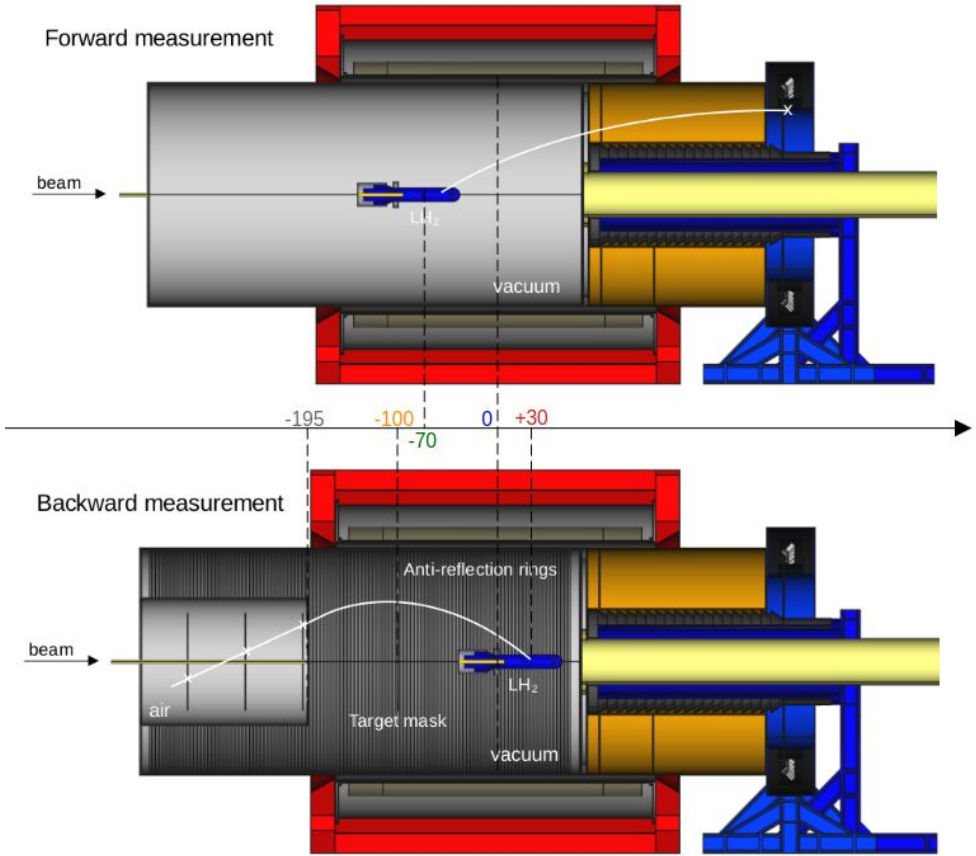
P2 / Basket
mechanical design & integration

May 22, 2024

Context

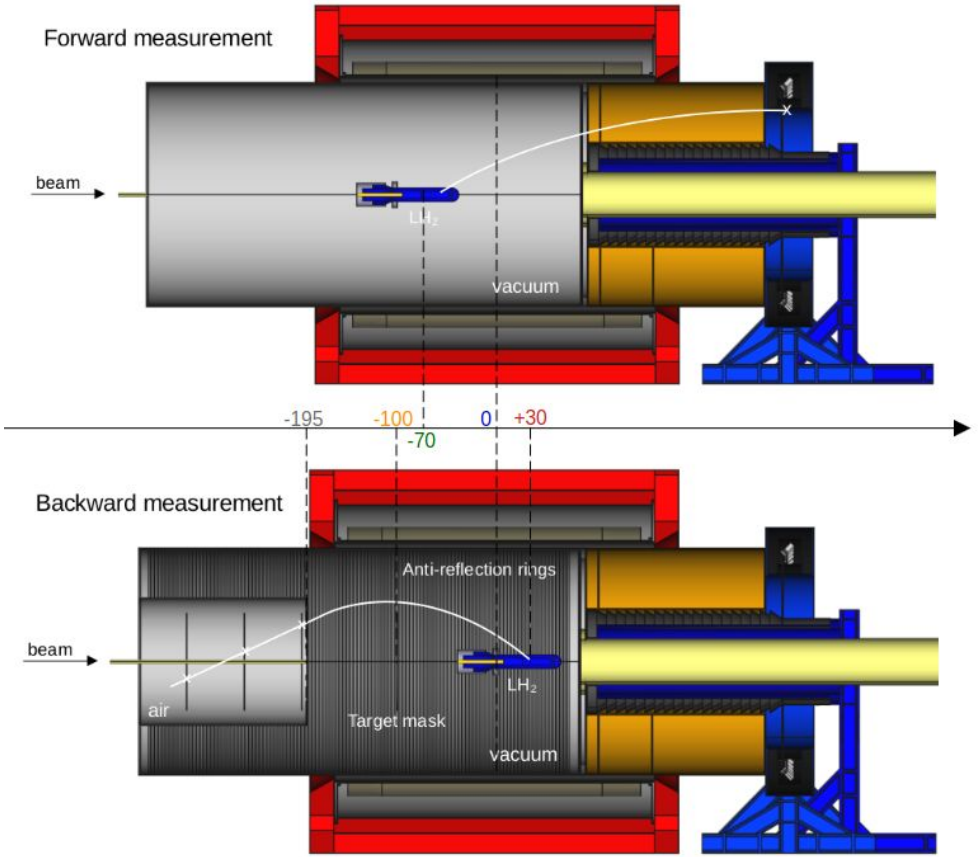
Forward → backward configuration:

- target moved forward
- new elements:
  - cylinder hosting the tracker (in air)
    - today : design & integration
  - target mask (cuts direct background)
  - Anti-reflection rings (indirect bg.)



Context

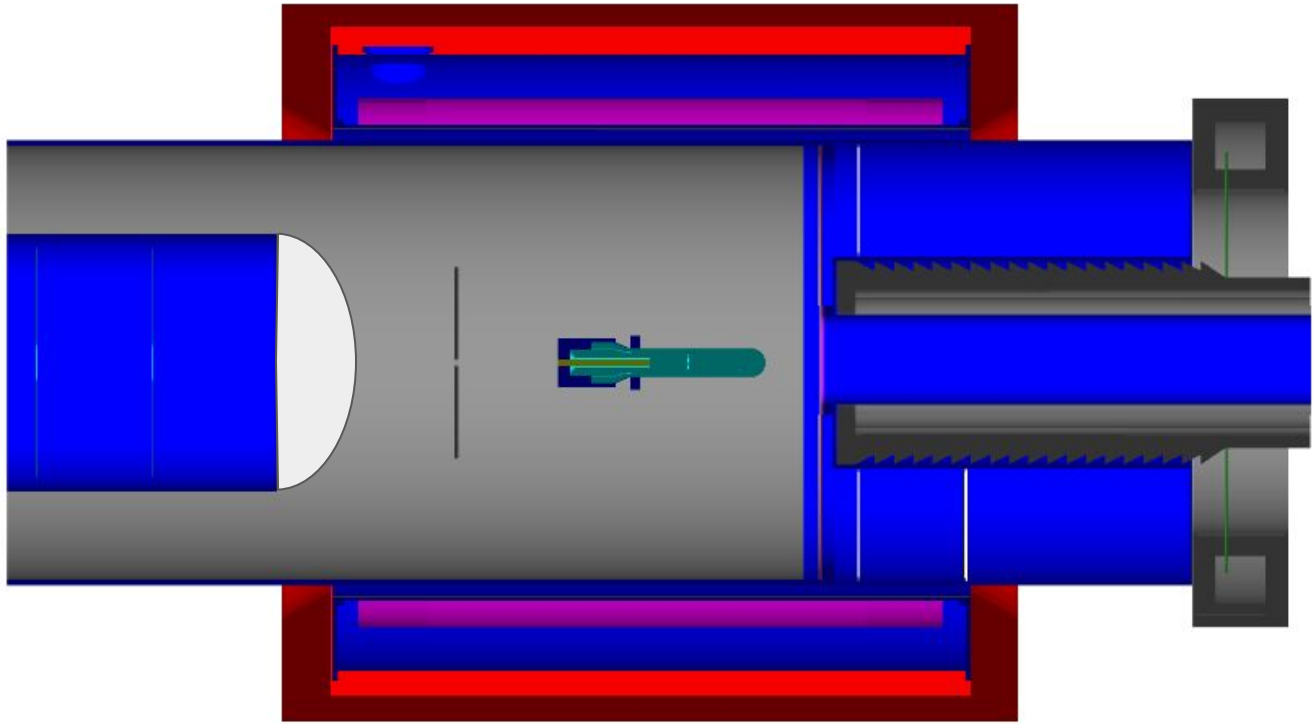
Summary of positions
- magnet centre
  - $z_{centre} = 0$
- forward measurement :
  - $z_{target} = -700$ mm
- backward measurement :
  - $z_{target} = +300 – +600$ mm
  - $z_{mask} = -1000$ mm
  - $z_{chapeau} = -1950$ mm



Is Basket compatible with Forward configuration?

Backward measurement

- z_{centre} = 0
- z_{target} = +300 mm
- z_{mask} = -1000 mm
- $z_{chapeau}$ = -1950 mm

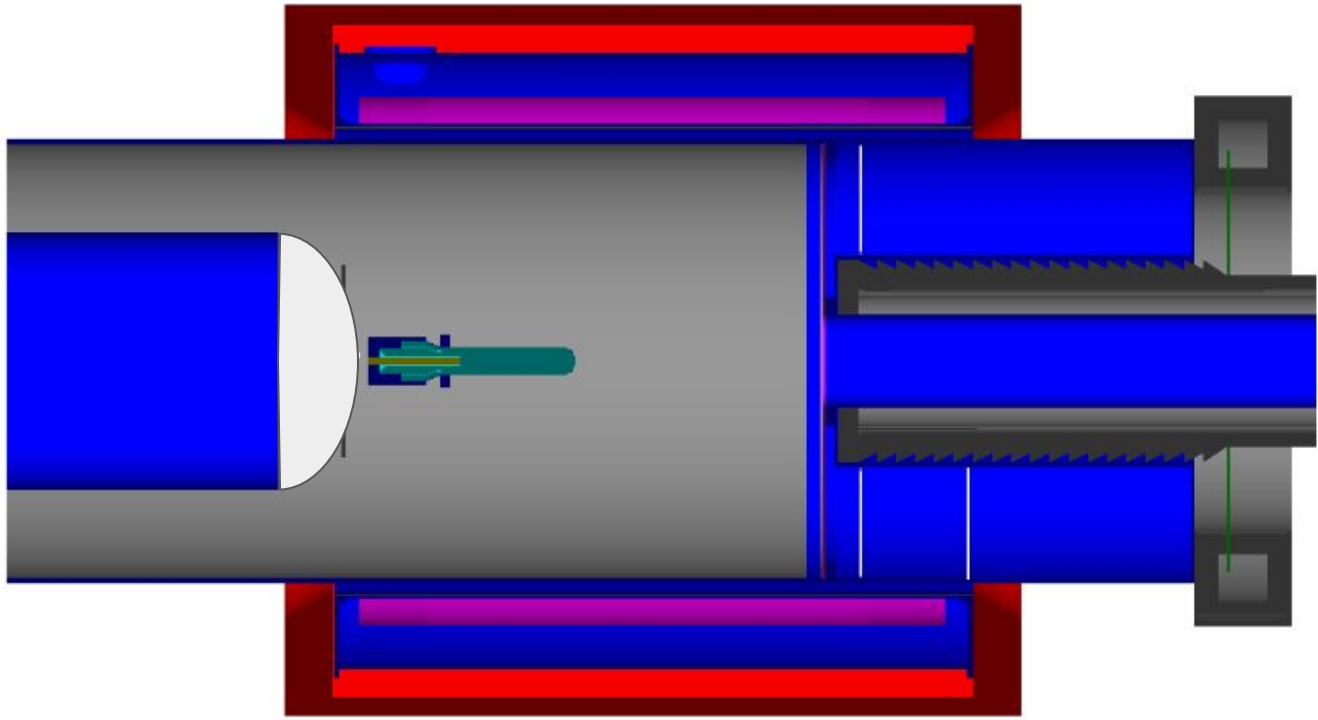


→how much can the membrane stick out?

Is Basket compatible with Forward configuration?

Forward measurement

- z_{centre} = 0
- z_{target} = -700 mm
- z_{mask} = -1600 mm ?
- $z_{chapeau}$ = -1950 mm

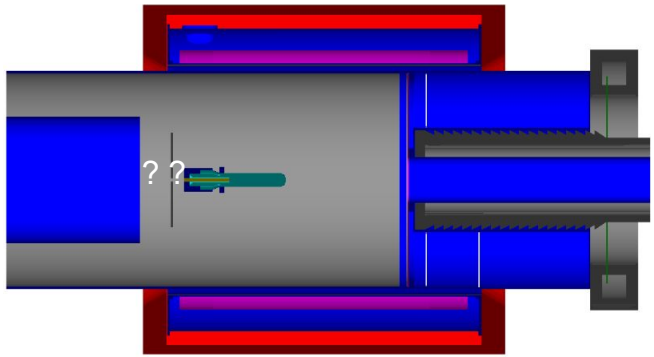


→how much can the membrane stick out?

(Sandrine’s presentation)

Questions / discussion

- dimensions of beam pipe and its flanges?
- handling of the bell :
  - crane : height available under ceiling?
  - trolley : how to cross the rails?
- concept that the bell stays in place after installation, for both forward and backward measurements
  - Hydrogen target, target mask, vacuum window should be movable while avoiding clashes
  - can we define exclusion zones?



Next meetings

- June :
  - iteration on today’s discussion
  - shielding
- July
  - in-person meeting in Mainz?

- dates TBD