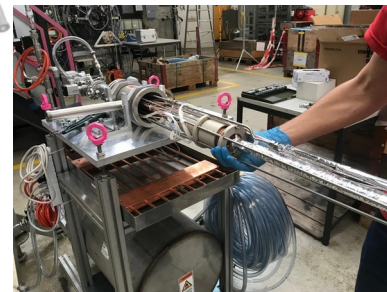
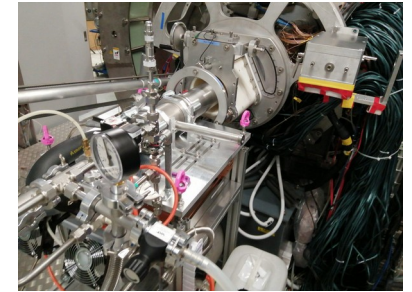
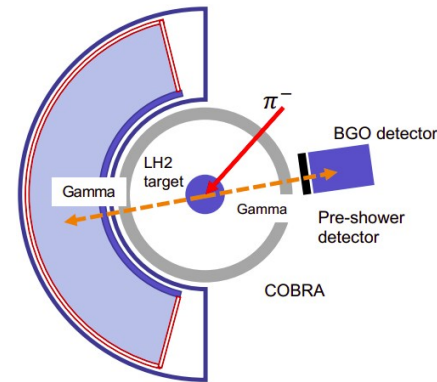


A liquid hydrogen target to fully characterize the new MEG II liquid xenon calorimeter

- The MEG II LXe calorimeter has to be carefully calibrated in the signal region
- The Charge EXchange ($\pi^- + p \rightarrow \pi^0 + n$; $\pi^0 \rightarrow \gamma + \gamma$) and the use of BGO for tagging provide γ at 54.9 MeV, which is close to the $\mu \rightarrow e\gamma$ signal
- A liquid hydrogen target has been developed to provide the protons required for the CEX
- The hydrogen liquefies at COBRA centre, in a 'can' at the tip of a Cu cold-finger, cooled at the other end with liquid helium
- We managed to collect data for most of the LXe and the analysis for the resolutions is ongoing



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