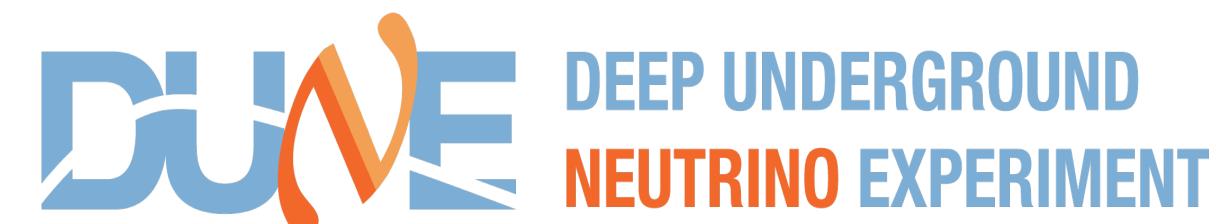


ArgonCube 2x2 Filter Update



Cubism - Braque's Bottle and Fishes, Paris c.1910-12

Cryo meeting
Nov 4th 2019
James Sinclair, LHEP ¹

Filter Material from Research Catalysts

Thanks Kathrine.

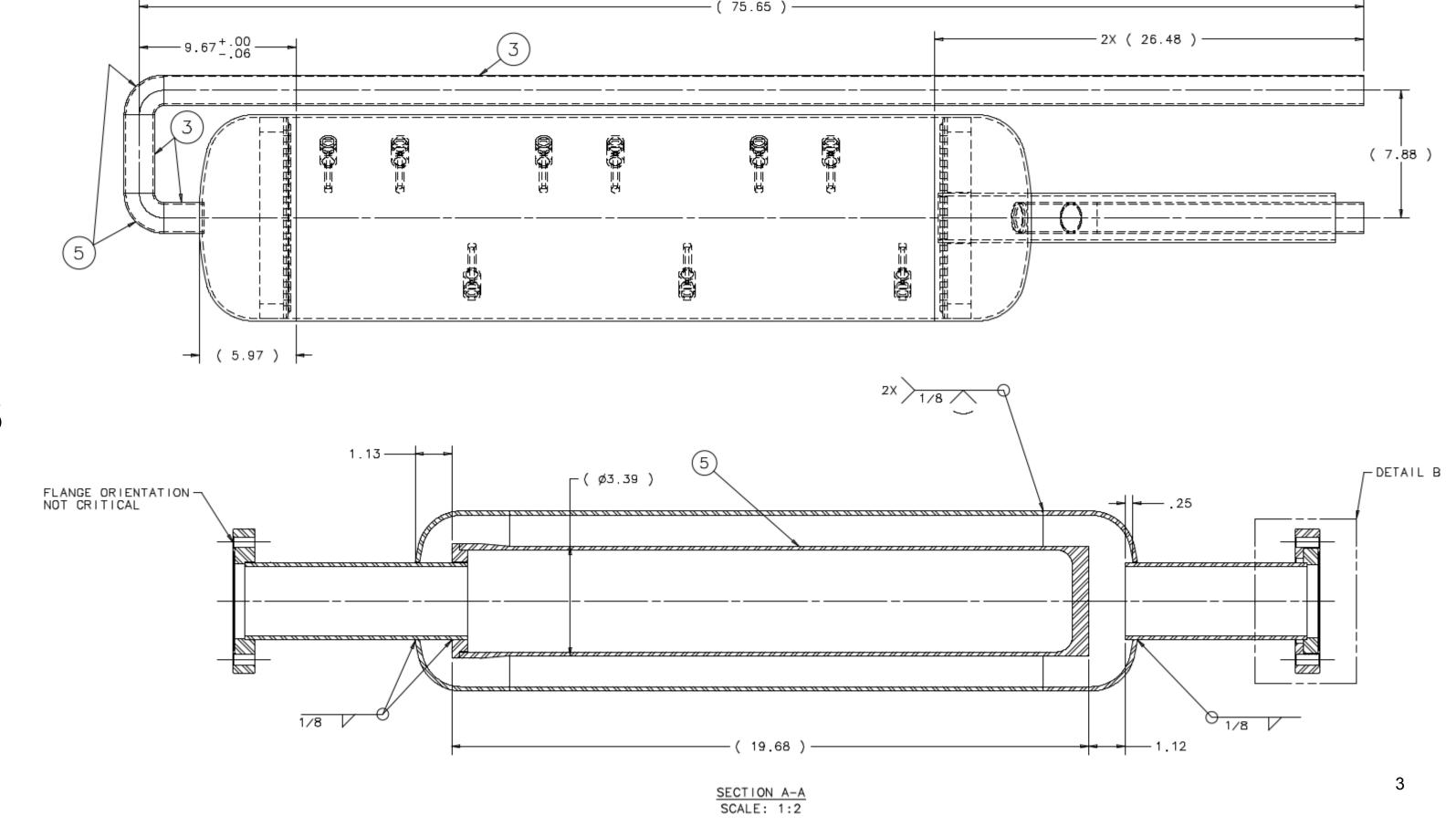
- ~ 10 I molecular sieve RCI-DRI 4A Mol-Sieve
- ~ 10 I getter Q-5 Copper Catalyst

20 I filter material for ~ 8 t LAr.

uBooNE Filter

uBooNE uses ~ 110 I of getter and molecular sieve

For particulate there is a 5 um SS cartridge from GKN



Filter Cooling

To make the filter external we need to provide cooling.

LN2 at 2.25 bar will provide 85 K.

A suitable cryostat is need.

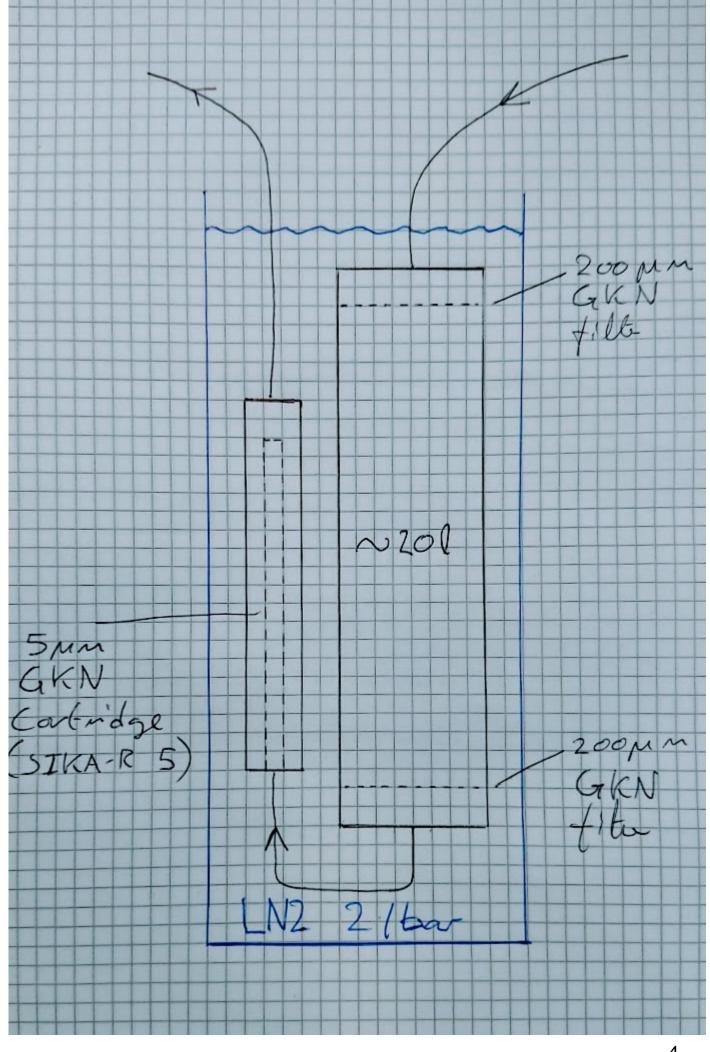
We have a spare LHe cryostat:

External dimensions 1.35 x 0.65 m

Internal dimensions 1.23 m x 0.25 m

Manufacturer (Cryogenic Ltd) says the vessel will be ok at 2.25 bar.







Pressure tested to 3.5 bar

