

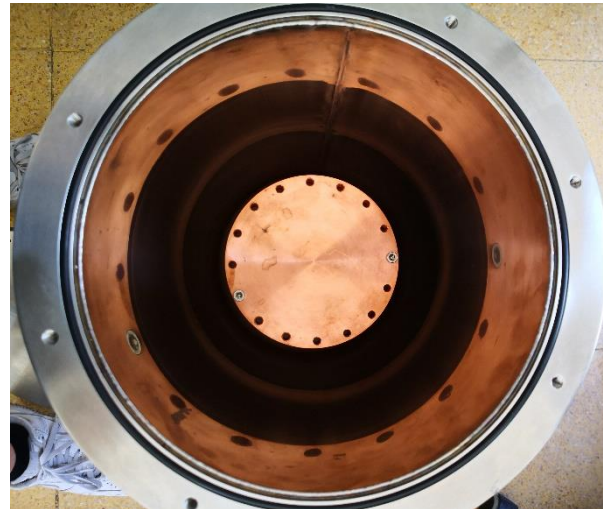
A DArT test set up at CIEMAT

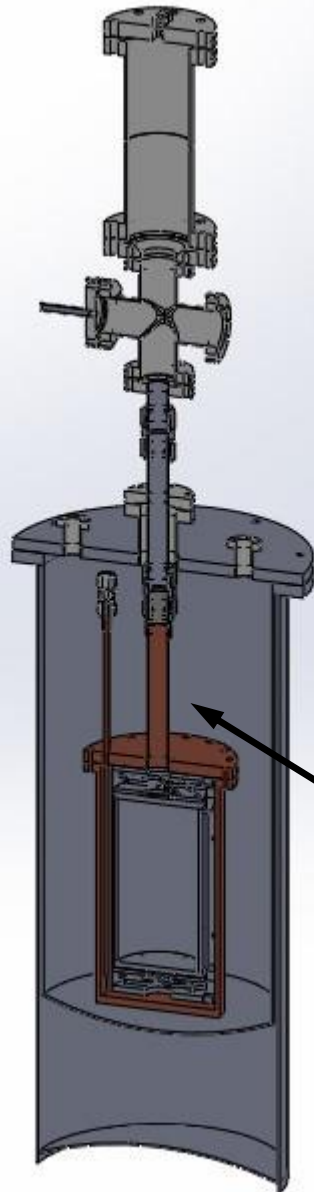
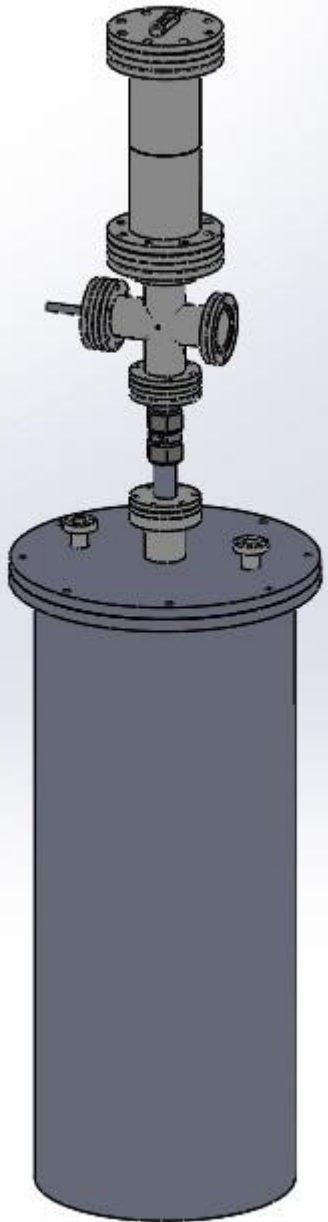
3-April-2019

Luciano Romero

Test of DArT at Ciemat

- We present a proposal in order to do DArT tests at Ciemat
- We have at CIEMAT a flanged cryostat ready to be used.
 - 240 mm diameter x 460 mm depth
 - 3 access in the flange: 1 CF40 + 2 CF16
- We need to do a small modification in the DArT integration design in order to made it compatible with the cryostat.





DArT test set up

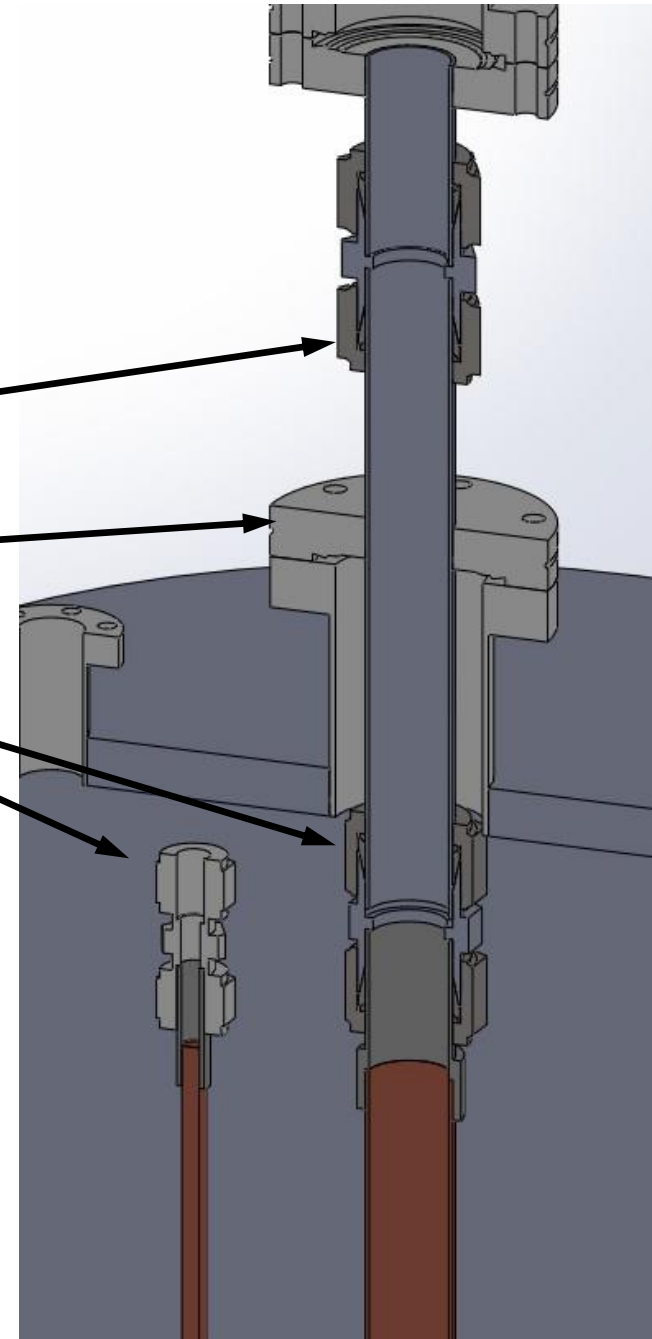
D22 Sagana ferrule

New CF40 connection

D22 Sagana ferrule

Recirculation pipe plugged

Shorter (150 mm) pipes

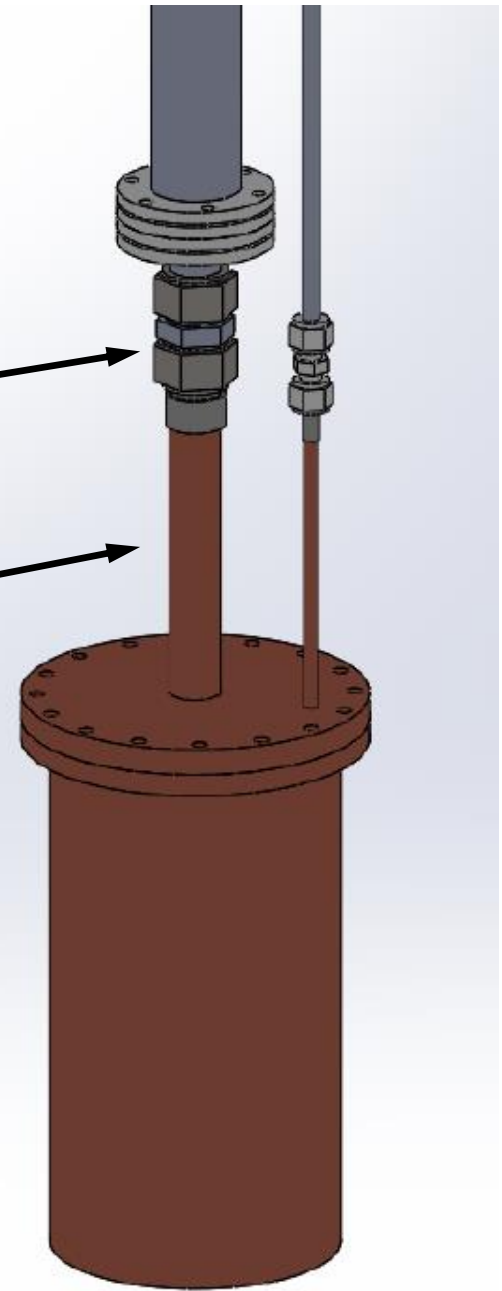


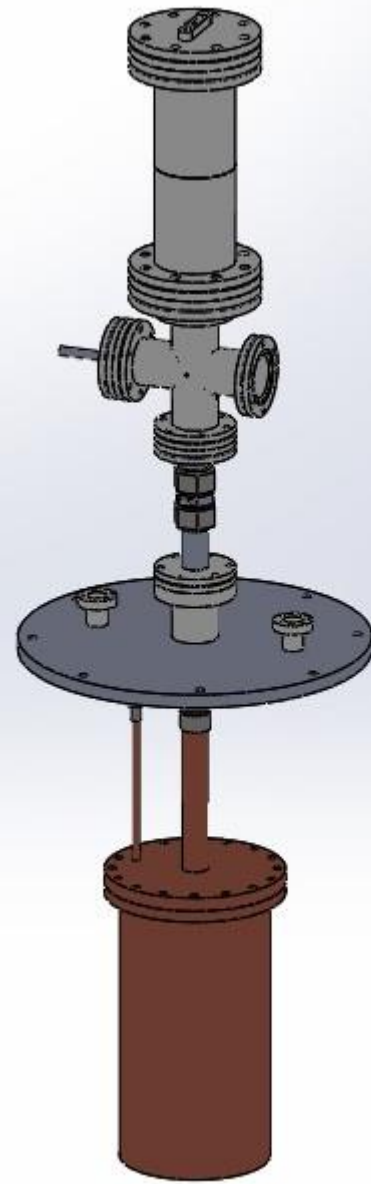
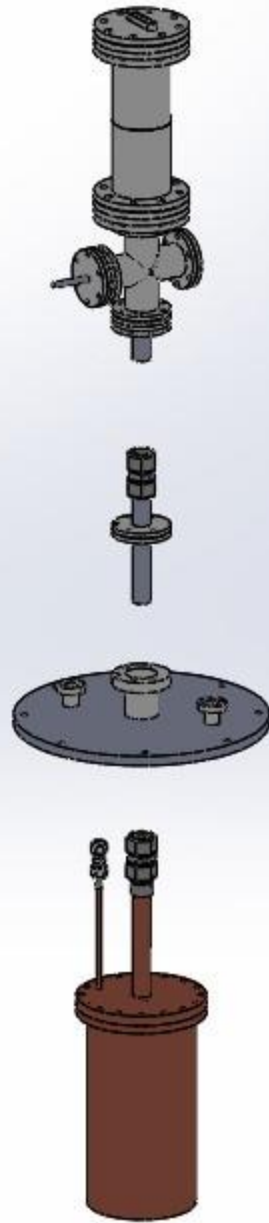
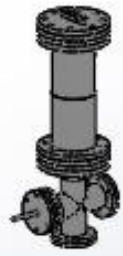
Modifications of DArT integration design



New D22 Sagana ferrule

Shorter (150 mm) copper pipes





Tests of DArT

- Vacuum
- Gas system
- Cryogenic
 - Filling DArT with LAr.
 - Emptying DArT
- Pulsed light source
- SiPM response

Tests requirements

- LAr level sensor
 - Same as DArT
- Electronic for the level sensor
- LAr supply (Ranger of 180 liters)