

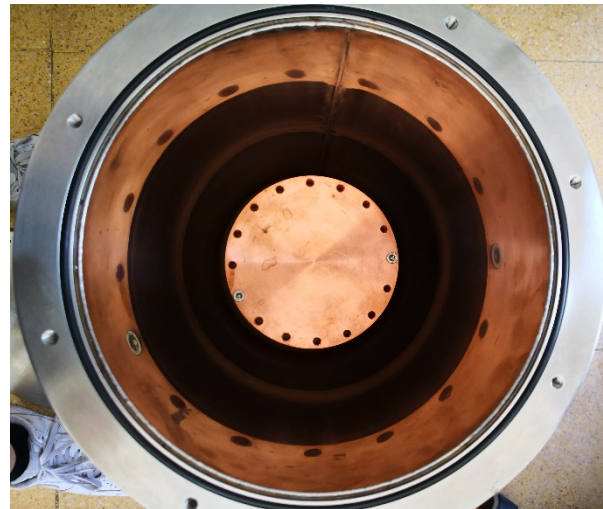
# A DArT test set up at CIEMAT

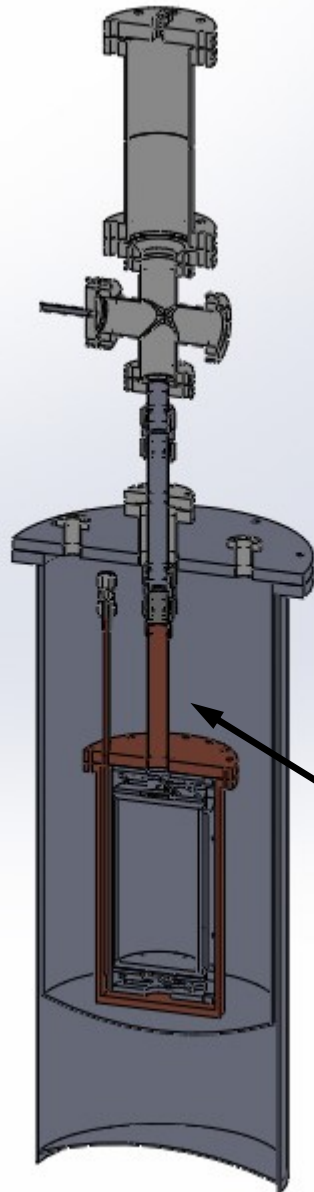
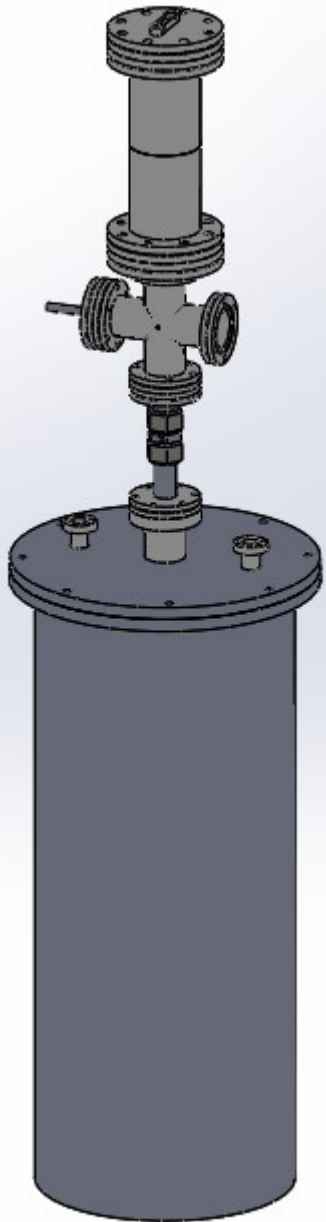
3-April-2019

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

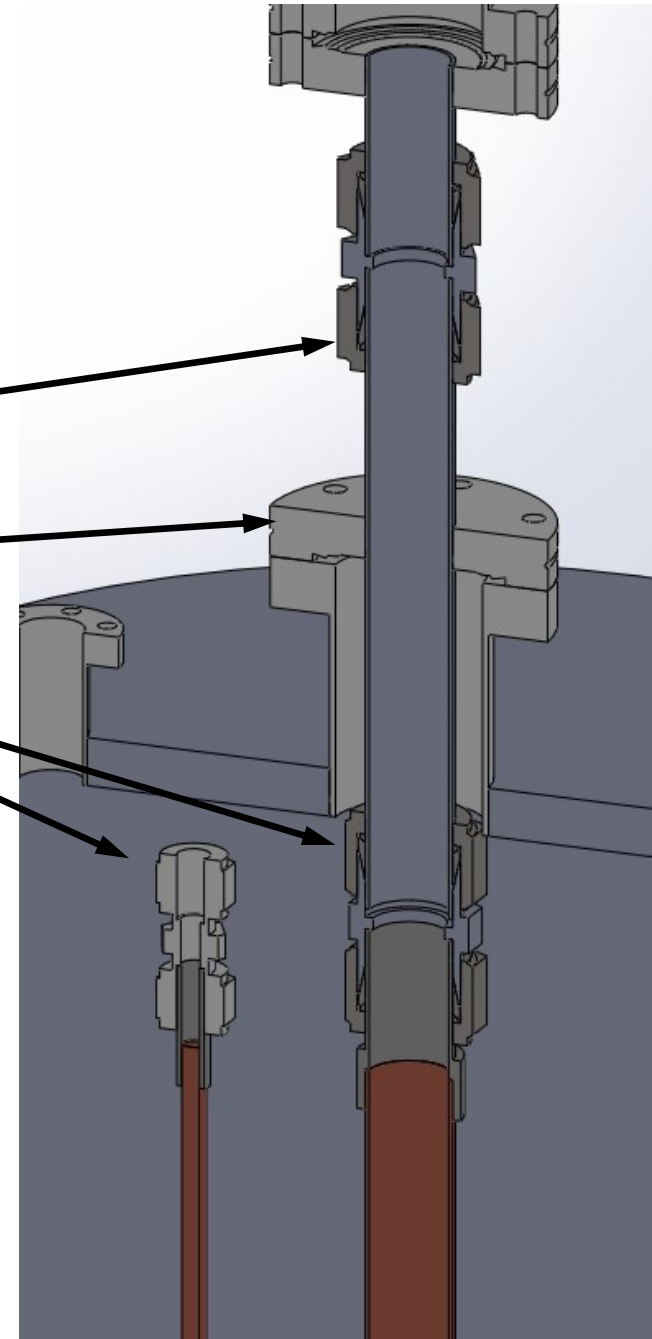
D22 Sagana ferrule

New CF40 connection

D22 Sagana ferrule

Recirculation pipe plugged

Shorter (150 mm) pipes

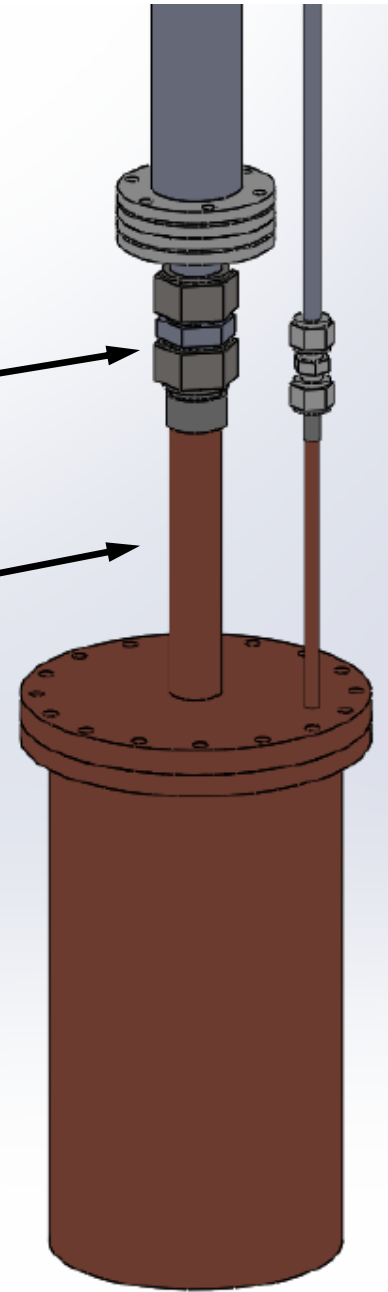


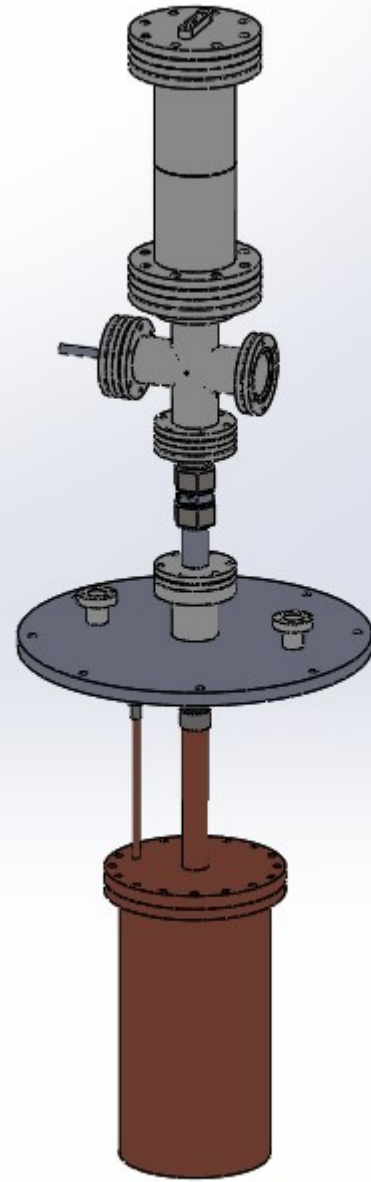
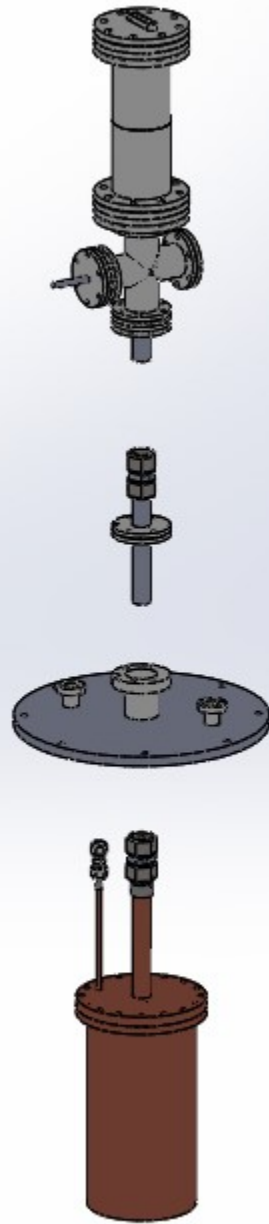
# Modifications of DArT integration design



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)