LONG SHUTDOWN ACTIVITIES

Sergiy Gladchenko

1. 11T Magnet:

- Clean the He3-He4 Mixture (1 Week).
- Find and fix the leak (top of the magnet) to the main bath (1 Week).
- Make complete cooldown to figure out optimal parameters, base temperature. Try different regimes. Check temperature gradient (1 Week).
- Start testing 11T with microwave equipment (Jonas experiment) (2 Weeks?).
- Housekeeping, cable management (1 Day).

2. 7T Magnet:

- Pack and send for repair (leak to the vacuum space, sample well alignment, He level meter) (Done).
- Make cryogenic tests after receiving (3 Days).

3. Goniometer project.

- Room temperature tests (rotation, accuracy) (3 Days).
- Cryogenic testing (sample temperature, rotation) (1 Week).

4. He3 7T Insert (test) (3 Days).

5. He3 OC Insert (test) (3 Days).

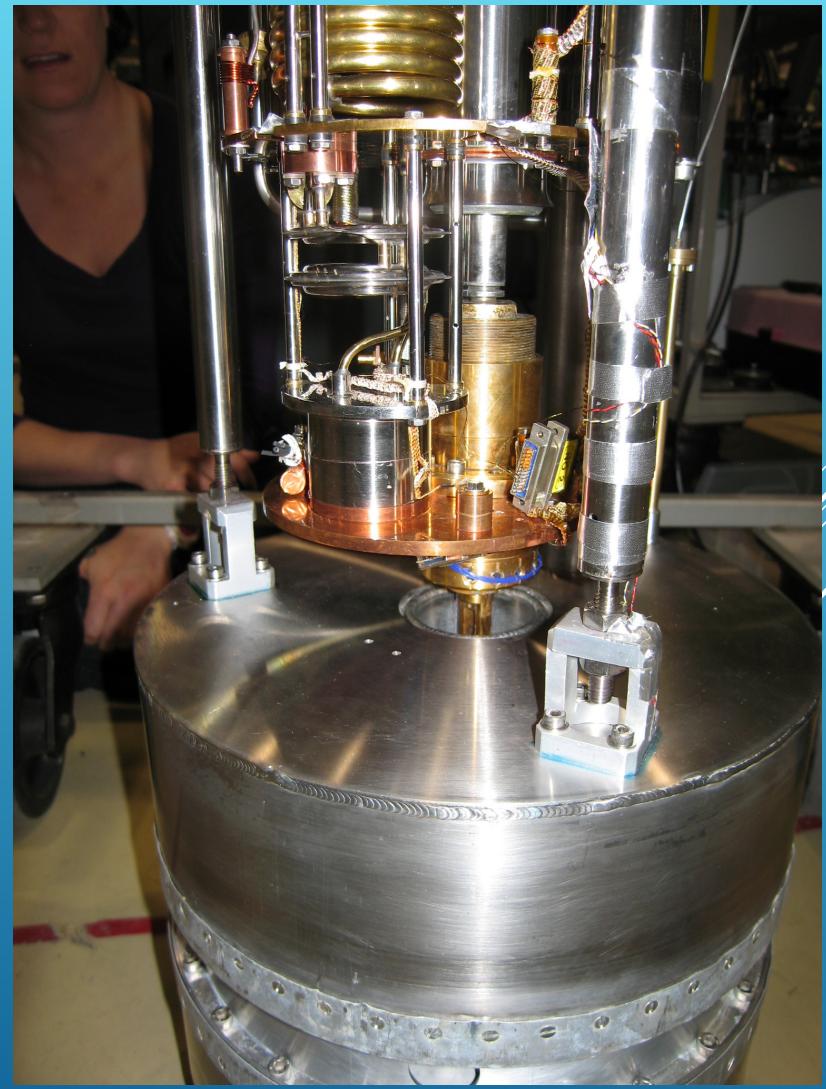
6. Visit to ISIS and HZB (6 Weeks).

11T Magnet:

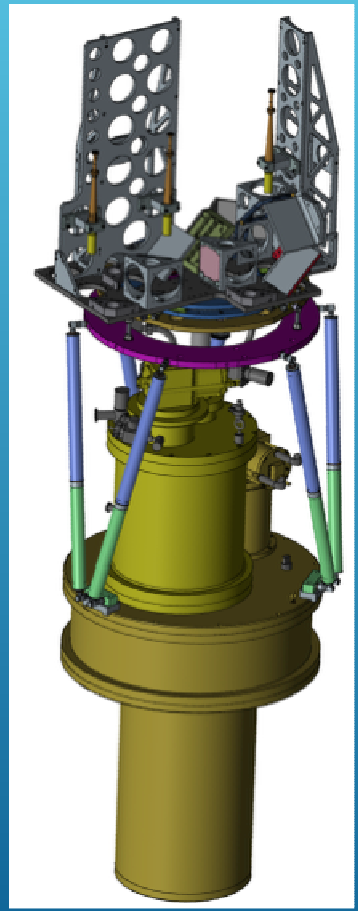
- Clean the He3-He4 Mixture.
- Find and fix the leak (top of the magnet) to the main bath.
- Make complete cooldown to figure out optimal parameters, base temperature. Try different regimes. Check temperature gradient.
- Start testing 11T with microwave equipment (Jonas experiment).
- Housekeeping, cable management.

11T Magnet:

- Clean the He3-He4 Mixture.
- Find and fix the leak (top of the magnet) to the main bath.
- Make complete cooldown to figure out optimal parameters, base temperature. Try different regimes. Check temperature gradient.
- Start testing 11T with microwave equipment (Jonas experiment).
- Housekeeping, cable management.



11T Magnet



7T Magnet:

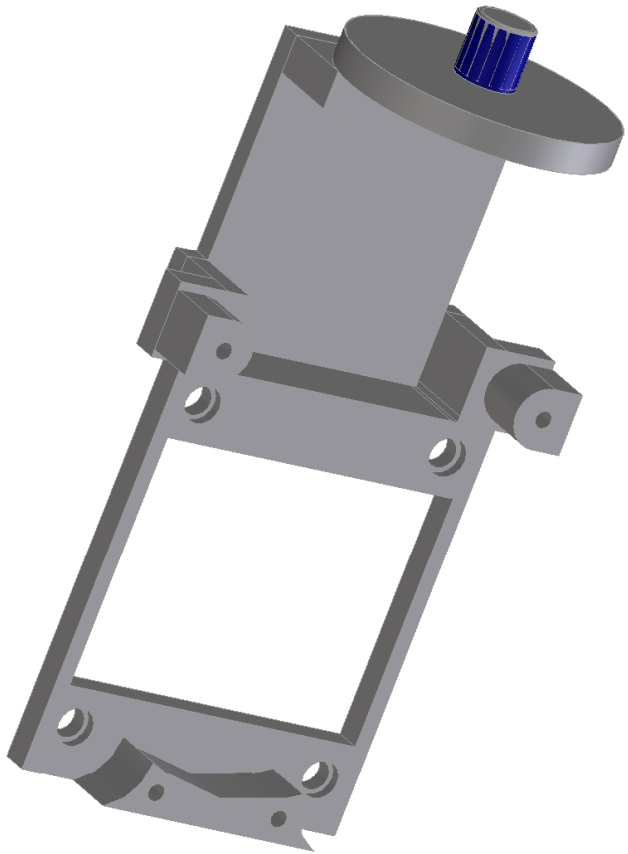
- Pack and send for repair (leak to the vacuum space, sample well alignment, He level meter).
- Make cryogenic tests after receiving.
  - Preparation time (precooling with LN and LHe)
  - Cryogenic liquids holding time
  - Helium consumption

Goniometer project.

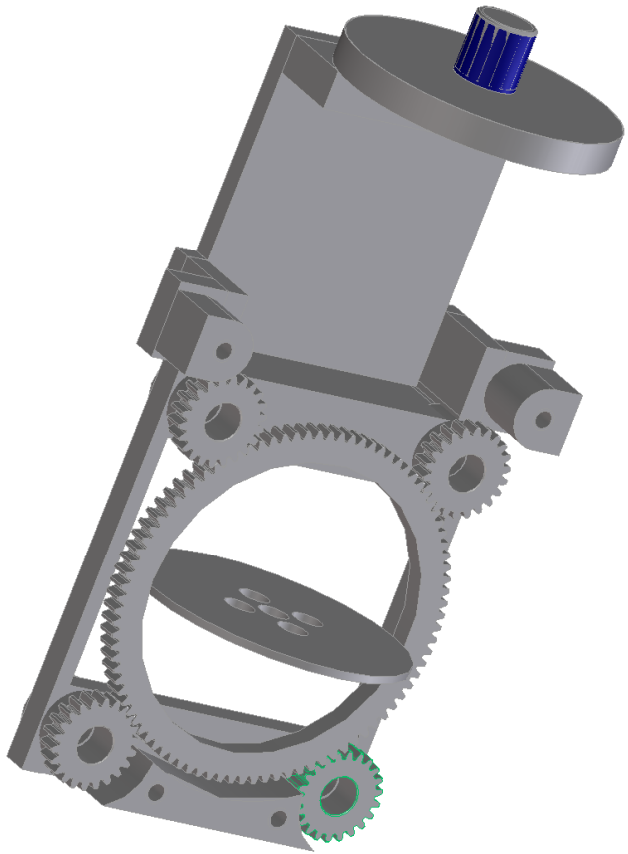
7T Superconducting magnet

He3 Insert

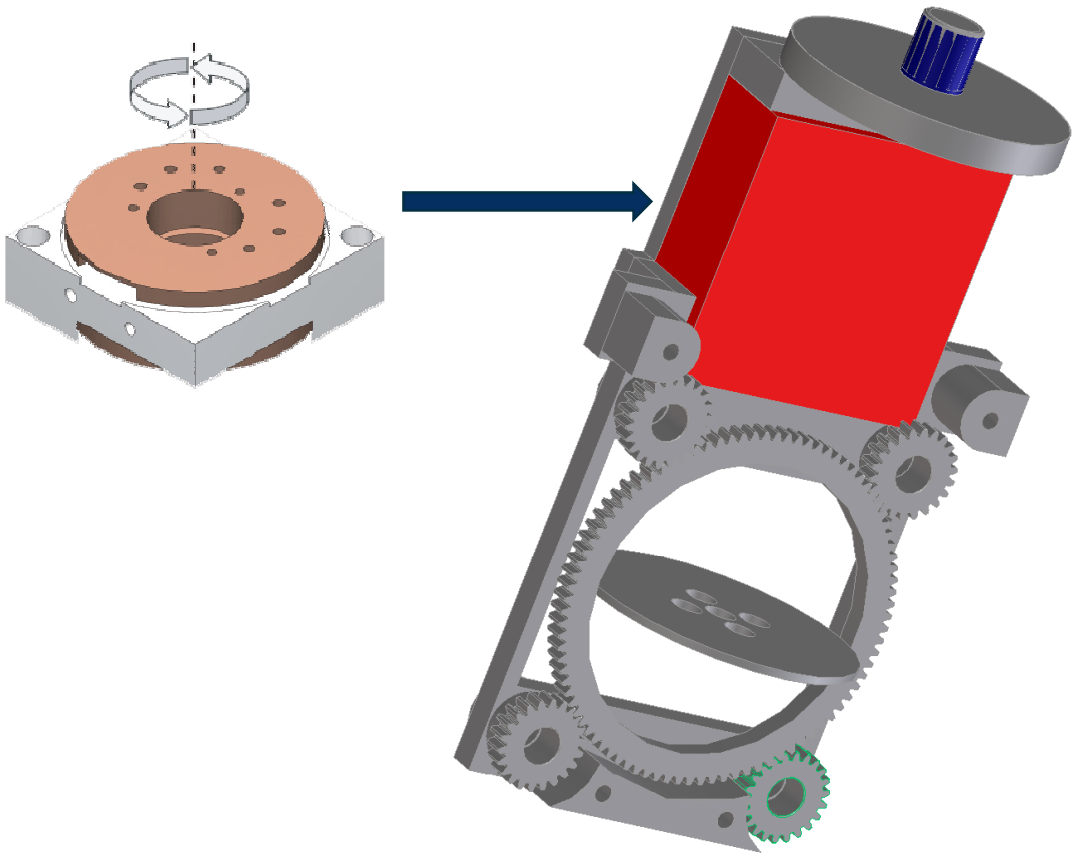
Goniometer project.



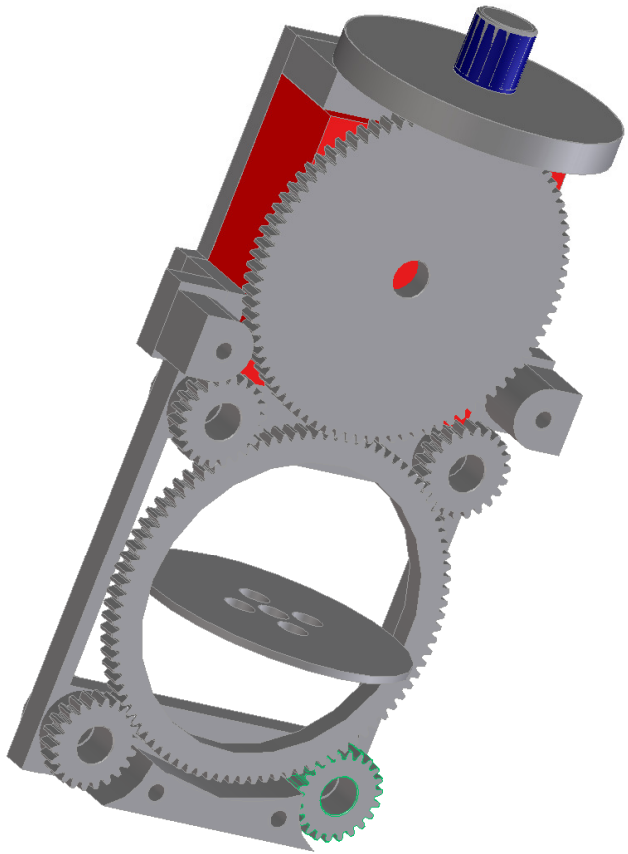
Goniometer project.



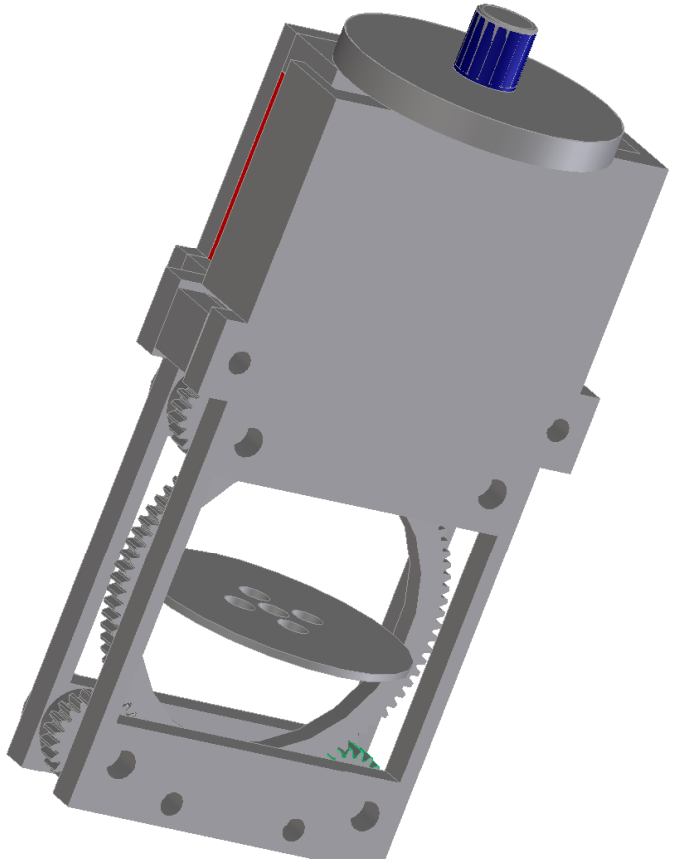
Goniometer project.



Goniometer project.



Goniometer project.

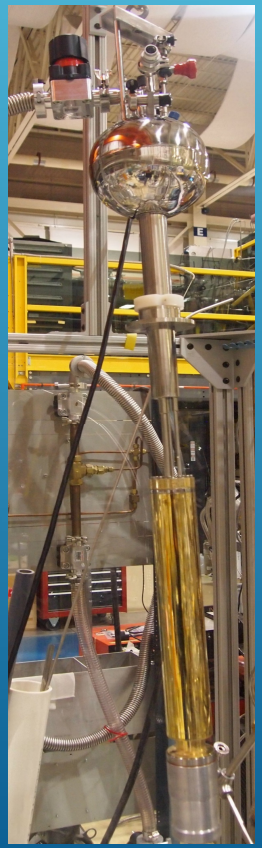


Important tests:

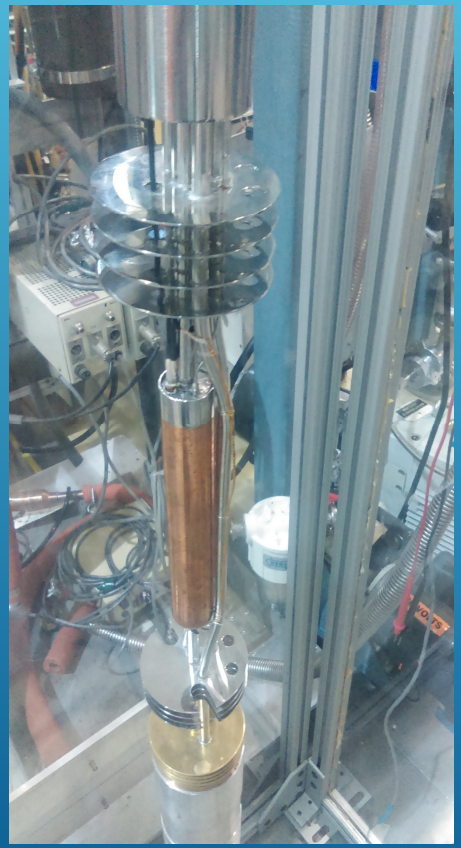
- Room temperature (rotation, accuracy)
- Cryogenic temperature (rotation, sample cooling efficiency)

OC and 7T He3 Inserts

7T Insert



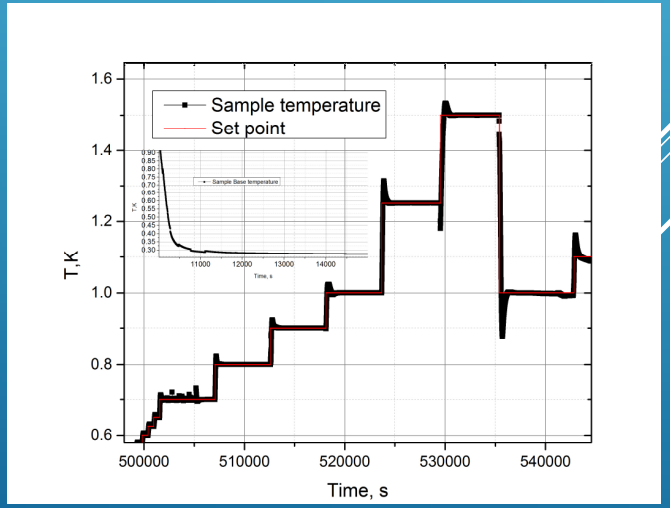
OC Insert



Test:

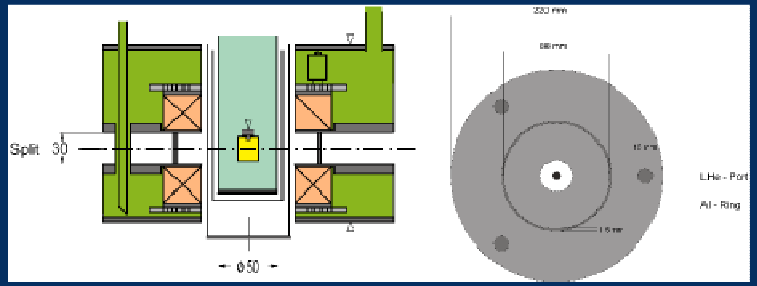
- Duration of initial preparation;
- Base temperature and maximal time at this temperature;
- Setting temperature time and accuracy;
- Check Vacuum cans.

Temperature Setting for OC Insert

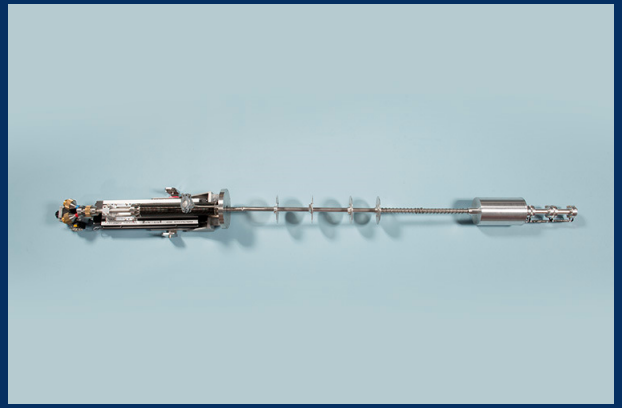


Visit to ISIS and HZB.

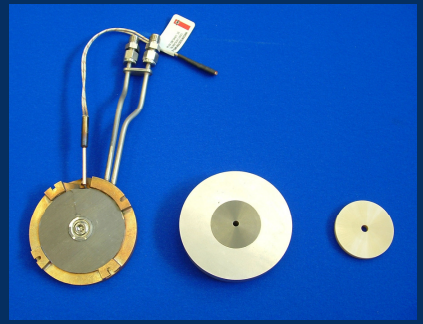
Magnets



Sample changers



Variable temperature inserts



Paris Edinburgh Cells

General Clamped Cells