Polarised target status

Norihiro DOSHITA
Outline

• He3 line of the dilution refrigerator
• He4 line of the dilution refrigerator
• Target cell
• Magnet
• Precooling
• Man power
He3 line of the DR

- Isolation vacuum
  - 5 $10^{-6}$ mbar
- Root pumps running test with dry N2 gas for 24 hours
- Leak check
  - Pumping line connections
  - needle valves and gauges connections
  - access tube line
  - condensation line
  - from He4 line
  - root pumps $\rightarrow$ Leak @ 8th pump back $\rightarrow$ fixed
  - from cooling water
  - gas panel
  - LN2 trap
- New LN2 buffer dewar for LN2 trap
He4 line

- Pump system running test
- Leak check
  - pumping line → leaks → fixed (TE-CRG) : no more spare helicoflex joint
  - needle valves and gauges connection
  - cavity pumping line → leak → fixed
  - around pump
- 500 L liquid helium dewar (TE-CRG)
  - already delivered (15/2)
  - transfer line installation (20/2)
- Recovery line modification
  - recovery line to cold box closed
  - connection to balloon line with a check valve
- Purging
  - 3 times
Target cell

• All coils installed
• Target cell and target holder connection
  - a NMR coil cable damaged
• Insertion test at room temperature
• Check of the NMR cables
• Leak check of the holder
Magnet

• New power convertor lack installed (31/1)
• Converters commissioning
  -- Full current with short cut circuit (12-13/2)
  -- MSS signal test on going with the short cut circuit
• Flow controllers service
• Leak check
  -- magnet necks
  -- flow controller panel
  -- Two big safety valves
• Precooling preparation
  -- 4 times purging ➔ see next page
  -- LN2 line installation
• Valve control tests
Magnet helium vessel pressure

3rd
34 mbar drop for 60 hours

1st purging
2nd
4th
Precooling

• Magnet: OK ➔ started at 8:00 in this morning
  - purging: done
  - Alexey and Fabrice came to check.
  - N2 transfer test: done

• DR: OK ➔ started at 9:00 in this morning
  - purging: done
  - 500 L dewar: installed
    -- transfer line: installed at 9:00 today
  - helium recovery line: OK
COMPASS Preparation schedule

We are here.
Man power

- Accelerating of preparation since last week
- Jaakko, Kaori and Nori
  -- Permanently at CERN
- Michael: back to CERN on Wednesday
- Genki: back to CERN on Thursday
- Eric: came to CERN on Thursday for 2 weeks

Three tasks progressed in parallel

- Yuri will come from April
LN2 transfer line

Short cut cable
Target insertion place

Target cell and holder