



SPL cryomodule specifications

CNRS' open questions

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Contents

➤ Mechanical aspects

- Cavities
- Cryostat
- Technical module

➤ Operations for tests

- Cryogenics
- Cavity support
- Others ? Cavities, coupler

➤ Magnetic shielding

- Shielding strategy:
 - One shield mounted on the cavity tank
 - Two shields:
 - One on the cavity
 - One in the cryostat
- Definition of the interfaces:
 - Tank and cavity support
 - Instrumentation
- Cooling requirements:
 - Active
 - Passive
 - None

➤ Vacuum pumping system

- Specifications of piping, valves, feedthroughs...

- Evaluate the needs of maintenance actions on/in the cryomodule...
 - Frequency
 - Type of maintenance
 - On the experimental site
 - In an intervention zone (= assembly zone)

- To define the needs of windows / of redundant elements

- Mechanical specifications of
 - Valves
 - SM18 cryogenic facility interfaces

- Transient states: cooling down / warming up
 - Time specifications
 - Slope specification (100K effect ?)

- Measurement and diagnostic – Specifications of:
 - LHe Level transducer
 - Temperature transducer
 - Heaters
 - + cables and feedthroughs

- Specification of the alignment diagnostic objectives
 - Measurement of the cavities alignment
 - Vibration diagnostic (?)

- Alignment diagnostic method
 - Wire Position Monitor ?
 - Optical method ?



Thank you for your attention