

Participants

Required

U. Gambardella (INFN), E. Floch, G. Hess, J. Kaugerts, M. Kauschke, J. P. Meier, G. Moritz, I. Pschorn, P. Schnizer

Optional

C. Schröder, A. Stafiniak, P. Spiller

Date and Location

Building: C26

Room: 2.014

Responsibilities

INFN Contributors:

U. Gambardella (gamba@sa.infn.it): Development of the dipole model magnet system

GSI contributors:

E. Floch (E.Floch@gsi.de): Quench detection and protection
G. Hess (G.Hess@gsi.de): Designing engineer, cryostats
J. Kaugerts (J.Kaugerts@gsi.de): Project coordinator sc SIS 300 magnets
M. Kauschke (M.Kauschke@gsi.de): Cryogenic supply and distribution
J. P. Meier (J.P.Meier@gsi.de): Project engineer, cryostats
G. Moritz (G.Moritz@gsi.de): Group leader magnet technology
I. Pschorn (I.Pschorn@gsi.de): Survey and alignment
P. Schnizer (P.Schnizer@gsi.de): Magnetic measurement
C. Schröder (C.Schroeder@gsi.de): SC Magnet test facility
A. Stafiniak (A.Stafiniak@gsi.de): Coordinator SC magnet testing
P. Spiller (P.Spiller@gsi.de): Project coordinator FAIR synchrotrons

Goals

During this meeting, the listed topics shall be discussed as detailed as necessary and possible at present to collect and spread available information from and to all participants.

One further output shall be a clear structure for future communication between all parties concerned.

Session schedule

9.00 – 12.00 Morning session
12.00 – 13.00 Lunch brake
13.00 – 13.30 Visiting the GSI sc magnet test facility
13.30 – 15.50 Afternoon session

Topics

Opening and introduction (G. Moritz)

Short presentation on aims and requirements for the SIS300 dipole model magnet cryostat (J. Meier)

Discussion on topics introduced by INFN

- thermal budget for the magnet - how many watts available at low and intermediate temperatures, i.e. mass flow rates and pressures.
- vessel materials and technologies for cooling/shielding – outer vessel material, shield material, MLI insulation type and position
- cryo line interfaces (@ 4.5K and shield temp) - kind of matching between cryostat and GSI cryo plant
- diagnostic line, vacuum ports – ports and feed through required for diagnostic and measurements
- current bias feed through – design and technology to be adopted, thermal budget for current leads
- room inside the cryostat for protection - cold diode?
- Magnetic measurements – do they require a warm bore?
- perspectives and requirements for final cryostats - fiducials, tolerances, supports, available room in the tunnel, etc.

Discussion on topics introduced by GSI

- Magnet support concept (LHC – type)
- Defining the future communication and data exchange structure between parties concerned