MQXFA1 Conductor & Coils Readiness Review

Goal & Charge

MQXFA1 is the first prototype of the MQXFA magnets to be used in Q1 and Q3 for the High Luminosity LHC.

MQXFA1 uses coils with 4m magnetic length (QXFP) fabricated before LARP had the capability to make full length (4.2m) coils at both coil-fabrication sites. Five QXFP coils were fabricated, and the first one (QXFP1) was successfully tested in a mirror structure. The baseline plan is to use coils QXFP2/3/4/5 for MQXFA1 and to keep QXFP1 (still in mirror structure) as spare coil.

This is an internal review where L3s and Task Leaders in charge of conductor and coil fabrication are going to present the data for coil acceptance by L3s and Task Leaders in charge for magnet assembly and test.

The committee is requested to answer the following questions:

- Is the baseline plan (to use coils QXFP2/3/4/5) for MQXFA1 assembly and test fine?
- Are conductor and coils fabrication and QC data adequate for a thorough evaluation?
- Is any special attention needed for the use of coils QXFP2/3/4/5?
- Do you have any other comment or recommendation regarding coil selection to assure successful MQXFA1 assembly and test?

Committee

D. Cheng, G. Chlachidze (chair), J. Muratore.

Date and Time

March 23, 2017 starting at 11am/1pm/2pm (LBNL/FNAL/BNL)

Location/Connection

The review will be by video-mtg Video-link by Zoom, info on the Indico page

Link to talks

https://indico.fnal.gov/conferenceDisplay.py?confId=14087