

# Magnetic shielding meeting: 2013-01-09: 15:00 GMT

## Conference Room 4, R1 (phone conference details circulated)

**Present:** HW, KL, JW, JT, LF, CMacW, AN, RP, LF, PS, MG, PH, MC, AG, JC

### 1. Actions:

- **ABr:** Pursue development of test of non-standard lengths of Cryomech hoses  
Superseded -- delete
- **KL:** Liaise with ISIS to set up joint meeting after Christmas.  
Principle agreed with ISIS. KL to set up a Doodle poll.

### 2. Status of magnetic model of MICE Hall:

**PS**

- See slides:
- Points noted:
  - Matrix of models for the racks under various configurations. Systematic study in preparation;
  - CMacW is making analysis of the results as the models finish;
  - Sub-models:
    - Has been in abeyance because of other work;
    - Increase in personnel, summarized;
      - Email jim Clarke
    - PS will make a meeting of the modellers
  - JW:
    - Can we decide on modeling of racks?
    - Not yet, need to study the various configurations. Can check model against R9 equipment with FC energized;

### 3. Design and detailing of West Wall, MLCR extension and Room of Requirement:

**JT**

- West Wall/Mezzanine:
  - Have now developed design to point at which it can be documented. Goal is to produce a document for review in a week or so;
- Rack room and revised MLCR:
  - LF is developing detail of cable routing taking space constraints into account;
  - Meeting tomorrow with BPG to discuss building modifications. Will require civil engineering review, but hope to have some cost information after this meet;
  - Next week have meeting with Alan Stevens to discuss how we fit with ISIS requirements;
  - Issues of cable routing discussed. Seek to avoid too many major revisions to the building;
  - Goal to use CM35 as venue for reporting of review;
- Status of rack build:
  - Rack build is underway. FC control rack and power-rack are: complete/50% complete;

- Then can send out the spectrometer racks;
- Proposed timescale:
  - CM35 need timescale;

#### 4. Partial return yokes: magnetic analysis and design

HW

- See slides:
- Points noted:
  - B-H curves used for the magnetic modeling of the Hall were supplied by Opera with the exception of the 1010 used for the shield walls and magnets. The resolution of the B-H curves at low field is poor and needs to be corrected;
  - Results presented by HW emphasises the priority of comparing model to data, for example in R9 with the FC;

#### 5. VC and collaboration meeting presentations

All

- VC
  - KL; principles to send material by Monday or Tuesday next week;
- CM35:
  - KL intro:
  - Modeling -- PS
  - Racks and MLCR -- JT
  - Return yoke – HW
  - Measurements -- CMacW
  - Schedule considerations – KL

#### 6. Schedule and plans, discussion

All

- CMacW agreed to “own” the schedule.

#### 7. DONM:

16Jan13; 15:00 GMT

Meeting with ISIS to be confirmed

#### 8. AoB

- PH: asks for change in colours to distinguish items on the drawings.
  - Issue is time (and money) – HW will do something intelligent.

#### Summary of actions:

- **KL:** Liaise with ISIS to set up joint meeting after Christmas.