

# Magnetic shielding meeting: 5-03-2013: 15:00 GMT

## CR4, R1 (phone conference details circulated)

**Present:** CM, KM, JC, HW, MG, CP, MC, LF, AG, JW, PH, JT, RP

### 1. Actions:

- **KL:** Ken spoken to ISIS representative and joint meeting destined in next month or so
- **JW:** John Webb to get detail of substation components when DL down next week.
- **Modellers:** Is there interest in hosting a common source of BH data somewhere
- **PS, MC, KL:** Provide first draft of questions and specification of advice required from VF

**Done:** PS prepared this, waiting for feedback from KL. MC says to ask about correct application of mesh resolution and issues like multiple skins. Will send list of concerns to Paul. Need to emphasise urgency of service from VF.

### 2. Magnetic model of MICE Hall: PS

- See slides. Paul looking at Q7-Q9 area in more detail using a reduced model. Took 14 hours to solve using same mesh resolution as the latest hall model. Uses new boundary conditions as recommended by VF which now produces vector plots that seem logical. Wants to develop model to see if there is mesh convergence and look in more detail to see if there is field gradient across the quads.

### 3. Magnetic model of tracker cryostat: KM

- Started on investigation of shielding can thickness vs. inner field. The process is quite time consuming. Is using a 2D technique to analyse this.

### 4. Magnetic model of racks and R9: MG

- Now got VF working after lots of issues with Linux installation process. Measured compressor and rack detail in R9. Putting first few blocks in place in model.

### 5. Partial return yokes: magnetic analysis and design: HW

- See slides. Presented a comparison study of field mapping the tracker in the MICE hall compared to free space. Concluded the error field in the hall due to surrounding iron content would be approx 1mT.

### 6. Magnetic measurements: IT

- More data taken in R9 for AFC field and compressor in 10G air field

### 7. Schedule and plans: CM/JT

- No progress on Schedule
- Jason reported that work now started on compressors on west wall plan

8. **DONM** Tuesday 12<sup>th</sup> March 2013, 15:00 GMT. CR02, R1 at RAL, phone conference

### 9. AoB