



MICE CM 34

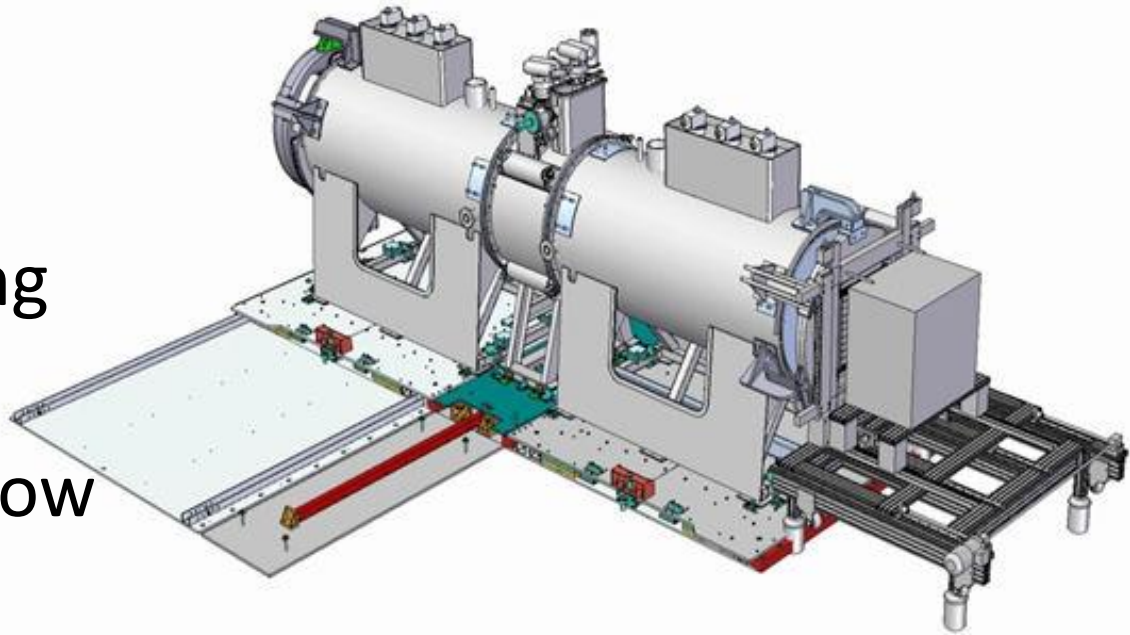
Goals & Status

Thanks go out to the organizers: Alain, Linda, Victoria, Rose and Debbie

Step IV



- The “Goal” of CM33 was to make this image a photo by Christmas 2012
- This is now not going to happen
- Christmas 2013 is now likely
 - More in technical & scheduling discussions

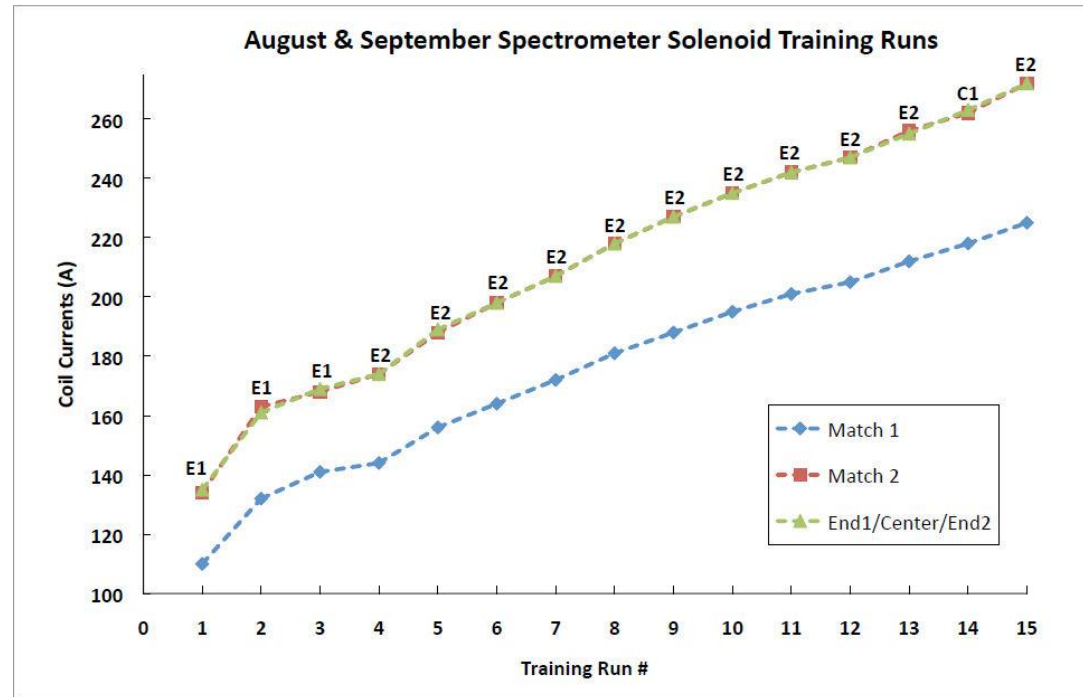


MICE Magnets



- We have had numerous delays/setbacks
- But we are making progress

SS training history



Steve Virostek will give details

AFC



- The first AFC is now scheduled to be at RAL – *Next week*
- R9 is prepped and ready

Tom Bradshaw will give us the latest

MICE Magnets



- Yes, MICE magnets are a continuing problem and not having them has been a headache
- But, having MICE magnets (operating) is now also a headache.

Stray Field Mitigation



- As you all know, without steps to mitigate the problem, many components in the MICE hall will not operate in the stray field of the SSs + AFC (+ CCMs in Step VI)
- Two solutions being investigated
 - Global shielding
 - Move or shield all affected hardware
 - Locally shield
 - Partial return yoke to reduce stray fields to point where all hardware can operate

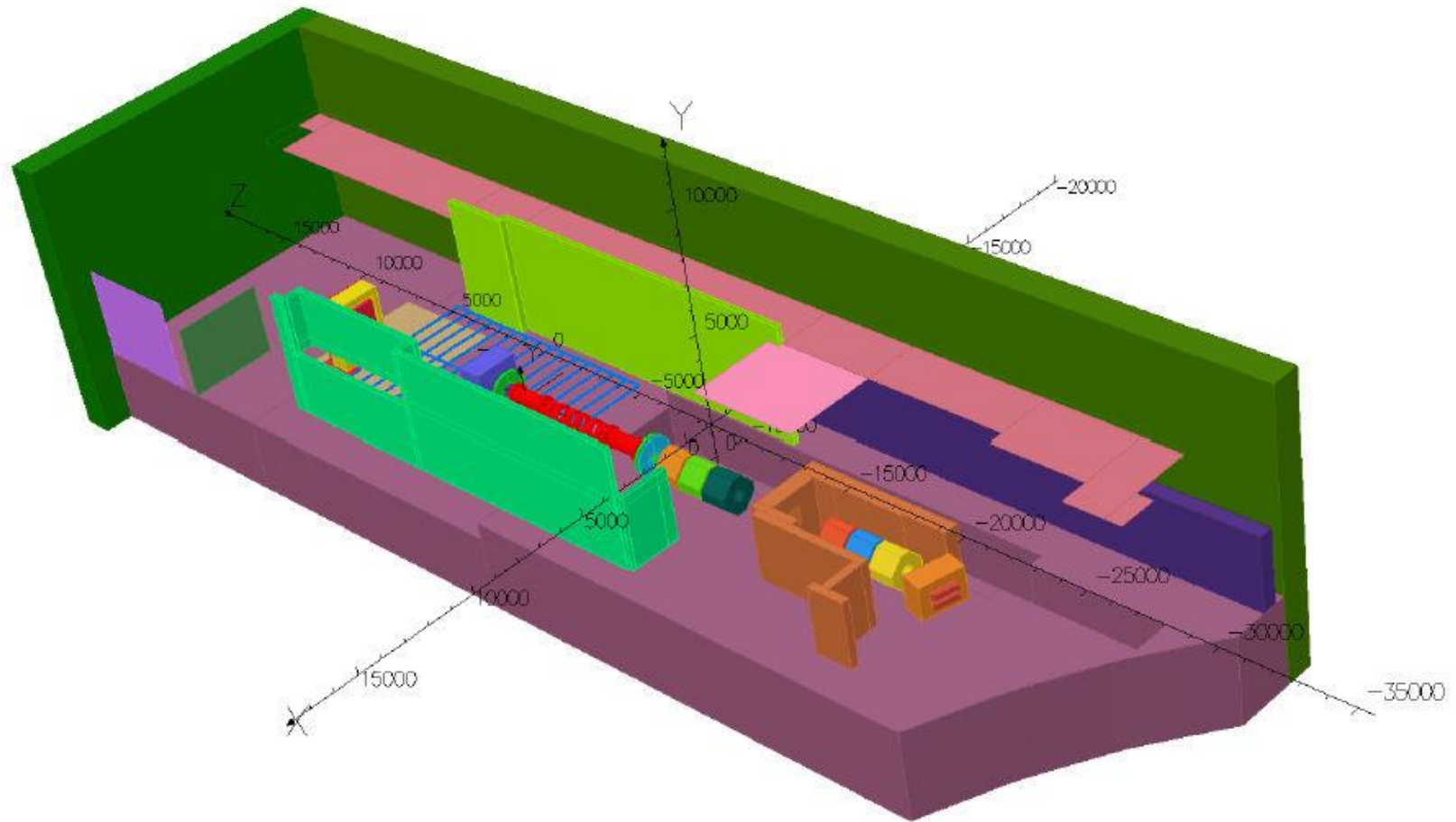
Stray Field Mitigation II



- Global Solution
 - Brute force & can likely be made to work in time available
 - Drawbacks
 - Many potential loose threads – *“The unknown unknowns”*.
 - Tools used to define solution have not yet been demonstrated to be fully up to the task
 - How to shield components that cannot be relocated.
- Local shielding solution
 - Works in Opera with conceptual model
 - Drawbacks
 - Need detailed engineering design
 - Then procurement plan

We will get updates from Paul Smith and Holger Witte

Magnetic Model

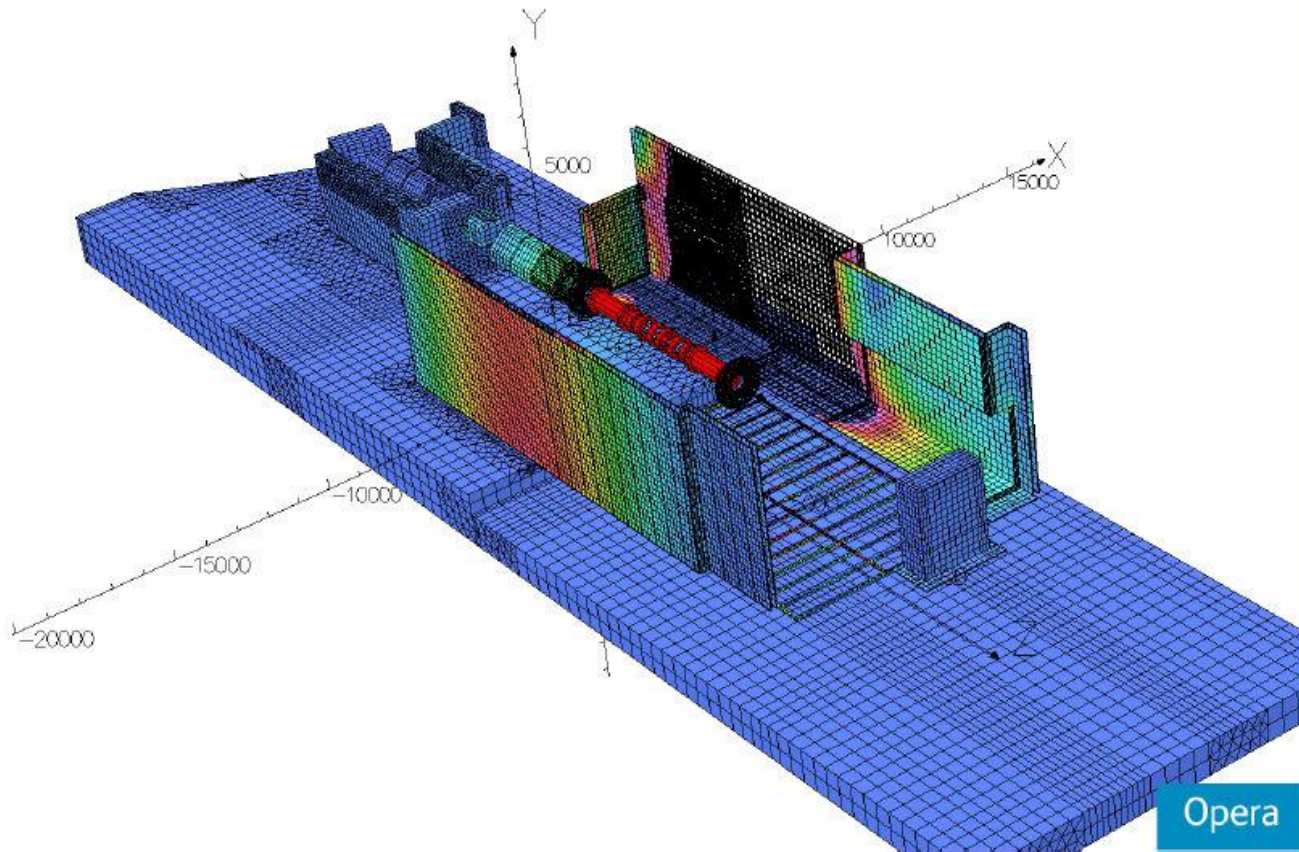
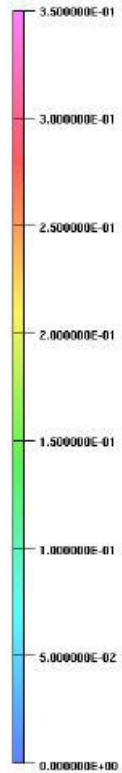


Global Shielding

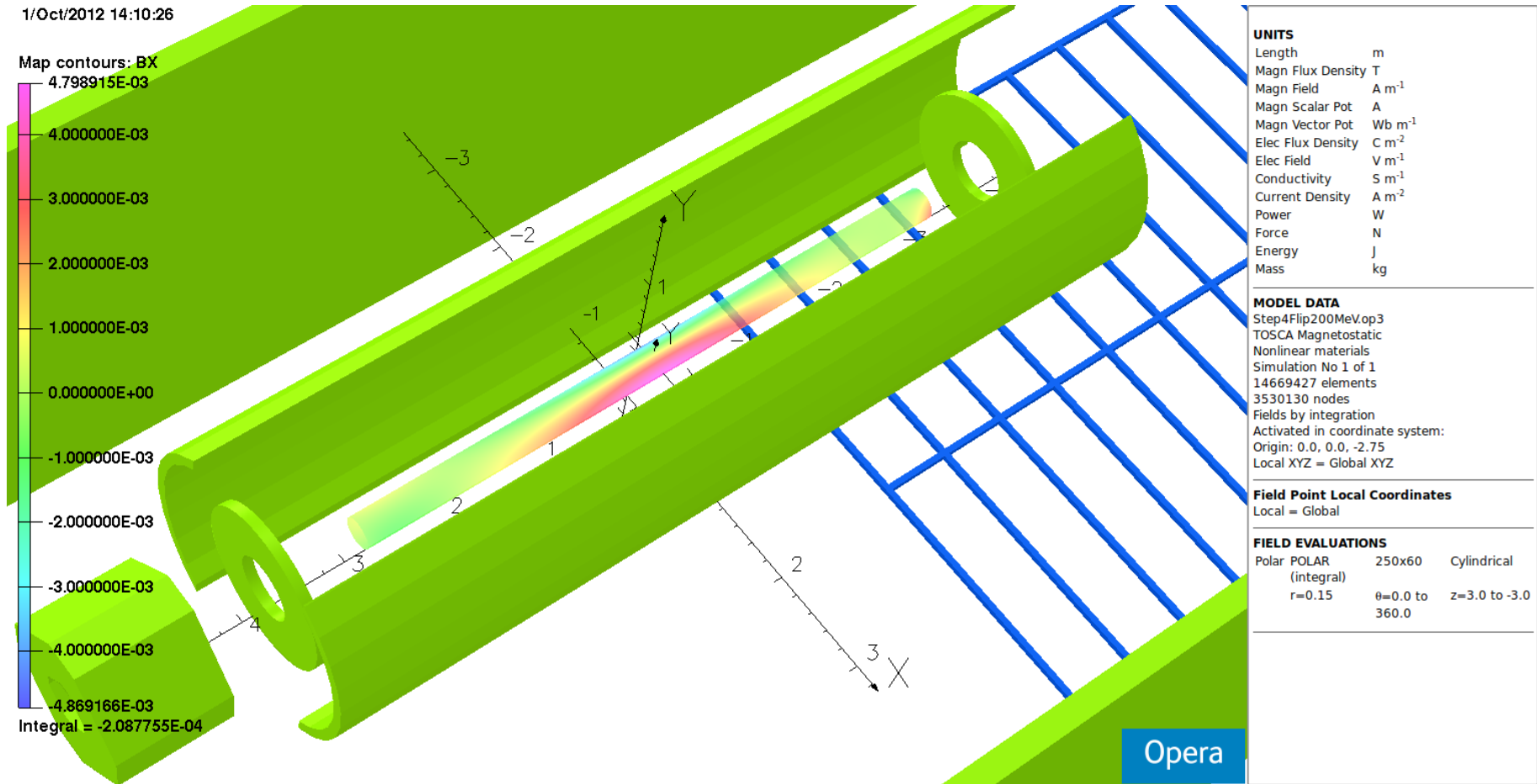


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Surface contours: BMOD



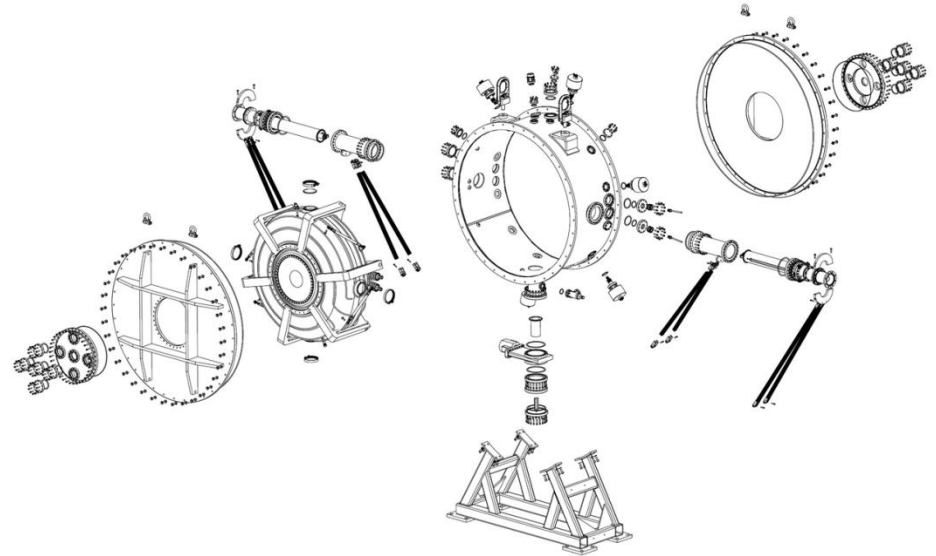
Local Shielding



System test of MICE RF



- Making good progress
 - Vacuum vessel in house
 - Cavity processed
 - Tuners complete
 - Actuators being fab'd
- Outstanding
 - Complete updating RF coupler design update
 - Fabricate



Meeting outline



Review activities and progress of MICE

- Magnet reports (AFC, SS, CC)
 - Magnetic field (external to “MICE channel”)
- Stray-field mitigation
- Publication(s)
- Understanding of the physics of the experiment
- Software development

Continued Planning for Step IV

- EMR, LH₂, Solid absorbers
- Controls and monitoring

Planning for MICE Step VI

- RF in B, RFCC modules, RF power