

**Radiation Effects in
Superconducting Magnet
Materials (RESMM'12)**

Report of Contributions

Contribution ID: 0

Type: **not specified**

Conceptual Design of COMET and radiation hardness

Monday, 13 February 2012 13:10 (35 minutes)

Presenter: YOSHIDA, Makoto (KEK)

Session Classification: Superconducting Magnets in High Radiation Environment

Contribution ID: 1

Type: **not specified**

Opening remarks

Monday, 13 February 2012 13:00 (10 minutes)

Presenter: MOKHOV, Nikolai (FNAL)

Session Classification: Superconducting Magnets in High Radiation Environment

Contribution ID: 2

Type: **not specified**

Mu2e experiment and issues

Monday, 13 February 2012 13:45 (35 minutes)

Presenter: COLEMAN, Rick (Fermilab)

Session Classification: Superconducting Magnets in High Radiation Environment

Contribution ID: 3

Type: **not specified**

Superconducting magnets of the Mu2e experiment

Monday, 13 February 2012 16:30 (30 minutes)

Presenter: LAMM, Michael (Fermilab)

Session Classification: Superconducting Magnets in High Radiation Environment

Contribution ID: 4

Type: **not specified**

Mu2e production solenoid design

Monday, 13 February 2012 17:00 (30 minutes)

Presenter: KASHIKHIN, Vadim (Fermilab)

Session Classification: Superconducting Magnets in High Radiation Environment

Contribution ID: 5

Type: **not specified**

Discussion

Contribution ID: 6

Type: **not specified**

Superconducting Magnets for the FRIB Fragment Separator

Monday, 13 February 2012 14:55 (35 minutes)

Presenter: ZELLER, AI (FRIB, MSU)

Session Classification: Superconducting Magnets in High Radiation Environment

Contribution ID: 7

Type: **not specified**

Radiation damage issues for Muon Collider target system magnets

Presenter: MCDONALD, Kirk (Princeton)

Contribution ID: 8

Type: **not specified**

HTS-based quadrupoles

Monday, 13 February 2012 16:00 (30 minutes)

Presenter: GUPTA, Ramesh (BNL)

Session Classification: Superconducting Magnets in High Radiation Environment

Contribution ID: 9

Type: **not specified**

Discussion

Monday, 13 February 2012 17:30 (30 minutes)

Session Classification: Superconducting Magnets in High Radiation Environment

Contribution ID: **10**

Type: **not specified**

Superconducting magnets in J-PARC and their radiation protections

Tuesday, 14 February 2012 09:05 (35 minutes)

Presenter: OGITSU, Toru (KEK)

Session Classification: Radiation Effects in Magnets

Contribution ID: 11

Type: **not specified**

Review of WAMSDO-2011 workshop: superconductors in LHC upgrade

Tuesday, 14 February 2012 09:40 (35 minutes)

Presenter: FLUKIGER, Rene (CERN)

Session Classification: Radiation Effects in Magnets

Contribution ID: 12

Type: **not specified**

The effect of neutron and gamma radiation on magnet components

Tuesday, 14 February 2012 10:55 (35 minutes)

Presenter: EISTERER, Michael (ATI)

Session Classification: Radiation Effects in Magnets

Contribution ID: **13**

Type: **not specified**

Discussion

Contribution ID: 14

Type: **not specified**

Evaluation of radiation resistance for organic materials used in atomic energy-related facilities

Tuesday, 14 February 2012 11:30 (30 minutes)

Presenter: IDESAKI, Akira (JAEA)

Session Classification: Radiation Effects in Magnets

Contribution ID: 15

Type: **not specified**

Damage of NdFeB Permanent Magnets under Neutron Irradiation at the Brookhaven Linear Isotope Producer

Tuesday, 14 February 2012 12:00 (30 minutes)

Presenter: SIMOS, Nick (BNL)

Session Classification: Radiation Effects in Magnets

Contribution ID: **16**

Type: **not specified**

Discussion

Contribution ID: 17

Type: **not specified**

Advanced tools for physics-based modeling of radiation effects

Tuesday, 14 February 2012 13:30 (35 minutes)

Presenters: FEDOSEYEV, Alex (CFDRC); TUROWSKI, Marek (CFDRC)

Session Classification: Modeling Radiation Effects in Magnets and Material Response

Contribution ID: **18**

Type: **not specified**

Radiation effect modeling: status, uncertainties and benchmarking needs

Tuesday, 14 February 2012 14:05 (30 minutes)

Presenter: Dr MOKHOV, Nikolai (Fermilab)

Session Classification: Modeling Radiation Effects in Magnets and Material Response

Contribution ID: **19**

Type: **not specified**

Improved description of ion stopping power in compounds

Tuesday, 14 February 2012 14:35 (25 minutes)

Presenter: RAKHNO, Igor (Fermilab)

Session Classification: Modeling Radiation Effects in Magnets and Material Response

Contribution ID: 20

Type: **not specified**

Radiation damage calculation in PHITS over a wide energy range

Tuesday, 14 February 2012 15:00 (30 minutes)

Presenter: IWAMOTO, Yosuke (JAEA)

Session Classification: Modeling Radiation Effects in Magnets and Material Response

Contribution ID: 21

Type: **not specified**

Radiation studies for Mu2e magnets

Tuesday, 14 February 2012 16:00 (30 minutes)

Presenter: PRONSKIKH, Vitaly (Fermilab)

Session Classification: Modeling Radiation Effects in Magnets and Material Response

Contribution ID: 22

Type: **not specified**

Radiation environment and lifetime estimates for FRIB fragment separator superconducting magnets

Tuesday, 14 February 2012 16:30 (30 minutes)

Presenter: RONNINGEN, Reg (FRIB, MSU)

Session Classification: Modeling Radiation Effects in Magnets and Material Response

Contribution ID: 23

Type: **not specified**

Moving from DPA to changes in materials properties

Tuesday, 14 February 2012 17:00 (30 minutes)

Presenter: LI, Meimei (ANL)

Session Classification: Modeling Radiation Effects in Magnets and Material Response

Contribution ID: 24

Type: **not specified**

Discussion

Tuesday, 14 February 2012 17:30 (30 minutes)

Session Classification: Modeling Radiation Effects in Magnets and Material Response

Contribution ID: 25

Type: **not specified**

Low temperature irradiation tests on stabilizer materials using reactor neutrons at KUR

Wednesday, 15 February 2012 08:30 (45 minutes)

Presenter: YOSHIDA, Makoto (KEK)

Session Classification: Irradiation Tests and Benchmarking Experiments

Contribution ID: 26

Type: **not specified**

Irradiation requirements of Nb₃Sn based SC magnets electrical insulation developed within the EuCARD program

Wednesday, 15 February 2012 09:15 (45 minutes)

Presenter: CHOROWSKI, Maciej (WUT)

Session Classification: Irradiation Tests and Benchmarking Experiments

Contribution ID: 27

Type: **not specified**

Irradiation test of electrical insulation materials performed at NCBJ, Poland

Wednesday, 15 February 2012 10:30 (40 minutes)

Presenter: POLINSKI, Jaroslaw (WUT)

Session Classification: Irradiation Tests and Benchmarking Experiments

Contribution ID: 28

Type: **not specified**

Beam test possibilities in Japan

Wednesday, 15 February 2012 11:10 (40 minutes)

Presenter: NAKAMOTO, Tatsushi (KEK)

Session Classification: Irradiation Tests and Benchmarking Experiments

Contribution ID: 29

Type: **not specified**

Beam test possibilities at JINR and Fermilab

Wednesday, 15 February 2012 11:50 (40 minutes)

Presenter: Dr PRONSKIKH, Vitaly (Fermilab)

Session Classification: Irradiation Tests and Benchmarking Experiments

Contribution ID: **30**

Type: **not specified**

Discussion

Wednesday, 15 February 2012 15:30 (30 minutes)

Session Classification: General Discussion

Contribution ID: **31**

Type: **not specified**

Action items

Contribution ID: **32**

Type: **not specified**

Planning session

Uploading talks, convener's job, collaboration possibilities

Contribution ID: 33

Type: **not specified**

Radiation damage issues for Muon Collider target system magnets

Monday, 13 February 2012 14:20 (35 minutes)

Presenter: MCDONALD, Kirk (Princeton)

Session Classification: Superconducting Magnets in High Radiation Environment

Contribution ID: **34**

Type: **not specified**

Discussion

Tuesday, 14 February 2012 10:15 (15 minutes)

Session Classification: Radiation Effects in Magnets

Contribution ID: 35

Type: **not specified**

Project X physics program and high-power beam issues

Tuesday, 14 February 2012 08:30 (35 minutes)

Presenter: TSCHIRHART, Bob (Fermilab)

Session Classification: Radiation Effects in Magnets

Contribution ID: 36

Type: **not specified**

Superconducting Magnets in High Radiation Environment

Wednesday, 15 February 2012 13:30 (25 minutes)

Presenter: Dr LAMM, Michael (Fermilab)

Session Classification: Convener's Summary

Contribution ID: 37

Type: **not specified**

Radiation Effects in Magnets

Wednesday, 15 February 2012 13:55 (25 minutes)

Presenter: NAKAMOTO, Tatsushi (KEK)

Session Classification: Convener's Summary

Contribution ID: 38

Type: **not specified**

Modeling radiation effects in magnets and material response

Wednesday, 15 February 2012 14:20 (25 minutes)

Presenter: Dr MOKHOV, Nikolai (Fermilab)

Session Classification: Convener's Summary

Contribution ID: 39

Type: **not specified**

Irradiation tests and benchmarking experiments

Wednesday, 15 February 2012 14:45 (25 minutes)

Presenter: OGITSU, Toru (KEK)

Session Classification: Convener's Summary

Contribution ID: 40

Type: **not specified**

Plans and Action Items

Wednesday, 15 February 2012 17:00 (30 minutes)

Session Classification: Action Items