

**Workshop on Radiation
Effects in Superconducting
Magnet Materials 2015
(RESMM'15)**

Report of Contributions

Contribution ID: 1

Type: **Abstract**

Measurement of the damage rate of copper irradiated with 125 MeV protons at 12 K and comparison with calculated result with the PHITS code

Wednesday, 13 May 2015 09:00 (45 minutes)

Primary author: Dr IWAMOTO, Yosuke (Japan Atomic Energy Agency)

Co-authors: Dr TAKAHASHI, Fumiaki (Japan Atomic Energy Agency); Dr YASHIMA, Hiroshi (Kyoto University Research Reactor Institute (KURRI)); Dr YOSHIDA, Makoto (KEK); Mr SAKAMOTO, Masaaki (Kyoto University Research Reactor Institute (KURRI)); Dr XU, Qiu (Kyoto University Research Reactor Institute (KURRI)); Prof. NAKAMOTO, Tatsushi (KEK); Dr UESUGI, Tomonori (Kyoto University Research Reactor Institute (KURRI)); Prof. OGITSU, Toru (KEK); Dr YOSHIIE, Toshimasa (Kyoto University Research Reactor Institute (KURRI)); Dr KURIYAMA, Yasutoshi (Kyoto University Research Reactor Institute (KURRI)); Prof. MORI, Yoshiharu (Kyoto University Research Reactor Institute (KURRI)); Dr ISHI, Yoshihiro (Kyoto University Research Reactor Institute (KURRI))

Presenter: Dr IWAMOTO, Yosuke (Japan Atomic Energy Agency)

Session Classification: Session C: Benchmark Experiments

Track Classification: Benchmarking Experiments

Contribution ID: 2

Type: **Abstract**

Correlation between the dpa number and Tc in Nb₃Sn wires for HL-LHC

Tuesday, 12 May 2015 09:45 (45 minutes)

Primary authors: Prof. FLUKIGER, Rene (CERN); Ms SPINA, Tiziana (CERN)

Co-authors: Dr BALLARINO, Amalia (CERN); Dr LECHNER, Anton (CERN); Dr SCHEUERLEIN, Christian (CERN); Dr RICHTER, David (CERN); Dr CERUTTI, Francesco (CERN); Dr BOTTURA, Luca (CERN); Dr ESPOSITO, Luigi Salvatore (CERN)

Presenter: Ms SPINA, Tiziana (CERN)

Session Classification: Session B: Modeling - II

Track Classification: Modeling of Radiation Effects in Magnets and Material Response

Contribution ID: 3

Type: **Abstract**

Study on Magnesium Diboride SC Links for HL-LHC

Tuesday, 12 May 2015 11:35 (45 minutes)

Primary author: Mr BIGNAMI, Andrea (INFN-LASA Milan)

Presenter: Mr BIGNAMI, Andrea (INFN-LASA Milan)

Session Classification: Session B: Modeling - II

Track Classification: Modeling of Radiation Effects in Magnets and Material Response

Contribution ID: 4

Type: **Abstract**

Study of the Displacement per atom in the n-alpha Reaction on MgB2 in the frame of Hi-Lumi LHC Project

Tuesday, 12 May 2015 10:50 (45 minutes)

Primary author: BROGGI, Francesco (INFN Milano - LASA)

Co-author: Mr BIGNAMI, Andrea (INFN-LASA Milan)

Presenter: BROGGI, Francesco (INFN Milano - LASA)

Session Classification: Session B: Modeling - II

Track Classification: Modeling of Radiation Effects in Magnets and Material Response

Contribution ID: 5

Type: **Abstract**

Radiation Heat Load and Coil Lifetime Calculations in Support of FRIB Dipole Magnet Design

Monday, 11 May 2015 16:35 (45 minutes)

Primary author: Dr GEORGOBIANI, Dali (FRIB/MSU)

Co-authors: Dr HAUSMANN, Marc (Michigan State University); Dr PORTILLO, Mauricio (Michigan State University)

Presenter: Dr GEORGOBIANI, Dali (FRIB/MSU)

Session Classification: Session B: Modeling - I

Track Classification: Modeling of Radiation Effects in Magnets and Material Response

Contribution ID: 6

Type: **Abstract**

Beam-Related Design Limits for Superconducting Magnets

Monday, 11 May 2015 11:00 (20 minutes)

Primary author: Dr MOKHOV, Nikolai (Fermilab)

Presenter: Dr MOKHOV, Nikolai (Fermilab)

Session Classification: Session A: Superconducting Magnet Designs

Track Classification: Design of Superconducting Magnets for High Radiation Environment

Contribution ID: 7

Type: **Abstract**

The FRIB Fragment Separator Status

Monday, 11 May 2015 09:45 (45 minutes)

Primary author: Dr BURKHARDT, Earle (FRIB)

Co-authors: Dr ZELLER, Al (FRIB, MSU); Dr GEORGOBIANI, Dali (FRIB/MSU); Mr COLE, Daniel (FRIB); BOLLEN, Georg (Michigan State University); Dr RONNINGEN, Reginald (Facility for Rare Isotope Beams, Michigan State University); Mr SWANSON, Richard (FRIB); Dr CHOUHAN, Shailendra (FRIB); Mr BORDEN, Tom (FRIB)

Presenter: Dr BURKHARDT, Earle (FRIB)

Session Classification: Session A: Superconducting Magnet Designs

Track Classification: Design of Superconducting Magnets for High Radiation Environment

Contribution ID: 8

Type: **Abstract**

Roadmap to Determine the Damage Limit of Superconducting Magnets for Instantaneous Beam Losses

Wednesday, 13 May 2015 10:50 (45 minutes)

Primary author: Dr WOLLMANN, Daniel (CERN)

Co-authors: Dr VERWEIJ, Arjan (CERN); Dr AUCHMANN, Bernhard (CERN); Mr RAGINEL, Vivien (CERN)

Presenter: Dr WOLLMANN, Daniel (CERN)

Session Classification: Session C: Benchmark Experiments

Track Classification: Benchmarking Experiments

Contribution ID: 9

Type: **Abstract**

Progress of COMET Superconducting Solenoid System

Monday, 11 May 2015 09:00 (45 minutes)

Primary author: Dr YOSHIDA, Makoto (KEK)

Co-author: Mr YANG, Ye (Kyushu Univ.)

Presenter: Dr YOSHIDA, Makoto (KEK)

Session Classification: Session A: Superconducting Magnet Designs

Track Classification: Design of Superconducting Magnets for High Radiation Environment

Contribution ID: 10

Type: **Abstract**

Recent neutron irradiation experiments on HTS coated conductors and Nb₃Sn wires

Wednesday, 13 May 2015 09:45 (45 minutes)

Primary author: Dr EISTERER, Michael (Atominstitut, Vienna University of Technology)

Co-authors: FISCHER, David (Atominstitut, Vienna University of Technology); WEBER, Harald W. (Atominstitut, Vienna University of Technology); PROKOPEC, Rainer (Atominstitut, Vienna University of Technology); BAUMGARTNER, Thomas (Atominstitut, Vienna University of Technology)

Presenter: Dr EISTERER, Michael (Atominstitut, Vienna University of Technology)

Session Classification: Session C: Benchmark Experiments

Track Classification: Benchmarking Experiments

Contribution ID: 11

Type: **Abstract**

RESMM

Monday, 11 May 2015 15:30 (45 minutes)

Primary author: Dr EIDELMAN, Yury (Fermilab)

Co-author: Dr MOKHOV, Nikolai (Fermilab)

Presenter: Dr MOKHOV, Nikolai (Fermilab)

Session Classification: Session B: Modeling - I

Track Classification: Modeling of Radiation Effects in Magnets and Material Response

Contribution ID: 12

Type: **Abstract**

DPA and power density constraints for Mu2e @ PIP-II design

Tuesday, 12 May 2015 09:00 (45 minutes)

Primary author: Dr PRONSKIKH, Vitaly (Fermilab)

Presenter: Dr PRONSKIKH, Vitaly (Fermilab)

Session Classification: Session B: Modeling - II

Track Classification: Modeling of Radiation Effects in Magnets and Material Response

Contribution ID: 13

Type: **Abstract**

Radiation Heat Deposition in LHC IR Quadrupoles

Monday, 11 May 2015 13:00 (45 minutes)

Primary author: Mr NOVITSKI, Igor (Fermilab)

Presenter: Mr NOVITSKI, Igor (Fermilab)

Session Classification: Session A: Superconducting Magnet Designs

Track Classification: Design of Superconducting Magnets for High Radiation Environment

Contribution ID: 14

Type: **Abstract**

Reference Design of the Mu2e Production Solenoid

Monday, 11 May 2015 13:45 (45 minutes)

Primary author: Mr KASHIKHIN, Vadim (Fermilab)

Presenter: Mr KASHIKHIN, Vadim (Fermilab)

Session Classification: Session A: Superconducting Magnet Designs

Track Classification: Design of Superconducting Magnets for High Radiation Environment