

# **The 2014 Kyoto Workshop on HTS Magnet Technology for High Energy Physics –The 2nd Workshop on Accelerator Magnet in HTS (WAMHTS-2) –**



## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## Welcome and scope of the workshop

*Thursday, 13 November 2014 09:00 (15 minutes)*

**Presenter:** AMEMIYA, Naoyuki (Kyoto University)

**Session Classification:** Opening and Introduction

Contribution ID: 2

Type: **not specified**

## Report from WAMHTS-1

*Thursday, 13 November 2014 09:15 (30 minutes)*

**Presenter:** ROSSI, Lucio (CERN)

**Session Classification:** Opening and Introduction

Contribution ID: 3

Type: **not specified**

## **Challenges and opportunities for the development of HTS magnets for High Energy Physics**

*Thursday, 13 November 2014 14:40 (30 minutes)*

**Presenter:** WANG, Xiaorong (Lawrence Berkeley National Laboratory)

**Session Classification:** R&D for HTS Accelerator Magnets (2)

Contribution ID: 4

Type: **not specified**

## **Conductor progress in Eucard2**

*Thursday, 13 November 2014 09:45 (30 minutes)*

**Presenter:** SENATORE, Carmine

**Session Classification:** Opening and Introduction

Contribution ID: 5

Type: **not specified**

## Structural design of Eucard2 magnets

*Thursday, 13 November 2014 10:45 (30 minutes)*

**Presenter:** DURANTE, Maria (CEA/IRFU,Centre d'etude de Saclay Gif-sur-Yvette (FR))

**Session Classification:** R&D for HTS Accelerator Magnets (1)

Contribution ID: 6

Type: **not specified**

## **Considerations during the development of a HTS research accelerator magnet**

*Thursday, 13 November 2014 11:15 (30 minutes)*

**Presenter:** KIRBY, Glyn (CERN)

**Session Classification:** R&D for HTS Accelerator Magnets (1)

Contribution ID: 7

Type: **not specified**

## **Electrical Network Model for ReBCO Cables and Coils**

*Thursday, 13 November 2014 11:45 (30 minutes)*

**Presenter:** VAN NUGTEREN, Jeroen (Twente Technical University (NL))

**Session Classification:** R&D for HTS Accelerator Magnets (1)



Contribution ID: 8

Type: **not specified**

## **Design of alternative cos-theta magnet with Roebel cable**

*Thursday, 13 November 2014 12:15 (30 minutes)*

**Presenter:** LORIN, Clement (CEA/IRFU,Centre d'etude de Saclay Gif-sur-Yvette (FR))

**Session Classification:** R&D for HTS Accelerator Magnets (1)

Contribution ID: 9

Type: **not specified**

## **HTS magnets for the 100TeV FCC-hh accelerator**

*Thursday, 13 November 2014 14:10 (30 minutes)*

**Presenter:** TODESCO, Ezio (CERN)

**Session Classification:** R&D for HTS Accelerator Magnets (2)

Contribution ID: **10**

Type: **not specified**

## **Development of a 19 T block-coil hybrid dipole for a 100 TeV hadron collider**

**Presenter:** MCINTYRE, Peter (Texas A&M University)

Contribution ID: 11

Type: **not specified**

## **Investigation of HTS Roebel Cable strand alignment within coils and during coil winding**

*Thursday, 13 November 2014 16:40 (30 minutes)*

**Presenter:** LONG, Nicholas (Victoria University of Wellington)

**Session Classification:** CC Coils / Magnets

Contribution ID: 12

Type: **not specified**

## **Recent Results in High Field HTS Magnet Technology**

*Thursday, 13 November 2014 17:10 (30 minutes)*

**Presenter:** GUPTA, Ramesh (BNL)

**Session Classification:** CC Coils / Magnets

Contribution ID: 13

Type: **not specified**

## **Magnet technology in the NHMFL 32 T HTS-LTS solenoid**

*Thursday, 13 November 2014 17:40 (30 minutes)*

**Presenter:** WEIJERS, Hubertus (NHMFL/FSU)

**Session Classification:** CC Coils / Magnets

Contribution ID: 14

Type: **not specified**

## **Detail design of 25T cryogen-free superconducting magnet at Tohoku University**

*Thursday, 13 November 2014 18:10 (30 minutes)*

**Presenter:** AWAJI, Satoshi (u)

**Session Classification:** CC Coils / Magnets

Contribution ID: 15

Type: **not specified**

## **R&D of fundamental technologies of accelerator magnets using coated conductors**

*Friday, 14 November 2014 08:30 (30 minutes)*

**Presenter:** AMEMIYA, Naoyuki (Kyoto University)

**Session Classification:** R&D for HTS Accelerator Magnets (3)



Contribution ID: 16

Type: **not specified**

## Canted cos-theta magnets

*Friday, 14 November 2014 09:30 (30 minutes)*

**Presenter:** CASPI, Shlomo (Lawrence Berkeley National Lab. (US))

**Session Classification:** R&D for HTS Accelerator Magnets (3)

Contribution ID: 17

Type: **not specified**

## **HTS magnets in high radiation areas**

*Friday, 14 November 2014 09:00 (30 minutes)*

**Presenter:** ZELLER, AI (M)

**Session Classification:** R&D for HTS Accelerator Magnets (3)

Contribution ID: 18

Type: **not specified**

## **Bi-2212 high-field magnet technology at Fermilab: Prototype overpressure processing coil fabrication and quench protection studies**

*Friday, 14 November 2014 10:00 (30 minutes)*

**Presenter:** SHEN, Tengming (Fermilab)

**Session Classification:** R&D for HTS Accelerator Magnets (3)

Contribution ID: 19

Type: **not specified**

## **Bi-2212 round wire processed with over-pressure for accelerator magnet applications**

*Friday, 14 November 2014 11:00 (20 minutes)*

**Presenter:** MATRAS, Maxime

**Session Classification:** HTS Test Coils

Contribution ID: 20

Type: **not specified**

## **Recent progress towards high field magnets using Bi-2212/Ag-alloy multifilament round wire**

*Friday, 14 November 2014 11:20 (20 minutes)*

**Presenter:** CHEN, Peng

**Session Classification:** HTS Test Coils

Contribution ID: 21

Type: **not specified**

## **Recent progress of coil applications using DI-BSCCO wires at Sumitomo Electric**

*Friday, 14 November 2014 11:40 (30 minutes)*

**Presenter:** HAYASHI, Kazuhiko

**Session Classification:** HTS Test Coils

Contribution ID: 22

Type: **not specified**

## **Recent progress in R&D of REBCO coated conductors and coils at Fujikura**

*Friday, 14 November 2014 12:10 (30 minutes)*

**Presenter:** DAIBO, Masanori

**Session Classification:** HTS Test Coils

Contribution ID: 23

Type: **not specified**

## **YBCO high temperature superconducting coil development for various applications at Toshiba**

*Friday, 14 November 2014 12:40 (30 minutes)*

**Presenter:** TASAKI, Kenji

**Session Classification:** HTS Test Coils



Contribution ID: 24

Type: **not specified**

## **Key issues for advancing high field superconducting magnets: quench detection, degradation limits, and ancillary technology development**

*Friday, 14 November 2014 14:45 (30 minutes)*

**Presenter:** SCHWARTZ, Justin (NC State University)

**Session Classification:** Stability and Protection

Contribution ID: 25

Type: **not specified**

## **Quench propagation in the second generation HTS coils**

**Presenter:** LALITHA, Seetha L.

Contribution ID: 26

Type: **not specified**

## **Modeling thermal propagation and quench behavior in a protection heater covered YBCO coil**

*Friday, 14 November 2014 14:25 (20 minutes)*

**Presenter:** SALMI, Tiina (Tampere University of Technology, Finland)

**Session Classification:** Stability and Protection

Contribution ID: 27

Type: **not specified**

## **Quench & protection: modelling and review of tooling**

*Friday, 14 November 2014 15:15 (30 minutes)*

**Presenter:** SORBI, Massimo (Universita degli Studi di Milano)

**Session Classification:** Stability and Protection

Contribution ID: 28

Type: **not specified**

## **State of the art and future challenges for the quench detection and protection of accelerator superconducting magnet circuits**

*Friday, 14 November 2014 15:45 (30 minutes)*

**Presenter:** SIEMKO, Andrzej (CERN)

**Session Classification:** Stability and Protection

Contribution ID: 29

Type: **not specified**

## **Latest developments, comments, suggestions**

*Friday, 14 November 2014 16:45 (20 minutes)*

**Session Classification:** Discussion

Contribution ID: **30**

Type: **not specified**

## **Discussion**

*Friday, 14 November 2014 17:05 (1 hour)*

**Session Classification:** Discussion

Contribution ID: **31**

Type: **not specified**

## **Lab. Tour**



Contribution ID: 32

Type: **not specified**

## **High Temperature Superconductors for Magnets**

*Wednesday, 12 November 2014 15:45 (1h 15m)*

**Presenter:** LARBALESTIER, David (National High Magnetic Field Laboratory)

**Session Classification:** Seminar

Contribution ID: 33

Type: **not specified**

## **Summary of the CERN Workshop on Beam-Induced Quenches**

*Wednesday, 12 November 2014 17:00 (45 minutes)*

**Presenter:** Dr TODESCO, Ezio (CERN)

**Session Classification:** Seminar