Oral Sessions

Accelerator / Fusion

Chairpersons: Amalia Ballarino (CERN) and Tetsuhiro OBANA (NIFS)

AP5-1-INV 9:45–10:15

Future Plan of Large Accelerators and Requiments to Superconducting Magnets

*Toru Ogitsu

KEK

AP5-2-INV 10:15–10:45

Design and Test Results of Superconducting Magnet for Heavy-Ion Rotating-Gantry

*Shigeki Takayama[1], Kei Koyanagi[1], Hiroshi Miyazaki[1], Shohei Takami[1], Tomofumi Orikasa[1], Yusuke Ishii[1], Tsutomu Kurusu[1], Yoshiyuki Iwata[2], Koji Noda[2], Kento Suzuki[3], Toru Ogitsu[3], Naoyuki Amemiya[4]

1. Toshiba Corporation; 2. National Institute of Radiological Science; 3. High Energy Accelerator Research Organization; 4. Faculty of Engineering, Kyoto University

AP5-3 10:45–11:00

Stability Analysis of the 100 kA-class HTS Conductor for the Helical Fusion Reactor FFHR-d1

*Yoshiro TERAZAKI[1], Nagato YANAGI[2], Satoshi ITO[3], Shinji HAMAGUCHI[2], Hitoshi TAMURA[2], Toshiyuki MITO[2], Hidetoshi HASHIZUME[3], Akio SAGARA[2]

1. The Graduate University for Advanced Studies; 2. National Institute for Fusion Science; 3. Tohoku University

Power application

Chairpersons: Santiago Sanz (TECNALIA) and Akihisa Miyazoe (Hitachi)

AP6-1-INV 11:15–11:45

Current status of MgB_2 cable applications in Europe

*Amalia Ballarino

CERN, European Organization for Nuclear Research, Geneva, Switzerland

AP6-2 11:45–12:00

Detection of Local Temperature Change on HTS Cables via Time-Frequency Domain Reflectometry

*Su Sik Bang[1], Geon Seok Lee[1], Gu-Young Kwon[1], Yeong Ho Lee[1], Gyeong Hwan Ji[1], Songho Sohn[2], Kijun Park[2], Yong-June Shin[1]

1. School of Electrical and Electronic Engineering, Yonsei University; 2. Korea Electric Power Corporation Research Institute

AP6-3 12:00–12:15

Experimental and Analytical Investigation of Transient Properties of RE-123 Coated Conductors in Fault Current Limiting Operation

*Shogo Urasaki[1], Masahiro Tajima[1], Kohei Higashikawa[1], Masayoshi Inoue[1], Yusuke Fukumoto[2], Masaru Tomita[2], Takanobu Kiss[1]

1. Kyushu University; 2. Railway Technical Research Institute

AP6-4 12:15–12:30

Development Progress of a 220kV Resistive-type Superconducting Fault Current Limiter

*Shaotao Dai[1], Liye Xiao[2], Jingye Zhang[2], Yuping Teng[2], Bangzhu Wang[1], Liangzhen Lin[2]

1. Beijing Jiaotong Univeristy; 2. Institute of Electrical Engineering, CAS

AP6-5 12:30–12:45

Applying Energy-Based Control Strategy to SMES System in Microgrids for Eddy Current Losses Reduction

*Rui Hou[1, 2], Thai-Thanh Nguyen[1], Hak-Man Kim[1], Huihui Song[2], Yanbin Qu[2]

1. Incheon National University, Korea; 2. Harbin Institute of Technology (Weihai), China