CHATS on Applied Superconductivity 2013

Report of Contributions

Contribution ID: **6** Type: **not specified**

Process Analyses of ITER Toroidal Field Structure Cooling Scheme

Wednesday 9 October 2013 09:00 (30 minutes)

Presenter: MAEKAWA

Contribution ID: **7** Type: **not specified**

Cross comparison of thermo-hydraulic analysis of the ITER magnets using two code systems

Wednesday 9 October 2013 09:30 (30 minutes)

Presenter: GAUTHIER

Contribution ID: **8** Type: **not specified**

“Transverse heat transfer coefficient in the dual channel ITER TF CICCs. Part II. Analysis of transient temperature responses observed during heat slug propagation tests

Wednesday 9 October 2013 10:00 (30 minutes)

Presenter: LEWANDOWSKA

Contribution ID: **9** Type: **not specified**

Artificial Neural Network (ANN) Modeling of the Pulsed Heat Load during ITER CS Magnet Operation

Wednesday 9 October 2013 10:30 (30 minutes)

Presenter: SAVOLDI - RICHARD

Contribution ID: **10** Type: **not specified**

Simplified dynamic model of the heat loads on the ITER magnet system

Wednesday 9 October 2013 11:00 (30 minutes)

Presenter: LUONGO

Contribution ID: **11** Type: **not specified**

Application of the 4C code to the thermal-hydraulic analysis of the CS superconducting magnets in EAST

Wednesday 9 October 2013 11:30 (30 minutes)

Presenter: ZANINO

Contribution ID: **12** Type: **not specified**

Investigations about Helium Mass Expulsion and Heat Exchange Coefficients in CICCS: Predictive Analysis on Possible Experiments in HELIOS

Wednesday 9 October 2013 12:00 (30 minutes)

Presenter: NICOLLET

Contribution ID: **13** Type: **not specified**

Zero Dimensional Approach to Investigate the Thermal Stability of Superconducting Cables

Wednesday 9 October 2013 14:00 (30 minutes)

Presenter: GRANIERI

Contribution ID: **14** Type: **not specified**

Experiment Proposal to Quantify the Thermal Response of Superconducting Cable Stacks to Pulse Heat Loads

Wednesday 9 October 2013 14:30 (30 minutes)

Presenter: WINKLER

Contribution ID: **15** Type: **not specified**

Analysis of stability margins of four ITER Central Solenoid conductor designs during a 15 MA plasma scenario with JackPot-ACDC

Wednesday 9 October 2013 15:00 (30 minutes)

Presenter: NIJHUIS

Contribution ID: **16** Type: **not specified**

Advances in Numerical Coding of Two Fluid HeII Model

Wednesday 9 October 2013 15:30 (30 minutes)

Presenter: VAN WEELDEREN

Contribution ID: **17** Type: **not specified**

Modeling of radio frequency heating and current drive in tokamaks in the ion cyclotron and lower hybrid frequency ranges. Massively parallel programming, integrated multiscale, multiphysics modelling

Thursday 10 October 2013 09:00 (1 hour)

Presenter: WRIGHT

Contribution ID: **18** Type: **not specified**

Quench modeling in accelerator magnets using a general-purpose code system

Thursday 10 October 2013 10:00 (30 minutes)

Presenter: BOTTURA

Contribution ID: **19** Type: **not specified**

A computer code for comprehensive analysis of quench in pool-cooled and adiabatic superconducting multi-coil magnets

Thursday 10 October 2013 10:30 (30 minutes)

Presenter: GRAVILIN

Contribution ID: **20** Type: **not specified**

Thermal and flow processes in cryogenic systems following failure modes combined with superconducting magnets resistive transitions

Thursday 10 October 2013 11:00 (30 minutes)

Presenter: CHOROWSKI

Contribution ID: **21** Type: **not specified**

Influence of HTS Wire and Coil Configuration on Quench Propagation

Thursday 10 October 2013 11:30 (30 minutes)

Presenter: MASSON

Contribution ID: **22** Type: **not specified**

First Experience with the New Coupling Loss Induced Quench System

Thursday 10 October 2013 12:00 (30 minutes)

Presenter: RAVAIOLI

Contribution ID: **23** Type: **not specified**

Hot spot temperature experiment for a cable-in-conduit conductor with thick conduit

Thursday 10 October 2013 12:30 (30 minutes)

Presenter: SEDLAK

Contribution ID: **24** Type: **not specified**

QXF protection challenges, current analysis and key parameters/assumptions being used

Thursday 10 October 2013 14:30 (30 minutes)

Contribution ID: **25** Type: **not specified**

New approaches to heater design, comparison with existing ones, and plans for validation in model magnets

Thursday 10 October 2013 15:00 (30 minutes)

Contribution ID: **26** Type: **not specified**

An approximate electromagnetic model for superconducting helically wound cables and cable-in-conduit conductors

Thursday 10 October 2013 15:30 (30 minutes)

Presenter: RODRIGUEZ-ZERMENO

Contribution ID: **27** Type: **not specified**

Effect of combination of twist pitches on distribution of strands appearing on cable surface in CICC

Thursday 10 October 2013 16:00 (30 minutes)

Presenter: MIYAGI

Contribution ID: **28** Type: **not specified**

A novel modeling of the critical current degradation of Nb3Sn PIT strand under transverse load based on Finite Element Analysis and strain scaling laws

Thursday 10 October 2013 16:30 (30 minutes)

Presenter: WANG

Contribution ID: **29** Type: **not specified**

2G HTS Properties Beyond Critical Current

Friday 11 October 2013 09:00 (30 minutes)

Presenter: HAZELTON

Contribution ID: **30** Type: **not specified**

Numerical models of HTS for AC loss computation: how far do we need to go?

Friday 11 October 2013 09:30 (30 minutes)

Presenter: GRILLI

Contribution ID: **31** Type: **not specified**

Magnetization losses due to any combination of rotating and alternating fields in superconducting filaments driven by a power-law voltage-current behavior

Friday 11 October 2013 10:00 (30 minutes)

Presenter: MASSON

Contribution ID: **32** Type: **not specified**

Multi-pole components of magnetic field in small dipole magnets wound with coated conductors

Friday 11 October 2013 10:30 (30 minutes)

Presenter: AMEMIYA, N.

Contribution ID: **33** Type: **not specified**

Finite Element Investigation of HTS Tapes for Twisted Stacked-Tape Cabling Methods

Friday 11 October 2013 11:00 (30 minutes)

Presenter: ALLEN, N.

Contribution ID: **34** Type: **not specified**

Quench Protection for High Temperature Superconducting Magnets based on Fiber Optic Distributed Temperature Sensing

Friday 11 October 2013 11:30 (30 minutes)

Presenter: CHAN