### TTC 2021, TESLA Technology Collaboration

### **Report of Contributions**

Welcome

Contribution ID: 99 Type: not specified

#### Welcome

Tuesday 19 January 2021 14:30 (15 minutes)

**Presenter:** WEISE, Hans (MSL (Supraleitende Beschleuniger Technologie))

Session Classification: Opening Plenary Session

Contribution ID: **100** Type: **not specified** 

### Introduction and update from last collaboration meeting

Tuesday 19 January 2021 14:45 (15 minutes)

#### **Summary**

**Presenter:** WEISE, Hans (MSL (Supraleitende Beschleuniger Technologie))

Session Classification: Opening Plenary Session

Contribution ID: **101** Type: **not specified** 

### Experience with SRF Gun Module operation and lessons learned for SRF CW ERL modules (15 + 5)

Tuesday 19 January 2021 15:00 (20 minutes)

Presenter: NEUMANN, Axel (HZB)

Session Classification: WG1 Session 1

Contribution ID: 102 Type: not specified

### SRF gun cryomodule testing at ANL (15 + 5)

Tuesday 19 January 2021 15:20 (20 minutes)

#### **Summary**

**Presenter:** Mr PETERSEN, Troy (Argonne National Lab)

Session Classification: WG1 Session 1

Contribution ID: 103 Type: not specified

## RF Performance and experience of the 1st series spoke cryomodule for ESS (15+5)

Tuesday 19 January 2021 15:40 (20 minutes)

Presenter: LI, Han (Uppsala)

Session Classification: WG1 Session 1

Contribution ID: 104 Type: not specified

### PIP-II Half-Wave Resonator Cryomodule Test Results (Pneumatic tuner, top-loading CM) (12+3)

Tuesday 19 January 2021 16:20 (15 minutes)

**Presenter:** OZELIS, Joe (Fermilab)

**Session Classification:** WG1 Session 2

Contribution ID: 105 Type: not specified

# Test results from PIP-II Single-Spoke Resonator 1 prototype cryomodule (Stepper+piezo tuner, end-loading CM) (12+3)

Tuesday 19 January 2021 16:35 (15 minutes)

Presenter: SUKHANOV, Alexander (Fermilab)

**Session Classification:** WG1 Session 2

Contribution ID: 106 Type: not specified

## In situ dynamic heat load measurements of the SPIRAL 2 LINAC superconducting cavities (12+3)

Tuesday 19 January 2021 16:50 (15 minutes)

**Presenter:** ADNAN, Ghribi (GANIL)

**Session Classification:** WG1 Session 2

Contribution ID: 107 Type: not specified

#### XFEL heat load measurements (12+3)

Tuesday 19 January 2021 17:05 (15 minutes)

Presenter: RAMALINGAM, Rajinikumar (DESY)

**Session Classification:** WG1 Session 2

Contribution ID: 108 Type: not specified

### LCLS-II cryomodule heat load measurements at Fermilab + JLAB (10+10+5)

Tuesday 19 January 2021 17:20 (25 minutes)

Presenters: HARMS, Elvin (Fermilab); DRURY, Michael (Jefferson Lab)

**Session Classification:** WG1 Session 2

Contribution ID: 109 Type: not specified

### Offline and online heat load measurements of FRIB cryomodules and performance after thermal cycling

Tuesday 19 January 2021 17:45 (15 minutes)

#### **Summary**

**Presenter:** KIM, Sang-Hoon (FRIB)

Session Classification: WG1 Session 2

Contribution ID: 110 Type: not specified

#### Operation/installation of QWR CMs at RIKEN (15+5)

Wednesday 20 January 2021 14:30 (20 minutes)

**Presenter:** Dr SAKAMOTO, Naruhiko (RIKEN Nishina Center)

**Session Classification:** WG1 Session 3

Contribution ID: 111 Type: not specified

### Power coupler issues in CM operation from RIKEN (12+3)

Wednesday 20 January 2021 14:50 (15 minutes)

Presenter: OZEKI, Kazutaka (RIKEN)

**Session Classification:** WG1 Session 3

Contribution ID: 112 Type: not specified

# Lessons learned from FRIB linac SRF commissioning: field calibration, mitigation of field emission, resonance control (12+3)

Wednesday 20 January 2021 15:05 (15 minutes)

Presenter: POPIELARSKI, John (FRIB)

**Session Classification:** WG1 Session 3

Contribution ID: 113 Type: not specified

# Cryomodule development at IMP-lessons learned from operation of C-ADS and recent design for HIAF project (15+5))

Wednesday 20 January 2021 15:20 (20 minutes)

**Presenter:** BAI, Feng (IMP)

Session Classification: WG1 Session 3

Contribution ID: 114 Type: not specified

# Dark current in high-gradient SRF linac and the irradiation heating in superconducting magnets for beam focusing (15+5)

Wednesday 20 January 2021 15:40 (20 minutes)

Presenters: YAMAMOTO, Akira (KEK/CERN); SOLYAK, Nikolay (Fermilab)

**Session Classification:** WG1 Session 3

Contribution ID: 115 Type: not specified

#### Experience with field emitters at EuXFEL (15+5)

Wednesday 20 January 2021 16:20 (20 minutes)

#### **Summary**

Presenter: WALKER, Nick (DESY)

Session Classification: WG1 Session 4

Contribution ID: 116 Type: not specified

# Effects of thermal cycling and recent changes to the vacuum interlocks for C100 cryomodules (15+5)

Wednesday 20 January 2021 16:40 (20 minutes)

**Presenter:** POWERS, Tom (JLAB)

Session Classification: WG1 Session 4

Contribution ID: 117 Type: not specified

#### **Experience in CBETA RF commissioning (15+5)**

Wednesday 20 January 2021 17:00 (20 minutes)

**Presenter:** BANERJEE, Nilanjan (Cornell)

Session Classification: WG1 Session 4

Contribution ID: 118 Type: not specified

#### Status of ARIEL SRF e-Linac Cryomodules (15+5) tbc

Wednesday 20 January 2021 17:20 (20 minutes)

#### **Summary**

**Presenters:** Mr YANYUN, Ma (TRIUMF); LAXDAL, Robert (TRIUMF)

Session Classification: WG1 Session 4

Contribution ID: 119 Type: not specified

#### SNS operational experience (15+5)

Wednesday 20 January 2021 17:40 (20 minutes)

#### **Summary**

**Presenter:** Mr MAMMOSSER, John (SNS)

Session Classification: WG1 Session 4

Contribution ID: 120 Type: not specified

## Grainboundary-Diffusion studies on Cavity Cut-Outs and Samples (12+3)

Tuesday 19 January 2021 15:00 (15 minutes)

Presenter: DANGWAL PANDEY, Arti (DESY Hamburg)

**Session Classification:** WG2 Session 1

Contribution ID: 121 Type: not specified

# Progress on modeling high-temperature nitrogen diffusion and nitride growth guided by SIMS, SEM, and AFM measurements (12+3)

Tuesday 19 January 2021 15:15 (15 minutes)

**Presenter:** LECHNER, Eric (JLAB)

Session Classification: WG2 Session 1

Contribution ID: 122 Type: not specified

# First insight on Internal Friction measures on Nb samples to study the precipitates esponsible of HFQS (12+3)

Tuesday 19 January 2021 15:30 (15 minutes)

Presenter: SPINA, Titziana (FNAL)

Session Classification: WG2 Session 1

Contribution ID: 123 Type: not specified

#### First results from beta-NMR for SRF samples (12+3)

Tuesday 19 January 2021 15:45 (15 minutes)

**Presenter:** THOENG, Edward (TRIUMF)

Session Classification: WG2 Session 1

Contribution ID: 124 Type: not specified

# High-Q performance of SRF cavities by mid-T furnace baking at KEK (15+5)

Tuesday 19 January 2021 16:20 (20 minutes)

Presenter: ITO, Hayato (KEK)

**Session Classification:** WG2 Session 2

Contribution ID: 125 Type: not specified

## Experimental study of simplified mid-T furnace baking at IHEP (15+5)

Tuesday 19 January 2021 16:40 (20 minutes)

Presenter: HE, Feisi (IHEP Beijing)

**Session Classification:** WG2 Session 2

Contribution ID: 126 Type: not specified

### High Q progess at PKU (15+5)

Tuesday 19 January 2021 17:00 (20 minutes)

Presenter: HAO, Jiankui (PKU)

**Session Classification:** WG2 Session 2

Contribution ID: 127 Type: not specified

## New results on N-doping applied to 5-cells low-beta 644 MHz cavities (15+5)

Tuesday 19 January 2021 17:20 (20 minutes)

**Presenter:** MCGEE, Kellen (FNAL / MSU) **Session Classification:** WG2 Session 2

Contribution ID: 128 Type: not specified

## Origins and Implications of the F vs T Dip in Nb Cavities (15+5)

Tuesday 19 January 2021 17:40 (20 minutes)

Presenter: BAFIA, Daniel (FNAL)

**Session Classification:** WG2 Session 2

Contribution ID: 129 Type: not specified

# Studies of the cool-down dynamics around Tc using a magnetic flux lens (12+3)

Wednesday 20 January 2021 14:30 (15 minutes)

Presenter: IVANOV, Anton (CERN)

**Session Classification:** WG2 Session 3

Contribution ID: 130 Type: not specified

### Study of possible frequency dependence of small AC fields on magnetic flux trapping in Niobium (12+3)

Wednesday 20 January 2021 14:45 (15 minutes)

Presenter: Dr KUGELER, Oliver (Helmholtz Zentrum Berlin)

**Session Classification:** WG2 Session 3

Contribution ID: 131 Type: not specified

## Dynamics of RF dissipation - High-speed temperature mapping (15+5)

Wednesday 20 January 2021 15:00 (20 minutes)

Presenter: PORTER, Ryan (Cornell)

**Session Classification:** WG2 Session 3

Contribution ID: 132 Type: not specified

### A New Model for Q Slope in Nb Cavities and Its Application to Production Resonators for FRIB (15+5)

Wednesday 20 January 2021 15:20 (20 minutes)

Presenter: SAITO, Kenji (FRIB)

**Session Classification:** WG2 Session 3

Contribution ID: 133 Type: not specified

#### New results from TEM test cavities (15+5)

Wednesday 20 January 2021 15:40 (20 minutes)

**Presenter:** KOLB, Philipp (TRIUMF)

**Session Classification:** WG2 Session 3

Contribution ID: 134 Type: not specified

#### Development of Coating System and First Cavity Performance Test for High-Efficiency Nb3Sn Superconducting Cavity (15+5)

Wednesday 20 January 2021 16:20 (20 minutes)

Presenter: TAKAHASHI, Kotaro (KEK)

Session Classification: WG2 Session 4

Contribution ID: 135 Type: not specified

#### Recent progress of Nb3Sn thin film SRF at IMP (15+5)

Wednesday 20 January 2021 16:40 (20 minutes)

**Presenter:** YANG, Ziqin (IMP)

Session Classification: WG2 Session 4

Contribution ID: 136 Type: not specified

### Nb3Sn and V3Si as thin films on Cu toward SRF applications (15+5)

Wednesday 20 January 2021 17:00 (20 minutes)

**Presenter:** FERNANDEZ, Stéphanie (CERN)

Session Classification: WG2 Session 4

Contribution ID: 137 Type: not specified

### Progresses on thin film deposition by ALD at IRFU/IJCLab (15+5)

Wednesday 20 January 2021 17:20 (20 minutes)

**Presenter:** BIRA, Sarra (IRFU/IJCLab)

Session Classification: WG2 Session 4

Contribution ID: 138 Type: not specified

#### ALD-Based NbTiN studies for SIS R&D (15+5)

Wednesday 20 January 2021 17:40 (20 minutes)

**Presenter:** GONZALEZ, Isabel (DESY)

Session Classification: WG2 Session 4

Contribution ID: 139 Type: not specified

#### **New SRF infrastructures in China**

Thursday 21 January 2021 14:30 (30 minutes)

(SHINE)

**Presenter:** WANG, Dong (SINAP)

Session Classification: Plenary Session

Contribution ID: 140 Type: not specified

#### XFEL operational experience

Thursday 21 January 2021 15:00 (30 minutes)

**Presenter:** BRANLARD, Julien (DESY)

Session Classification: Plenary Session

Contribution ID: 141 Type: not specified

### SRF challenges for the EIC project

Thursday 21 January 2021 15:30 (30 minutes)

#### **Summary**

Primary author: WU, Qiong (BNL)

**Presenter:** WU, Qiong (BNL)

Session Classification: Plenary Session

Contribution ID: 142 Type: not specified

### **WG1 Summary Report**

Thursday 21 January 2021 16:20 (20 minutes)

 $\textbf{Session Classification:} \ \ \textbf{Closing Plenary Session}$ 

Contribution ID: 143 Type: not specified

### **WG2 Summary Report**

Thursday 21 January 2021 16:40 (20 minutes)

Session Classification: Closing Plenary Session