Session Program

18–26 Sept 2025

SRF2025 TOKYO

22ND INTERNATIONAL CONFERENCE ON RF SUPERCONDUCTIVITY

September 21-26, 2025

SRF2025 - 22nd International Conference on RF Superconductivity

Tuesday Poster Session

Ito International Research Center
Tokyo

Tuesday 23 September

14:30

Tuesday Poster Session

Poster Session | **Location:** Ito International Research Center, Tokyo

Point contact tunneling spectroscopy for SRF applications

Speaker
Ivana Curci

Evolution of the ELBE SRF gun - improvements towards the 3rd generation

Speaker
Petr Murcek

Development of a 1.3 GHz RF research cavity for use in testing of superconducting thin films

Speaker
Nathan Leicester

Coming closer to high frequency gravitational waves detection with MAGO

Speaker
Giovanni Marconato

Implementation of embedded EPICS for MELSEC iQ-R in the SRILAC LLRF System

Speaker
Akito Uchiyama

Overview of metal cathode R&D for the CW L-band SRF photoinjector at DESY

Speaker
Elmar Vogel

Three years of operating the superconducting linac for the Linac Coherent Light Source (LCLS)

Speaker
Sebastian Aderhold

Developments for the RF transmission system for the ITN cryomodule

Speaker
Prakash Joshi

Photon frequency conversion in high-Q superconducting resonators: axion electrodynamics, QED, and nonlinear meissner radiation

Speaker
Hikaru Ueki

Search for dark matter with superconducting cavities and qubits

Speaker
Tatsumi Nitta

Development of wet nitrogen doping to improve the performance of half-wave resonators

Speaker
Kenji Saito

Specification, design, production including quality check and preparation for high-power test of input power couplers for SRF 5-year plan (MEXT-ATD) at KEK by global collaboration for ILC Technology Network (ITN)

Speaker
Yasuchika Yamamoto

Commissioning status of the RF power source for the LIPAc SRF linac

Speaker
Kouki Hirosawa

Predicting the critical fields of the vortex state in impure superconductors

Speaker
Lucas Wallace

Test stand for HELIAC cryomodules at GSI

Speaker
Thorsten Kuerzeder

Cavity compensation studies in the JAEA-ADS superconducting linac using LightWin

Speaker
Bruce Yee-Rendon

CEBAF 2023 linac plasma processing gradient and Qo results

Speaker
Michael McCaughan

LCLS-II-HE cavity and cryomodule test performance

Speaker
James Maniscalco

Beam characterization and lessons learned from beam commissioning prior to SRF linac integration

Speaker
Jibong Hyun

Application of the plasma processing technique to the ELBE SRF gun

Speaker
Andre Arnold

Identifying the connections between grain growth and flux expulsion in low RRR niobium SRF cavities

Speaker
Katrina Howard

Nb3Sn thin films for dark matter detection

Speaker
Andre Juliao

Development of in situ thickness sensor for vapor diffused Nb3Sn films

Speaker
Katrina Howard

Mechanically polishing electroplated Nb3Sn for higher accelerating gradients

Speaker
Liana Shpani

Measurements of the DC field of first vortex penetration on modern SRF materials using a vibrating sample magnetometer

Speaker
Lucas Wallace

Field emission and particulate contamination in TRIUMF’s superconducting accelerators

Speaker
Aveen Mahon

Quality factor analysis of surface-passivated cavities at low gradients applying two level system models

Speaker
Marc Wenskat

Detailed surface morphological studies of Nb_3Sn treated by controllable bipolar pulsed electropolishing

Speaker
Dr Mingqi Ge

Density-functional theory study of novel recipes to reduce Nb3Sn grain boundary dissipation

Speaker
Nathan Sitaraman

Progress on theory of nanohydride dissipation

Speaker
Nathan Sitaraman

A low-level radio frequency (LLRF) control system for multiple superconducting cavities based on MicroTCA.4

Speaker
Wenbin Gao

Field emission analysis in SRF cavities for PIP-II using GEANT4

Speaker
Kellen McGee

Localization of field emission emitters in RAON HWRs using quality factor

Speaker
Sungmin Jeon

Statistical analysis of field emission for SHINE project

Speaker
Yue Zong

Design and simulation of 975 MHz superconducting radio frequency cavity

Speaker
Mr Bo Wang

Optimization of deposition parameters for synthesising Nb3Sn film on copper cavity with and without buffer layer

Speaker
Christopher Benjamin

Experimental study on deposition of Nb3Sn thin films on 6 GHz copper half-cell using Co-sputtering

Speaker
Jiawen Kan

Towards Nb3Sn coated copper cavities for energy efficient SRF applications

Speaker
Lambert Alff

Development of a new system for Nb_3Sn thin film deposition on 1.3 GHz cavities

Speaker
Matteo Lazzari

Results of 1.3 GHz Nb cavity coated with Nb3Sn thin film deposition by PVD magnetron sputtering

Speaker
Reza Valizadeh

Research and development of Nb3Sn SRF cavity at IHEP

Speaker
Peng Sha

Preparation and test of Nb3Sn film cavities by tin vapor method at Peking University

Speaker
Ziyu Wang

The plasma processing development for CSNS-II superconducting Linac

Speaker
Cong Zhang

Design and simulation of conductive cooling for radio frequency superconducting cavities

Speaker
Cong Zhang

Plasma electrolytic polishing @ INFN: a versatile surface treatment for accelerator components and additive manufacturing

Speaker
Eduard Chyhyrynets

Development of plasma processing of 1.3 GHz superconducting radiofrequency cavities at TRIUMF

Speaker
Daniel Hedji

Plasma processing on low beta SRF elliptical cavities

Speaker
Elisa Del Core

RF measurement of plasma electrolytic polished 1.3 GHz full-seamless Nb/Cu cavities

Speaker
Hayato Araki

In-situ plasma processing on low-beta cavities at the Argonne Tandem Linac Accelerator System (ATLAS)

Speaker
Megan McIntyre

Development of organic solvent electropolishing method for Nb cavities

Speaker
Takeyoshi Goto

Fabrication of seamless single-cell copper elliptical cavities through bulk-machining

Speaker
Alan Saillet

Improvement of performance for Nb/Cu hydroformed full-seamless cavity

Speaker
Masashi Yamanaka

Status of SRF cavity fabrication in Cavity Fabrication Facility (CFF) at KEK.

Speaker
Takayuki Saeki

A novel manufacture of niobium foil cavities

Speaker
Masashi Yamanaka

Characterization of multilayer SRF cavity materials using radioactive beam based techniques for gradient enhancement

Speaker
Md Asaduzzaman

First elliptic cavity fabricated with metallographic polishing

Speaker
Takeshi Dohmae

Performance analysis of the ESS SRF cavities from qualification to first operation run

Speaker
Paolo Pierini

Beam-based measurements on ESS SRF cavities

Speaker
Paolo Pierini

Preliminary results of electromagnetic and beam dynamics simulation for optimizing an SRF gun cavity to maximize the beam brightness

Speaker
Gowrishankar Hallilingaiah

Status of the qualification campaign of the ESS elliptical cryomodules

Speaker
Paolo Pierini

Design, fabrication, assembling and testing of QWR/HWR cryomodules for HIAF project

Speaker
Feng Bai

Status of the SRF cavity tuner for the MEXT-ATD / ITN cryomodule being built at KEK

Speaker
Mathieu Omet

Real-time cavity simulator and tuner control system for the ITN cryomodule at KEK

Speaker
Dr Rishabh Bajpai

Design study of a cryomodule that meets ILC requirements at KEK

Speaker
Takafumi Hara

Recent progress of robotic R&D for SRF at KEK

Speaker
Yasuchika Yamamoto

Damping microphonics in SRF cavities using boron nitride nanotubes

Speaker
Kevin Jordan

Results from a helium flowmeter that measures SRF cavity Q0s In situ

Speaker
Kevin Jordan

Development of faults identification pipeline for SPIRAL2 LLRF data

Speaker
Charly Lassalle

Design of an MTCA.4-Based LLRF tuning controller for cryomodules at S3FEL

Speaker
Jinfu Zhu

Progress and challenges on SRF technology development for PERLE

Speaker
Akira Miyazaki

Initial results of the ESS cavities parameters identification at the TS2 towards future LLRF operation

Speaker
Wojciech Cichalewski

The RF design of a fast reactive tuner for UK-XFEL superconductor cavities

Speaker
Hongping Jiang

591 MHz SRF cavity for EIC ESR

Speaker
Wencan Xu

High power FPC progress for EIC ESR SRF cavities

Speaker
Wencan Xu

Current status of the high current 1.5 GHz SRF cavity prototypes for VSR Demo

Speaker
Adolfo Velez

Multipacting analysis of the conditioning box of the 591 MHz SRF cavity fundamental-mode power coupler in EIC

Speaker
Wencan Xu

17:30