

## **Session Program**

**18-26 Sept 2025**



**SRF2025  
TOKYO**

**22<sup>ND</sup> INTERNATIONAL CONFERENCE  
ON RF SUPERCONDUCTIVITY**

**September 21-26, 2025**

# **SRF2025 - 22nd International Conference on RF Superconductivity**

## ***Thursday Poster Session***

Ito International Research Center  
Tokyo

# Thursday 25 September

14:30

## Thursday Poster Session

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

### Construction of the LB650 pre-production cryomodule for the PIP-II linear accelerator

**Speaker**

Guillaume Devanz

### When plastic meets particle physics: developing & characterising 3D-printed vacuum vessels for helium leak testing at high stakes and low pressures

**Speaker**

Oliver Poynton

### Beam diagnostics and RF cavity operation during SCL3 beam commissioning at RAON

**Speaker**

Jangwon Kwon

### Expansion of the line-up of high capacity 4 K GM-JT cryocooler system

**Speaker**

Yuki Iino

### The RF power source systems of CSNS-II Linac RF superconducting cavities

**Speaker**

Zhencheng Mu

### Preliminary design of continuous wave low-level RF systems for S3FEL

**Speaker**

Zhiyuan Zhang

### CFD simulation of micron-scale dust particle transport and deposition in superconducting accelerator vacuum lines

**Speaker**

Zhizhen Luo

### RaSTA 2.0 - development of a compact sample test cavity for surface resistance measurements

**Speaker**

Dr Sebastian Keckert

### Horizontal cryostat testing of the ORNL Spallation Neutron Source (SNS) Proton Power Upgrade (PPU) cryomodules at Jefferson Lab

**Speaker**

Michael McCaughan

### Depth-resolved characterization of the magnetic field screening in superconducting RF materials near the critical field

**Speaker**

Robert Laxdal

**Improved calorimetric cavity measurement techniques for the HB650 prototype cryomodule for PIP-II****Speaker**

Jeremiah Holzbauer

**Utilization of remote monitoring tools in the long-term operation of the superconducting linac at RIKEN****Speaker**

Kenta Kaneko

**Beam envelope measurements using beam position monitors for low-beta superconducting linear accelerator****Speaker**

Takahiro Nishi

**Unveiling the interplay: cold work, recrystallization, and flux expulsion in SRF cavities****Speaker**

Dr Santosh Chetri

**Point defects in Nb-based superconducting films probed by positron annihilation spectroscopy****Speaker**

Sebastian Klug

**RF and DC vortices in superconductors studied with time-dependent Ginzburg-Landau theory****Speaker**

Prof. Steven Anlage

**Activities on medium grain niobium at DESY****Speaker**

Detlef Reschke

**Characterizing and controlling recovery and recrystallization in Nb for improved SRF cavity performance****Speaker**

Eric Taleff

**Electrochemical impedance spectroscopy analysis of Nb electropolishing in HF solutions****Speaker**

Eric Viklund

**RF measurements and performance tests at 4K of cryomodule 1 cavities for HELIAC****Speaker**

Florian Dirk Dziuba

**HOM antenna upgrades and refurbishment of TESLA cavities for the MESA ER-Mode**

<p><b>Speaker</b> Paul Plattner</p>
<p><b>Development of 1.3 GHz 3-cell superconducting cavities for high current application</b></p> <p><b>Speaker</b> Xiaowei Wu</p>
<p><b>The influence of rolling direction and surface pinning of deformed grain boundaries during recrystallization in high-RRR niobium sheet</b></p> <p><b>Speaker</b> Zackery Thune</p>
<p><b>The effects of strain path and strain magnitude on the uniformity of recrystallization in high-RRR niobium 1.3 GHz half-cells</b></p> <p><b>Speaker</b> Zackery Thune</p>
<p><b>Assembly of the LIPAc SRF LINAC cryomodule</b></p> <p><b>Speaker</b> Janic Chambrillon</p>
<p><b>Development of 1.5 GHz harmonic superconducting cavity and cryomodule</b></p> <p><b>Speaker</b> Zheng Mi</p>
<p><b>Searching for axions: a new SRF cavity-based programme at CERN</b></p> <p><b>Speaker</b> Lee Millar</p>
<p><b>The operation of ARIEL e-LINAC RF system</b></p> <p><b>Speaker</b> Yanyun Ma</p>
<p><b>Q degradation in operation in ISAC-II SC linac</b></p> <p><b>Speaker</b> Zhongyuan Yao</p>
<p><b>Magnetic field sensitivity of a QWR under different cooldown dynamics</b></p> <p><b>Speaker</b> Philipp Kolb</p>
<p><b>Study of interstitial oxygen concentration near surface of Mid-T heat treated Nb SRF cavities: frequency shift analysis</b></p> <p><b>Speaker</b> Rezvan Ghanbari</p>
<p><b>Development of niobium 3 GHz single-cell cavity for superconducting thin film research</b></p> <p><b>Speaker</b> Dr Ryo Katayama</p>
<p><b>Impact of initial cold work on the bulk microstructure and flux expulsion performance of SRF Nb cavities</b></p>

<p><b>Speaker</b> Santosh Chetri</p>
<p><b>Study of multilayer thin-film structures in superconducting acceleration cavities</b></p> <p><b>Speaker</b> Taisei Sasaki</p>
<p><b>Fabrication of 1.3 GHz MgB2 superconductor-on-copper cavity using hybrid physical-chemical vapor deposition</b></p> <p><b>Speaker</b> Prof. Xiaoxing Xi</p>
<p><b>Cold spray additive manufactured copper as substrate for thin film-SRF cavities</b></p> <p><b>Speaker</b> Fritz Motschmann</p>
<p><b>European thin film roadmap</b></p> <p><b>Speaker</b> Oleg Malyshev</p>
<p><b>Additive manufacturing for seamless 6 GHz Nb/Cu cavity</b></p> <p><b>Speaker</b> Davide Ford</p>
<p><b>Thermal and magnetic flux dynamics in superconducting niobium cavities: implications for the threshold field limit</b></p> <p><b>Speaker</b> Ravikumar Gurazada</p>
<p><b>LCLS-II HE cryomodule test results after an uncontrolled vacuum event</b></p> <p><b>Speaker</b> Genfa Wu</p>
<p><b>Improving the performance of mid-T baked niobium cavities through post-bake surface treatment</b></p> <p><b>Speaker</b> Genfa Wu</p>
<p><b>Thermo-mechanical testing results for IC-DX ultra-low thermal expansion alloy at cryogenic temperature</b></p> <p><b>Speaker</b> Tomohiro Yamada</p>
<p><b>New cleanroom nitrogen purge system to be used for superconducting radio frequency cavity string build at STFC</b></p> <p><b>Speaker</b> Stuart Wilde</p>
<p><b>Design of a fast reactive tuner for 1.3 GHz TESLA cavities at MESA</b></p> <p><b>Speaker</b> Ricardo Monroy-Villa</p>
<p><b>Low beta cavity production based on a novel procedure at IMP</b></p>

<p><b>Speaker</b> Zhijun Wang</p>
<p><b>Contamination of the Nb<sub>3</sub>Sn evaporation coating furnace at IHEP: analysis of causes and solutions</b></p> <p><b>Speaker</b> Baiqi Liu</p>
<p><b>Status of the Mainz Energy-Recovering Accelerator (MESA)</b></p> <p><b>Speaker</b> Timo Stengler</p>
<p><b>Role of niobium purity and thermal parameters in SRF cavity optimization</b></p> <p><b>Speaker</b> Ravikumar Gurazada</p>
<p><b>Measurement of low accelerating gradients in 1.3 GHz cavities at DESY</b></p> <p><b>Speaker</b> Mateusz Wiencek</p>
<p><b>Interface studies of Nb-AlN-NbTiN multilayers grown by PEALD</b></p> <p><b>Speaker</b> Isabel González Díaz-Palacio</p>
<p><b>Virtual cavity probe for the real-time identification of cavity burst-noise type in superconducting radio-frequency systems</b></p> <p><b>Speaker</b> Jin Ma</p>
<p><b>Upgrades to the Daresbury Laboratory Vertical Facility and testing of PIP-II HB650 cavities</b></p> <p><b>Speaker</b> Andrew Blackett-May</p>
<p><b>A LHe-free test facility for thin film SRF cavity testing</b></p> <p><b>Speaker</b> Daniel Seal</p>
<p><b>Molecular dynamics study on the mechanical behavior of pure and alloyed niobium for superconducting RF cavity applications</b></p> <p><b>Speaker</b> Taeyoung Yoon</p>
<p><b>Considerations on using SQUID metamaterials for tuning SRF cavities in accelerator applications</b></p> <p><b>Speaker</b> Thomas Oseroff</p>
<p><b>PIP-II LB650 cryomodule test bench at CEA</b></p> <p><b>Speaker</b> Hassen Jenhani</p>
<p><b>Fabrication of the prototype spoke cavity for the JAEA-ADS linac</b></p>

<p><b>Speaker</b> Jun Tamura</p>
<p><b>Enhancing superconducting radio-frequency performance with high-throughput method-assisted FeSe<sub>1-x</sub>Te coated Nb films</b></p> <p><b>Speaker</b> Chao Dong</p>
<p><b>Progress of prototype RFD crab cavity string assembly for HL-LHC at TRIUMF</b></p> <p><b>Speaker</b> Zhongyuan Yao</p>
<p><b>Magnetic environment optimization in SRF testing at INFN-LASA</b></p> <p><b>Speaker</b> Michele Bertucci</p>
<p><b>Strain gauge-based position monitoring of spaceframe-suspended SRF cavities</b></p> <p><b>Speaker</b> Ms Nina Ohm</p>
<p><b>Hybrid Wire Laser Additive Manufacturing and CNC machining for advanced SRF cavity fabrication</b></p> <p><b>Speaker</b> Oscar Azzolini</p>
<p><b>Feature of NC25 material and impact on flux trapping when used them for SRF cavity assembly</b></p> <p><b>Speaker</b> Kenji Saito</p>
<p><b>Local magnetic field evolution in shielded SRF cavities during thermal cycling in a cryomodule-like configuration</b></p> <p><b>Speaker</b> Rocío Santiago Kern</p>
<p><b>Mitigating residual magnetization in coldmass components via superconducting focusing lenses</b></p> <p><b>Speaker</b> Jacopo Bernardini</p>
<p><b>Attempt to include beam loading effects in finite element method RF simulations for B-cell cryomodules</b></p> <p><b>Speaker</b> Thomas Oseroff</p>
<p><b>The design and test of 648 MHz 6-cell elliptical cavity for CSNS-II</b></p> <p><b>Speaker</b> Wenzhong Zhou</p>
<p><b>Sideband excitation phenomena study in SRF vertical testing</b></p> <p><b>Speaker</b> Enrico Cenni</p>
<p><b>Preliminary physics design of 1.3 GHz superconducting electron gun</b></p>

**Speaker**

XiongHao Yuan

**High intensity proton cryomodule parasitic radiation analysis****Speaker**

Guillaume Devanz

**String assembly for the first HELIAC cryomodule****Speaker**

Thorsten Kuerzeder

**Preliminary cryogenic design for superconducting deflecting cavities for E2.0****Speaker**

Dr Marco Modica

**Development of a cobot-assisted High Pressure Rinsing solution for SRF cavities****Speaker**

Nicolas Gandolfo

**RF in situ heating of a single and nine cell 1.3 GHz cavity****Speaker**

Julia Goedecke

**The development and application of expansion joints****Speaker**

kai huang

**Mock-up waveguide loop development toward a half-meter scale traveling-wave SRF cavity****Speaker**

Kellen McGee

17:30