

**Session Program**

**Aug 25 - 30, 2024**

**LINAC2024 - 32nd Linear Accelerator  
Conference**

***Monday Poster Session***

Hilton Chicago, Grand Ballroom  
720 South Michigan Ave Chicago, IL 60605 USA

# Mon, August 26

4:00 PM

## Monday Poster Session

**Poster Session** | **Location:** Hilton Chicago, Boulevard, 720 South Michigan Ave Chicago, IL 60605 USA

### High dose pass-rate sealed ion chamber

**Speaker**

Zhiquan Zhang

### Testing of the SSR2 SRF cavity tuner for PIP-II at 2 K

**Speaker**

Crispin Contreras-Martinez

### Design and test of double spoke superconducting cavity tuner for CSNS-II

**Speaker**

Zheng Mi

### Studies of single and multi-bunch instabilities in linacs using RF-Track

**Speaker**

Andrea Latina

### Collimations systems studies at LANSCE

**Speaker**

Clara-Marie Alvinerie

### Geometric resonance of the wakefield of a metal-dielectric waveguide

**Speaker**

Michael Ivanyan

### High order modes spectra measurements in 1.3 GHz cavities for LCLS-II

**Speaker**

Andrei Lunin

### Study of manufacturing errors in 750 MHz RFQ using electromagnetic simulations

**Speaker**

Gabriela Moreno

### Recent results of the high gradient S-band accelerating module for FERMI energy upgrade

**Speaker**

Mauro Trovo

### Linac module phase scan in HPSim

**Speaker**

Martin Kay

### Beam loading compensation in charge-varying scenarios with RF-Track

**Speaker**

Andrea Latina

**Analysis of the Panofsky-Wenzel Theorem in pillbox cavities with a beam pipe****Speaker**

Andrea Latina

**High-voltage feed design for electrostatic potential depression in an RF accelerator****Speaker**

Maria Sanchez Barrueta

**Data acquisition and characterization software for radio-frequency (rf) systems****Speaker**

Mr Sohum Suthar

**LLRF and pulse-to-pulse correction for a compact linac****Speaker**

Joshua Einstein-Curtis

**Compensation of quadrupole component of RF field in solenoidal focusing channel****Speaker**

Arun Saini

**Advancements in Nb<sub>3</sub>Sn growth for SRF technology****Speaker**

Liana Shpani

**New concepts for a high power 805 MHz RF amplifier for LANSCE using Gallium Nitride semiconductors****Speaker**

John Lyles

**Performance evaluation and enhancement in kW level SSAs****Speaker**

Manjiri Pande

**Progress in the development of the cryomodules for CSNS-II superconducting linac****Speaker**

Miaofu Xu

**High-Q<sub>0</sub> treatment development in 800 MHz 5-cell elliptical cavities****Speaker**

Kellen McGee

**Simulation and experiment study of proton generated by residual gas stripping in CSNS****Speaker**

Qi Yu Kong

**Integration of computer vision system to track the alignment SRF cavities into the test cryostat for PIP-II at Fermilab****Speaker**

Jacopo Bernardini

**Strategies for mitigating residual magnetic field effect on pre-production PIP-II SSR2 cryomodule performance****Speaker**

Jacopo Bernardini

**Online multi-particle model for LANSCE physics tune-up with HPSim****Speaker**

En-Chuan Huang

**Elliptical undulator in a resistive elliptical waveguide****Speaker**

Michael Ivanyan

**Latent evolution model for time-inversion of spatiotemporal beam dynamics****Speaker**

Mahindra Rautela

**Generalization ability of convolutional neural networks trained for coherent synchrotron radiation computations****Speaker**

Christopher Leon

**RF tuning analysis of a 750 MHz carbon RFQ for medical applications****Speaker**

Gabriela Moreno

**Beam envelope matching for the LANSCE Modernization Project****Speaker**

Leanne Duffy

**Standardization of ancillary installation tooling for SRF cavities at Fermilab****Speaker**

Colin Narug

**Successful cleanroom installation of PIP-II SSR2 coupler using robotic arm****Speaker**

Colin Narug

**Application of survey and alignment techniques for beamline installation****Speaker**

Alexander Grabenhofer

**Studies of transverse emittance growth in CSNS Linac DTL****Speaker**

Huachang Liu

**Transverse electric modes in a resonant cavity and the resultant kick to an 800 MeV proton beam****Speaker**

Jesus Valladares

**High pressure rinse simulations for PIP-II SRF cavities**

**Speaker**

Tommaso Aiazzi

**Emittance measurements with wire scanners in the Fermilab side-coupled linac****Speaker**

Erin Chen

**Design of BPMs for a 750 MHz hadrontherapy Linac****Speaker**

Pedro Calvo

**An overview of microphonics in CEBAF and current moderation techniques****Speaker**

Tom Powers

**Thin Au layers on niobium for SRF cavities****Speaker**

Sadie Seddon-Stettler

**Mitigation of longitudinal beam losses in the FRIB linac****Speaker**

Alec Gonzalez

**High Q and high gradient performance of the first medium-temperature baking 1.3 GHz cryomodule****Speaker**

Prof. Jiyuan Zhai

**Accelerator design choices for a compact, electron-driven, pulsed neutron source****Speaker**

Andrea Latina

**Performance of the Fermilab linac injector****Speaker**

Daniel Jones

**Standing wave Dielectric Disk Accelerating structure design and cold test results****Speaker**

John Power

**Simultaneous acceleration of proton and H-minus beams in RFQ****Speaker**

Sergey Kurennoy

**High pulsed power measurements of superheating fields for SRF materials****Speaker**

Nicole Verboncoeur

**Low energy multi-beam dynamics in novel LANSCE front end****Speaker**

Yuri Batygin

**Beam optics design of a prototype 20 kW conduction-cooled SRF accelerator for medical sterilization**

**Speaker**

Arun Saini

**Automation of RF tuning for medical accelerators****Speaker**

Jonathan Edelen

**Development of test bench for 324 MHz superconducting cavity power couplers****Speaker**

MengXu Fan

**Fundamental power couplers development at CSNS campus****Speaker**

MengXu Fan

**Development of an online adjustable waveguide coupler for CSNS-II debuncher cavity****Speaker**

MengXu Fan

**Automation of sample alignment for neutron scattering experiments****Speaker**

Breeana Pritchard

**Machine learning tools to support heavy-ion linac operations****Speaker**

Brahim Mustapha

**Status Update on the Multi-User Upgrade of the ATLAS Linac at Argonne****Speaker**

Brahim Mustapha

**Extracting critical beamline element misalignments from data using a beam simulation model****Speaker**

Adwaith Ravichandran

**RF power challenge for the linac of the U4 single pass RF driver for energy from inertial confinement fusion****Speaker**

Robert Burke

**Integrated approach for ESS personnel safety systems****Speaker**

Jessica Lastow

**Successful international validation test shipment of the PIP-II HB650 cryomodule transportation system****Speaker**

Jeremiah Holzbauer

**Photocathode drive laser upgrade for the Advanced Photon Source linac**

**Speaker**

Jeffrey Dooling

**Beam loss mechanisms in the PIP-II linac and beam transfer line at Fermilab****Speaker**

Abhishek Pathak

**Construction status of the IFMIF-DONES 5 MW linac****Speaker**

Ivan Podadera

**Design of a quadripartite wakefield structure for free electron laser applications****Speaker**

Zongbin Li

**Gridded RF gun design for SRF linac applications****Speaker**

Ivan Gonin

**Direct injection extraction system into a high frequency radiofrequency quadrupole for medical applications****Speaker**

Aristeidis Mamaras

**LANSCE 805 MHz klystron design and performance****Speaker**

Aditya Waghmare

**Update on the status of Los Alamos Neutron Science Center accelerator modernization****Speaker**

Steven Russell

**Commissioning and performance of a C-band LLRF system at RadiaBeam****Speaker**

Jonathan Edelen

**LANSCE accelerator instrumentation and control technology choices****Speaker**

Martin Pieck

**Low-level RF system development for a C-Band LINAC****Speaker**

Jonathan Edelen

**Cold test results of pre-production PIP-II SSR2 cavities with high-power couplers in the Fermilab Spoke Test Cryostat****Speaker**

Alexander Sukhanov

**Design of a multi-purpose LEBT for the LANSCE Front End Upgrade****Speakers**

Janardan Upadhyay, Enrique Henestroza

**A cryogenic dielectric pulse compressor****Speaker**

Sergey Kuzikov

**Neutralizer-based longitudinal bunch profile measurement design****Speaker**

Charles Taylor

**An alternative design scheme for CSNS-II MEBT dynamics****Speaker**

Qi Yu Kong

**The four beam destinations for the commissioning of the ESS Normal Conducting Linac****Speaker**

Elena Donegani

**Performance of PIP-II high-beta 650 cryomodule after transatlantic shipping****Speaker**

Joseph Ozelis

**RF-Track simulations of Linac4****Speaker**

Andrea Latina

**Planned future upgrades of Linear IFMIF Prototype Accelerator (LIPAc)****Speaker**

Fabio Cismondi

**Single bunch and multi bunch operation with single klystron using a programmable SLED system****Speaker**

Anton Tropp

**Design of a beam transport line for external injection of plasma wakefield acceleration experiments based on BEPCII****Speaker**

Xueyan Shi

**Design of a helium ion linear accelerator for injection in a particle therapy synchrotron and parallel production of radioisotopes****Speaker**

Maurizio Vretenar

**Overview of accelerating structure research activities at IHEP****Speaker**

Jingru Zhang

**C-band RF system for the SAPS test bench****Speaker**

Hui Zhang

**Transverse Beam dynamics simulations benchmarked with ESS Bilbao injector measurements for ISOLDE IRSR project**

**Speaker**  
David Fernandez-Cañoto

**DTL studies for the LANSCE future front-end upgrade at LANL**

**Speaker**  
Dmitry Gorelov

**ALBA injector reliability improvement with an 80 MeV Linac beam**

**Speaker**  
Raquel Muñoz Horta

**Update on ESS-Bilbao RFQ linac**

**Speaker**  
David Fernandez-Cañoto

**Conceptual design of a 325 MHz Inductive Output Tube (IOT)**

**Speaker**  
Sultan Shaik

**Variable polarization self-locked streaking of electrons in time with a pair of corrugated structures**

**Speaker**  
Pierre Korysko

**Accelerating structures for the FCC-ee pre-injector complex: RF design, optimization, and performance analysis**

**Speaker**  
Adnan Kurtulus

**Online diagnostics and dosimetry of electron beam irradiation with a minimally invasive screens and beam charge monitors**

**Speaker**  
Alexander Malyzhenkov

**An RF simulator for control system development**

**Speaker**  
Jonathan Edelen

6:00 PM