Session Program

10–15 Aug 2025

NAPAC25 - North American Particle Accelerator Conference 2025

WEP: Wednesday Poster Session

SAFE Credit Union Convention Center
1401 K St, Sacramento, CA 95814

Wednesday 13 August

16:00

WEP: Wednesday Poster Session

Poster Session | **Location:** SAFE Credit Union Convention Center, 1401 K St, Sacramento, CA 95814

Progress updates on Compressed Ultrashort Pulse Injector Demonstrator

Speaker
Wei Hou Tan

Monte-Carlo modeling and experimental investigation of photoemission from CsTe semiconductor photocathode under high fields

Speaker
Chengkun Huang

Upgraded Photoinjector Laser Pulse Train Generator at the Argonne Wakefield Accelerator

Speaker
Rachel Margraf-O'Neal

Recent LANSCE efforts on improving H+ duoplasmatron capabilities

Speaker
Evan Loftin

Plasma Processing of C100 SRF cavities at Jefferson Lab: Experimental Results and Simulation Insights

Speaker
Nabin Raut

Understanding the RHIC triplet magnet vibrations in preparation for EIC

Speaker
Frederic Micolon

A novel nonlinear kicker scheme toward a transparent and lossless top-off injection for future diffraction-limited synchrotron light sources

Speaker
Xi Yang

Investigation of Wakefields in Dielectric Structures with Different Cross Sections

Speaker
Calcifer Phillips

A finite element study of stress reduction techniques in REBCO HTS conductor on a round cable (CORC) cable

Speaker
Scott Mueller

New Development and Testing Facility for HPRF SSA System at LANSCE CCL

Speaker
Javier Vega

Modeling of plasma channels for laser plasma accelerators

Speaker
Nathan Cook

Fast and efficient modeling of structure-based wakefield accelerators

Speaker
Nathan Cook

Science enabled by the the FACET-II low-energy laser arm

Speaker
Dr Alexander Knetsch

Radio-Frequency Hardware Considerations for a High-Power Solid-State Amplifier

Speaker
Wesley Hall

Design of a Low-Power Proof-of-Concept Multi-Stage Amplifier Test Stand to Model and Implement Outphasing Control for the LANSCE 805 MHz Solid-State High-Power RF Amplifier

Speaker
Michael Brown

Transverse photocathode shaping with phase plates

Speaker
Nathan Majernik

Experimental generation of petawatt peak power, extreme electron beams for advanced accelerator applications

Speaker
Claudio Emma

Progress on commissioning of the CARIE facility at LANL

Speaker
Wonjin Choi

Design study of novel deuteron cyclotron auto-resonance accelerator

Speaker
Yong Jiang

Updates towards a laser heated thermionic cathode

Speaker
Heather Andrews

Passive plasma lens experiments at FACET-II

Speaker
Mr Shutang Meng

Laser-Ionized Plasma Sources for Plasma Wakefield Accelerators: Alignment Technique, Tolerance, and Applications

Speaker
Valentina Lee

Design guidelines and longitudinal dynamics for plasma-based, extreme compression

Speaker
Kelly Swanson

Collider-quality electron bunches from an all-optical plasma photoinjector

Speaker
Arohi Jain

Compact Electron Buncher with Tunable Permanent Magnet Focusing

Speaker
Kevin Shipman

Transverse deflecting cavity optimization for active control of electron beam energy chirp

Speaker
Haoran Xu

Latest Progress on Plasma Wakefield Acceleration at FACET-II

Speaker
Douglas Storey

Baking of the vacuum chamber and Activation of the inside NEG coating film in the storage ring arc zone of HEPS

Speaker
Ping He

Challenges of vapor diffusion Nb3Sn coating at Fermilab: Minimizing impurities using TOF-SIMS

Speaker
Nikki Tagdulang

Thermal Performance of a 50 kW Minichannel Beam Dump at FRIB

Speaker
Jeongseog Song

The Pulsed Ion Reflex Klystron: A New Accelerator for High Efficiency Voltage Conversion

Speaker
David Mengel

An Integrated Approach to Understanding Electric Breakdown

Speaker
Jim Norem

Application of Low-Cost Sensors and Deep Autoencoders for Condition Monitoring of Water Pumps in Particle Accelerators

Speaker
Rajat Sainju

Design of a shipping fixture for a compact cryomodule hermetic assembly

Speaker
Jacob Lewis

Elimination of Training in Nb3Sn and NbTi Superconducting Magnets

Speaker
Emanuela Barzi

Water and Hydrogen Outgassing in AISI 1020 Low-Carbon Steel Vacuum Chambers for Spin-Polarized Electron Sources

Speaker
Aiman Al-Allaq

Recent Efforts on Rebuilding LANSCE CCL Klystrons

Speakers
Aditya Waghmare, Mr Cole Cochran

Low Frequency Ripple Current Attenuation for Slow Corrector Power Supplies in the APS Upgrade

Speaker
Yang Ruan

Magnetic field and force calculation of the new SCU prototypes

Speaker
Yuko Shiroyanagi

NSLSII RF-Shielded Bellows Offset Testing

Speaker
Robert Todd

Study of Uncorrelated Resonance Crossing in a Controlled Environment

Speaker
Jack Kelley

A new route to improve the material quality of Nb3Sn SRF cavities with Zr inclusion

Speaker
Malvika Tripathi

High efficiency L-band IOT design and high power testing

Speaker
Mohamed Othman

Development of ultra high power compact X-band pulse compressor

Speaker
Mohamed Othman

Klystron and Modulator issues affecting LANSCE Beamtime

Speaker
Aditya Waghmare

Final Design And First Use Of In-Situ Measuring Apparatus For Measurement Of Permanent Magnet Resiliency In CEBAF’s Radiation Environment

Speaker
Edith Nissen

Preliminary computational study on minimizing longitudinal emittance in photoinjector

Speaker
MinKyu Seo

Development and fabrication of CW copper injector for SRF industrial cryomodules

Speaker
Chunguang Jing

Thermal analysis and preliminary cooldown performance of the SCU cryostat

Speaker
Yuko Shiroyanagi

THz Detection and Investigation of Vacuum-Compatible Optical Components

Speaker
Calcifer Phillips

Status of the experimental demonstration of GW power generation from THz-TBA

Speaker
Gwanghui Ha

UED/UEM Conduction cooled Nb3Sn SRF photogun commissioning results

Speaker
Chunguang Jing

Sputter coating of Nb_3Sn into SRF cavity using stoichiometric target

Speaker
Md Sharifuzzaman Shakel

RF breakdown and dark current studies in short-pulse acceleration

Speaker
Gaurab Rijal

RF Amplifier System Reconfiguration Plans for New DTL and RFQ for LANSCE

Speaker
Maria Sanchez Barrueta

Progress of polarized sources at BNL

Speaker
Deepak Raparia

Performance Enhancement of Medium-Temperature Baked Niobium SRF Cavity by Surface Contamination Removal

Speaker
Vijay Chouhan

Investigation of transverse instability in efficient plasma-based accelerators

Speaker
Naveen Pathak

Ground vibration studies in the RHIC tunnel in view of EIC

Speaker
Frederic Micolon

Fitness For Service Assessment of a Corroded Heat Exchanger

Speaker
Alex Humenik

Development of Combined function Dipole-Quadrupole PMQs Magnets for NSLSII-Upgrade

Speaker
Patrick N'gotta

Investigating Dirac semimetal cadmium arsenide as a potential low-MTE photocathode

Speaker
Truman Idso

Design study of an RF-Kicker module for bunch cleaning at the ATLAS Positive-Ion Injector.

Speaker
Deeksha Sinha

DESIGN OF AN OPTICAL AMPLIFIER FOR AMPLIFIED OSC IN IOTA FACILITY AT FERMILAB

Speaker
Abhishek Mondal

Developing a Hybrid Accelerating Structure Based on Short-Pulse Structure Wakefield Acceleration

Speaker
Gongxiaohui Chen

Design of a high-power X-band load with circular waveguide TE01 mode input

Speaker
Mohamed Othman

Demonstration of a sheet electron beam production from a UNCD field emitter array

Speaker
Wonjin Choi

Jefferson Lab’s multi-purpose modular FPGA based controller board improves on project design cycle

Speaker
Maxwell Roy

Co-sputter deposition of Nb_3Sn layer into SRF cavity using Nb-Sn composite target

Speaker
Md Sharifuzzaman Shakel

Considerations of HTS Rapid-Cycling Magnets for Staged Muon Acceleration

Speaker
Henryk Piekarz

Design and cold test of a novel waveguide power splitter for distributed power coupling in short-pulse acceleration

Speaker
Salih Colmekci

Centrifugal Barrel Polishing of a 650 MHz Single-Cell Niobium SRF Cavity

Speaker
Vijay Chouhan

A W-band corrugated waveguide for high-efficiency high-gradient wakefield acceleration

Speaker
Brendan Leung

A simulation of the Fermilab Main Injector dual power amplifier cavities.

Speaker
Susanna Stevenson

Integral Field Probe for Mapping of Curved Magnets

Speaker
Alexander Jakopin

One-to-one mapping between the electromagnetic modes of Cylindrical and Coaxial Half-wave cavities

Speaker
Fariha Ahmed

External controller for the SRFK thyratron heaters

Speaker
Benjamin Laurel

Light-Induced Enhancement of Quantum Efficiency in III-Nitride Photocathodes

Speaker
Mansoure Moeini Rizi

Heavy Ion Implantation Analysis in Graphite for the FRIB Charge Selector

Speaker
Alexander Plastun

A hybrid structure-based wakefield accelerator

Speaker
Branko Popovic

Radiation Dose Simulations on Permanent Magnets for the CEBAF Energy Upgrade

Speaker
Bamunuvita Gamage

Overview of the FACET-II facility at SLAC

Speaker
Ivan Rajkovic

Progress of the Plasma Acceleration Research Platform at IHEP

Speaker
Haisheng Xu

R&D Progress of electron cyclotron resonance accelerator

Speaker
Yong Jiang

Developments in Lume-ACE3P Including Optimization for S3P

Speaker
Lila Fowler

Simulating dielectric wakefield acceleration of positrons from a solid target converter

Speaker
Nathan Majernik

IOTA Bake System

Speaker
Travante Thompson

High-Voltage Pulsed Power Generator for Beam Injection Systems

Speaker
Evgeniy Ivanov

Testing LANSCE 805 MHz CCL Klystrons

Speaker
Aditya Waghmare

Experimental Progress of PWFA in a Laser-Ionized Plasma Source FACET-II

Speaker
Michael Litos

The Compact Positron Source at SLAC

Speaker
Sophie Crisp

First Results from a Nb_3Sn-Coated 1.5-Cell 650 MHz SRF Cavity for Cryogen-Free Industrial Accelerators

Speaker
Nikki Tagdulang

Efficient Continuous-Wave Normal Conducting Accelerator for Industrial applications.

Speaker
Robert Rimmer

Grid Disturbance Rejection via Improved DC-Link Voltage Feedforward Control for L-Bend Power Supplies in the APS Upgrade

Speakers
Fernando Rafael, Yang Ruan

LLRF COMMISSIONING OF THE CEBAF C75 UPGRADES SAM 2024/2025

Speaker
Jayendrika Tiskumara

Power coupler and tuner design for a 2 MeV Distributed-Drive Linac

Speaker
Mr Benjamin Sims

18:00