

CAARI 2024 SPEAKER SCHEDULE SUMMARY - MONDAY, JULY 22, 2024

| Plenary Sessions | | Rio Grande |
|------------------|---------------------|--|
| | PS-01 | Chair: Yongqiang Wang |
| 9:00 AM | Blas Pedro Uberuaga | Novel approaches for in situ interrogation of irradiated materials |

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| 9:45 - 10:00 AM | Break |
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| General Sessions | |
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| RE-07 | | Title: Irradiation Effects in the Extremes, II | Elm Fork I |
|----------|-----------------|---|------------|
| | | Chair: Osman El Atwani | |
| 10:00 AM | Ibrahim Karaman | Functionally Graded Joints from Tungsten to Ferritic/Martensitic Steels Fabricated using Laser - Directed Energy Deposition as Plasma Facing Components | |
| 10:30 AM | Hyosim Kim | On the application of an engineered ferritic/martensitic alloy for fusion environments | |
| 11:00 AM | Mia Jin | Revealing radiation-induced defects and defect-phonon scattering in ThO ₂ | |

| AF-02 | | Title: Machine Learning for Particle Accelerators I | Elm Fork II |
|----------|---------------------|--|-------------|
| | | Chair: Alexander Scheinker | |
| 10:00 AM | Alexander Scheinker | Adaptive Physics Constrained ML for Autonomous Particle Accelerators | |
| 10:20 AM | Malachi Schram | Leveraging Distance-Aware Uncertainty Estimation for Machine Learning and Advanced Controls in Particle Accelerators | |
| 10:40 AM | Mahindra Rautela | Latent autoregressive recurrent approach for generation and forecasting spatiotemporal beam dynamics | |
| 11:00 AM | Kishansingh Rajput | Errant Beam Prognostics with Machine Learning at SNS Accelerator | |
| 11:15 AM | Alan Williams | Safe Extremum Seeking in Accelerators and Machine Learning | |

| OM-01 | | Title: Facility Updates I | Trinity Central |
|----------|------------------|--|-----------------|
| | | Chair: Mark Roberts | |
| 10:00 AM | Peter Linardakis | Status report for the Australian National University's Heavy Ion Accelerator Facility (HIAF) | |
| 10:20 AM | David Button | ANSTO Centre for Accelerator Science Lab Report for 2024 | |
| 10:40 AM | Naresh Deoli | Status report for the Columbia Radiological Research Accelerator Facility | |
| 11:00 AM | Luke Antwis | Facilities at the UK National Ion Beam Centre | |

CAARI 2024 SPEAKER SCHEDULE SUMMARY - MONDAY, JULY 22, 2024

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|---------------|-------------------------|---|---------------------|
| NST-04 | | Title: Surface Science with Charged Particle Beams | West Fork II |
| | | Chair: Michael Titze & Alex Belianinov | |
| 10:00 AM | Jon Poplawsky | Ultra-low kV Ion Implantation Depths Analyzed by Atom Probe Tomography | |
| 10:30 AM | Ludwig Bartels | Pseudo-Epitaxial and Aligned Growth of Transition Metal Dichalcogenide Heterostack | |
| 11:00 AM | Varghese Anto Chirayath | Coincidence Doppler broadening spectroscopy of single layer graphene on copper using a variable energy positron beam | |
| 11:15 AM | Hany Mahdy | Measuring the chemical composition of the topmost atomic layer of clean and adsorbate covered metal surfaces using a low energy positron beam | |

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|----------------|-----------------|--|-----------------|
| NBAT-02 | | Title: In Situ and Operando Neutron Scattering Techniques for Materials Research | Post Oak |
| | | Chair: Hanyu Wang | |
| 10:00 AM | Yangyang Wang | Time-resolved SANS study of deformation-induced demixing in polymer blends | |
| 10:30 AM | Galina Yakubova | Tagged neutron technique for in-situ soil composition determination | |
| 11:00 AM | Shao Wei Tsai | Unraveling the Molecular Mechanisms of Ion-selective Redox-mediated Electrosorption by In Situ Neutron Reflectometry | |

11:30 - 1:00 PM

Lunch

Grand Ballroom

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|--------------|-----------------|--|-------------------|
| RE-06 | | Title: Irradiation Effects in the Extremes, I | Elm Fork I |
| | | Chair: Osman El Atwani | |
| 1:00 PM | Mitra Taheri | Processing and Characterization of Refractory High Entropy Alloys as Candidates for Fusion Reactor Materials | |
| 1:30 PM | Osman El Atwani | Novel Refractory High Entropy Alloys for Applications in Extreme Environments | |
| 2:00 PM | Boris Maiorov | Rapid Selection and Elastic Property Determination of Novel High-Entropy Alloys using Resonant Ultrasound Spectroscopy | |

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|--------------|-------------------|---|------------------------|
| OM-02 | | Title: Facility Updates II | Trinity Central |
| | | Chair: David Button | |
| 1:00 PM | Daniel Robertson | CASPAR Underground Accelerator Facility Update and Planning | |
| 1:20 PM | Gregory Leblanc | Status Report for Edwards Accelerator Laboratory at Ohio University | |
| 1:40 PM | Edward Stech | Lab Status Report for Notre Dame's Nuclear Science Laboratory | |
| 2:00 PM | Prashanta Niraula | Status Report for Michigan Ion Beam Laboratory | |

CAARI 2024 SPEAKER SCHEDULE SUMMARY - MONDAY, JULY 22, 2024

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|--------------|----------------|---|--------------------|
| NP-09 | | Title: Neutron and Fundamental Symmetries, I | West Fork I |
| | | Chair: Matthew Devlin | |
| 1:00 PM | Sean Finch | Measurement of 14 MeV tD neutron production from the reaction-in-flight of dD fusion | |
| 1:30 M | Richard Hughes | Differential neutron scattering measurements on U-238 using monoenergetic beams | |
| 2:00 PM | Andrew Cooper | Neutron reaction experiments in inverse kinematics with the Neutron Target Demonstrator and Low-Energy Heavy Ion Source at LANSCE | |

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|--------------|------------------|--|---------------------|
| SD-03 | | Title: Neutron and Gamma Technologies for Security and Defense | West Fork II |
| | | Chair: Matthew Coventry | |
| 1:00 PM | Brian Bucher | Development towards a field-portable tagged neutron interrogation system for imaging and chemical analysis | |
| 1:30 PM | Mauricio Unzueta | Associated Particle Imaging for security and defense applications | |
| 2:00 PM | Mairead Montague | Uranium Detection using Photon Active Interrogation based on Delayed Neutron Analysis | |
| 2:15 PM | Matthew Coventry | Testing and evaluation of an associated particle imaging neutron generator | |

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| IBTM-04 | | Title: Ion and Micro Beam Analysis | Post Oak |
| | | Chair: Karen Kavanagh | |
| 1:00 PM | Greta Andrini | IBIC technique for the in-situ assessment of the ion beam spot size and single-ion counting. | |
| 1:30 PM | Todd Byers | Status of the Scanning Light Ion Microprobe at the University of North Texas | |
| 1:45 PM | Jorden Matty | The fabrication and design of a liquid target holder for Ion Beam Analysis | |
| 2:00 PM | Darshpreet Saini | Trace Element Analysis of Air Dust Samples using Particle-Induced X-ray Emission Spectroscopy | |
| 2:15 PM | Karen Kavanagh | Imaging Seeds for Archaeology | |

**2:30 - 3:00
PM**

Break

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|---------------|---------------------|---|-------------------|
| ISM-02 | | Title: Synthesis and Modification of Metal-Halide inspired Materials | Elm Fork I |
| | | Chair: Bibhudutta Rout | |
| 3:00 PM | Ian Sellers | Metal Halide Perovskite Solar Cells for Emerging Space Applications | |
| 3:25 PM | William Weber | Effects of Electronic Energy Loss on Ion-Beam Modification of Oxide Perovskites | |
| 3:50 PM | Manas Dalai | Observation of Superconducting Transition at ~ 25 K in Ag Implanted Au Thin Film | |
| 4:10 PM | Mritunjaya Parashar | Study of the Elemental Diffusion and Radiation Tolerance of Metal Halide Perovskite Solar Cells | |

CAARI 2024 SPEAKER SCHEDULE SUMMARY - MONDAY, JULY 22, 2024

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|---------------|----------------|--|--------------------|
| NST-01 | | Title: Nanoscale Pattern Formation Produced by Ion Bombardment of Solid Surfaces I | Elm Fork II |
| | | Chair: Mark Bradley | |
| 3:00 PM | Karl Ludwig | Investigation of Ar/Si Ion Beam Nanopatterning Near the Critical Angle | |
| 3:30 PM | Matteo Barelli | Large area periodically modulated plasmonic and 2D Transition Metal Dichalcogenide layers featuring flat-optics light harvesting | |
| 4:00 PM | Scott Norris | Some Advancements in the Continuum Modeling of Ion-Induced Nanopattern Formation | |

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| OM-03 <i>(Session to run long)</i> | | Title: Operations and Maintenance | Trinity Central |
| | | Chair: Peter Linardakis & Chris Westerfeldt | |
| 3:00 PM | Dannie Steski | Safety Review of the BNL Tandem Facility | |
| 3:20 PM | David Button | Update on ANSTO's New BPM Interface and Measurement System | |
| 3:40 PM | Thomas Tunningley | Rejuvenation of the 14UD at ANU | |
| 4:00 PM | Mikko Laitinen | Accident in the JYFL Accelerator Laboratory – Lessons Learned | |
| 4:20 PM | Luca Maran (20 min) | The 2 low energy Van de Graaf Accelerators AN2000 and CN maintenances and operation of Legnaro National Laboratories (Italy) | |

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|--------------|-------------------|---|--------------------|
| IA-02 | | Title: Industrial and Medical X-ray, Gamma-ray and UV Systems and Applications | West Fork I |
| | | Chair: Sergey Kutsaev | |
| 3:00 PM | Marcos Ruelas | Development of Pre-Clinical Electron FLASH LINACS with X-Ray Capability | |
| 3:30 PM | Anthony Tylenda | Design efforts to upgrade beam power of a 10 MeV S-band e-beam system from 15 kW to 25 kW | |
| 4:00 PM | Shinsuke Nakayama | Development of deuteron nuclear reaction database and its applications: from compact to large scale neutron sources | |

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|----------------|---------------------|---|-----------------|
| IBTM-01 | | Title: In-situ and In-Operando Materials Analysis Using Ion Beams | Post Oak |
| | | Chair: Robert Kolasinski | |
| 3:00 PM | Christopher Smyth | Revealing Fundamental Radiation Response in Atomically-Thin Transition Metal Sulfides (MoS ₂ , WS ₂) through In-Situ Ion Irradiation Experiments | |
| 3:30 PM | Lyudmila Goncharova | Quantifying radiolysis effects for in-situ RBS and electrochemical impedance spectrometry (EIS) | |
| 3:45 PM | Robert Kolasinski | Ion and neutral time-of-flight spectroscopy as an in-situ diagnostic for probing plasma-exposed surfaces | |
| 4:00 PM | Mohin Sharma | Investigating the in-situ radiation damage in optical sensors using ion beam-induced charge microscopy | |
| 4:15 PM | Patrick Kirscht | An attempt to predict oligomer sputtering using binary collision approximation simulations | |

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|-----------------------|-----------------------|-----------------------|
| 5:00 - 7:00 PM | Poster Session | Grand Ballroom |
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| 7:30 - 9:30 PM | Student Appreciation Event (by invite only) | |
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CAARI 2024 SPEAKER SCHEDULE SUMMARY - TUESDAY, JULY 23, 2024

Plenary Sessions

Rio Grande

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|---------|-----------------------------|--------------------------|
| 9:00 AM | Vendor Roadshow (VR) | Chair: Gary Glass |
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9:45 - 10:00 AM

Break

General Sessions

| ISM-04 | | Title: Mechanical Properties of Ion-Irradiated Complex Alloys | Elm Fork I |
|----------|------------------------|--|------------|
| | | Chair: Lukasz Kurpaska | |
| 10:00 AM | Khalid Hattar | Coupling Ion Accelerators to Small-scale Mechanical Testing and Analytical Tools for Rapid Screening of Complex Material Systems | |
| 10:30 AM | Malgorzata Lewandowska | Development of ODS steels for fusion and other harsh environments | |
| 11:00 AM | Sri Tapaswi Nori | Irradiation-Induced Defect Characteristics and Hardening Behaviour of Oxide-dispersion Strengthened Concentrated Solid Solution Alloys | |
| 11:15 AM | Andrea Stinchelli | In-situ Transmission Electron Microscopy study of irradiation-induced crystallization in advanced amorphous ceramic coatings | |

| RE-10 | | Title: Irradiation Effects in the Extremes, III | Elm Fork II |
|----------|------------------|---|-------------|
| | | Chair: Osman El Atwani | |
| 10:00 AM | Michael Short | Beam-On Irradiation Effects for Faster Down-Selection of Fusion Reactor Material Candidates | |
| 10:30 AM | Peter Hosemann | Surface near Helium damage in materials studied with a high throughput implantation method | |
| 11:00 AM | Daniel Velazquez | Avalanche Energy: The development of the Orbitron, a micro-fusion reactor for clean, mobile and distributed energy applications | |

| OM-04 | | Title: Ion Sources | Trinity Central |
|----------|-----------------|--|-----------------|
| | | Chair: Dannie Steski | |
| 10:00 AM | Naresh Deoli | Heavy ions for radiobiological work at the Columbia Radiological Research Accelerator Facility | |
| 10:20 AM | Ashton Morelock | Current status of the Triton source at Florida State University | |
| 10:40 AM | Eric Alderson | Development and performance of sub-nanoamp beam diagnostics at National Electrostatics Corp. | |
| 11:00 AM | Mark Harrison | Analytic Model for Filament Degradation in Filament-Driven DC Ion Sources | |

CAARI 2024 SPEAKER SCHEDULE SUMMARY - TUESDAY, JULY 23, 2024

| NP-10 | | Title: Neutron and Fundamental Symmetries, II | West Fork I |
|--------------|------------------|--|--------------------|
| | | Chair: Matthew Devlin | |
| 10:00 AM | Ingrid Knapova | Neutron capture cross sections measured with DANCE | |
| 10:25 AM | Danielle Schaper | Fundamental Physics using Pulsed Neutron Sources: Using Compound Nuclear (Resonance) States to Search for Exotic Beyond the Standard Model Physics | |
| 10:50 AM | Thomas Baumann | Development of a high-resolution fast-neutron detector | |
| 11:15 AM | Matthew Devlin | Recent High-precision Prompt Fission Neutron Spectra Measurements for Fast Neutron-induced Fission at LANSCE | |

| NST-05 | | Title: Quantum Information Sciences | West Fork II |
|---------------|------------------------|--|---------------------|
| | | Chair: Alex Belianinov & Michael Titze | |
| 10:00 AM | Eric Rosenthal | The tin-vacancy qubit in diamond: an emerging platform for quantum technologies | |
| 10:30 AM | Yeghishe Tsaturyan | Synthesis of optically active solid-state spin qubits via ion implantation and irradiation | |
| 11:00 AM | Vignesh Chandrasekaran | Quantum business opportunities | |

| SD-05 | | Title: Space-Based Security & Defense Applications | Post Oak |
|--------------|---------------------|--|-----------------|
| | | Chair: Gennady Miloshevsky | |
| 10:00 AM | Sivanandan Harilal | Applications of laser-produced plasmas in the fields of space security and nuclear non-proliferation | |
| 10:35 AM | Farhat Beg | Plasma ablation and shock generation to study the effect of laser impulse | |
| 11:10 AM | Gennady Miloshevsky | MIRDIC computer code for predictive modeling of electrostatic discharge induced by space radiation in dielectric and insulating materials of spacecrafts | |

11:30 - 1:00 PM

Lunch

Grand Ballroom

| RE-01 <i>(Session to run long)</i> | | Title: Irradiation Effects in Semiconductor and Applications | Elm Fork I |
|--|------------------|--|-------------------|
| | | Chair: Feng Ren | |
| 1:00 PM | Michael Titze | Displacement Damage and Total Ionizing Dose Response of Ga ₂ O ₃ MOSFETs | |
| 1:25 PM | Lauren Bezzina | Radiation Testing for Electronic Devices in Space at the ANU Heavy Ion Accelerator Facility | |
| 1:40 PM | Mia Jin | Radiation-induced crystalline defects in Al _x Ga _{1-x} N | |
| 2:05 PM | Sergei Kucheyev | Radiation defect engineering in hexagonal boron nitride | |
| 2:20 PM | Miguel Crespillo | Defect generation mechanisms in silica under intense electronic excitation by ion beams below 100 K: Interplay between radiative emissions | |

CAARI 2024 SPEAKER SCHEDULE SUMMARY - TUESDAY, JULY 23, 2024

| | | | |
|--------------|------------------|---|--------------------|
| AF-03 | | Title: Machine Learning for Particle Accelerators II | Elm Fork II |
| | | Chair: Alexander Scheinker | |
| 1:00 PM | Fuhao Ji | Multi-Objective Bayesian Active Learning for MeV-ultrafast electron diffraction | |
| 1:20 PM | Willem Blokland | Machine Learning to improve the Spallation Neutrons Source Accelerator and Target performance | |
| 1:40 PM | Xilin Zhang | Report on accelerator-physics-related machine learning studies from FRIB theory group | |
| 1:55 PM | Peter Norgard | Particle Beam Focus Optimization using Stochastic Swarm Technique | |
| 2:10 PM | Christopher Leon | Physics-constrained machine learning for electrodynamics based on Fourier transformed Maxwell's equations | |

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|--------------|------------------|---|------------------------|
| OM-05 | | Title: Open SNEAP Discussion | Trinity Central |
| | | Chair: Edward Stech | |
| 1:00 PM | Daniel Robertson | SNEAP Communications and Web Based Presence | |

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| SD-04 | | Title: Detectors for Accelerator-Based Systems | West Fork II |
| | | Chair: Nerine Cherepy | |
| 1:00 PM | John Derek Demaree | Scintillation response of gallium oxide to charged particle and gamma radiation produced by radioisotope and accelerator sources | |
| 1:20 PM | Nerine Cherepy | Detectors for MeV X-ray and Neutron Imaging | |
| 1:40 PM | Nathan Gillespie | Investigating Ce and Tb Concentrations in Translucent Rare-Earth Aluminum Garnet Ceramic Scintillators | |
| 2:00 PM | Kimberly Pestovich | Radiation Hardness of New Inorganic Halide Single Crystal Scintillators | |

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| MC-VAC-01 | | Title: Vacuum Class I | Post Oak |
| | | Chair: John Screech | |
| 1:00 PM | John Screech | Ultra-High Vacuum Seminar: Part 1 of 2 Session Series | |

**2:30 - 3:00
PM**

Break

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|---------------|------------------------------|---|-------------------|
| ISM-05 | | Title: Ionization Enhanced Synthesis, Modifications and Analysis | Elm Fork I |
| | | Chair: Vaithiyalingam Shutthanandan | |
| 3:00 PM | Zihua Zhu | Nanoscale hydrogen detection using time-of-flight secondary ion mass spectrometry | |
| 3:20 PM | Vaithiyalingam Shutthanandan | Radiant Precision: Exploring Material Radiation with the Helium Ion Microscope | |
| 3:40 PM | William Weber | Effects of Electronic Energy Loss on Amorphization Behavior in Pyrochlore Oxides | |
| 4:00 PM | Yanwen Zhang | Ionization Effects on Nanostructured Materials Subjected to Ion Irradiation | |

CAARI 2024 SPEAKER SCHEDULE SUMMARY - TUESDAY, JULY 23, 2024

| | | | |
|---------------|------------------------|--|--------------------|
| NST-02 | | Title: Nanoscale Pattern Formation Produced by Ion Bombardment of Solid Surfaces II | Elm Fork II |
| | | Chair: Mark Bradley | |
| 3:00 PM | Huck Beng Chew | Ion Bombardment of Carbon Targets and Beyond: Bridging Molecular Dynamics Simulations and Reduced-order Models | |
| 3:30 PM | Alvaro Lopez Cazalilla | Insights on silicon nanopatterning induced by low-energy surface bombardment | |
| 4:00 PM | Mark Bradley | A Simple Dynamical Model that Leads to Sputter Cone Formation | |

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| NP-13 <i>(Session to run long)</i> | | Title: Precision Measurements, Amo-Nuclear Techniques, I | West Fork I |
| | | Chair: Alfredo Galindo-Uribarri | |
| 3:00 PM | Yan Zhou | Precision spectroscopy of heavy molecular ions using quantum logic scheme | |
| 3:20 PM | Kia Boon Ng | Probing physics beyond the Standard Model with molecular ion $^{227}\text{ThF}^+$ | |
| 3:40 PM | Alex Brinson | Precision Measurement Techniques for Isotope Shifts of Unstable Atoms | |
| 4:00 PM | Jaime Cardona | Expanding Experimental Opportunities at TRIUMF with TITAN EBIT | |
| 4:15 PM | Xing Wu | Advancing EDM searches with ultracold radioactive molecules at FRIB | |
| 4:30 PM | Edwin Penafiel (15 min) | Precision Measurements with Cavity QED and Molecules for Fundamental Physics | |

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|--------------|-------------------|--|---------------------|
| IA-03 | | Title: Compact Accelerator-Based Systems for Geo-Physical Applications | West Fork II |
| | | Chair: Jani Reijonen | |
| 3:00 PM | Weijun Guo | Geochemistry and Saturation Applications Utilizing A New Slim Pulsed Neutron Technology | |
| 3:30 PM | Ahmed Badruzzaman | "Compact" Accelerators in Geological Probing, Petroleum to Climate Mitigation-State of Technology Ahmed Badruzzaman | |
| 4:00 PM | Christopher Meert | Quantification of Mercury Contamination using a Compact Cadmium Zinc Telluride Imaging Spectrometer and Neutron Generator. | |

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| MC-RD-01 | | Title: Radiation Damage: Fundamentals and Applications | Post Oak |
| | | Chair: Yongqiang Wang | |
| 3:00 PM | Lin Shao | Accelerator-based radiation materials science for nuclear engineering | |
| 3:45 PM | Joshua Young | Using ion beam irradiation as a surrogate for neutron displacement damage in microelectronics: Simple theory and equivalency considerations | |

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| 5:00 - 7:00 PM | Topic Editor, Session Chair, and Vendor Appreciation Event (<i>all welcome</i>) | | Grand Ballroom |
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CAARI 2024 SPEAKER SCHEDULE SUMMARY - WEDNESDAY, JULY 24, 2024

| Plenary Sessions | | | Rio Grande |
|-------------------------|--------------------|---|-------------------|
| | PS-02 | Chair: Barney Doyle | |
| 9:00 AM | Maria Gatu Johnson | Diagnostic development in MIT accelerator lab in support of advances in Inertial Confinement Fusion, including Ignition | |

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| 9:45 - 10:00 AM | Break |
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General Sessions

| RE-03 | | Title: Irradiation Effects in Ceramics | Elm Fork I |
|--------------|-------------------------|---|-------------------|
| | | Chair: Miguel Crespillo | |
| 10:00 AM | Joseph Graham | Using Cryo-Ionoluminescence to Differentiate the Electronic and Nuclear Origins of Emission Bands in Strontium Titanate | |
| 10:25 AM | Marta Malo | He implantation and radiation effects on coatings for fusion applications | |
| 10:50 AM | Elena Tajuelo Rodriguez | Review on the state of knowledge of neutron and gamma radiation effects on concrete | |
| 11:15 AM | Nishant Garg | Elucidating Radiation-Induced Degradation in Siliceous Minerals in Concrete via Multi-modal Imaging | |

| AF-01 | | Title: Accelerator Facilities I | Elm Fork II |
|--------------|-------------------|---|--------------------|
| | | Chair: Fuhao Ji | |
| 10:00 AM | Mauricio Portillo | Recent Developments and Scientific Highlights at the FRIB Facility | |
| 10:25 AM | Amy Sy | Pioneering research in accelerator and beam physics: recent highlights and initiatives at Jefferson Lab's CASA | |
| 10:50 AM | Wei Liu | An overview of ongoing and prospective R&D activities at HiRES to advance MeV-UED instruments | |
| 11:15 AM | Felix Olise | The Stewardship of the Nigerian Tandem Particle Accelerator: Preparing Ground for Expertise in Minerals Prospecting and Radiation Therapy | |

| OM-06 | | Title: Facility Updates III | Trinity Central |
|--------------|----------------------|---|------------------------|
| | | Chair: Thomas Tunningley | |
| 10:00 AM | Gurazada Ravi Prasad | CAIS AMS Status Report | |
| 10:20 AM | Jian Wang | Control System Upgrade for ANSTO's 2MV STAR Tandatron Accelerator | |
| 10:40 AM | John Wilkinson | Center for Accelerator Mass Spectrometry Status Report | |
| 11:00 AM | David Wright | Lab update and future neutron facilities at AWE | |

CAARI 2024 SPEAKER SCHEDULE SUMMARY - WEDNESDAY, JULY 24, 2024

| NP-11 | | Title: Nuclear Astrophysics, I | West Fork I |
|----------|--------------------|--|-------------|
| | | Chair: Dan Bardayan | |
| 10:00 AM | James deBoer | The $^{13}\text{C}(\alpha, n)^{16}\text{O}$ differential cross section | |
| 10:20 AM | David Neto | Measuring the cross section of the $^{15}\text{N}(\alpha, \gamma)^{19}\text{F}$ reaction using a single-fluid bubble chamber | |
| 10:40 AM | Karina Martirosova | Progress Towards a Single Atom Microscope (SAM) for Nuclear Astrophysics | |
| 11:00 AM | Maria Anastasiou | Measuring the $^{88}\text{Sr}(\alpha, n)^{91}\text{Zr}$ reaction cross section with Accelerator Mass Spectrometry | |
| 11:20 AM | Dan Bardayan | First measurements with the Enge split-pole spectrometer at the Notre Dame Nuclear Science Lab (NSL) | |

| IA-04 | | Title: Advances in Accelerator-Based Sterilization Systems and Blood/Food Irradiators | West Fork II |
|----------|--------------------------|--|--------------|
| | | Chair: Leo Fifield | |
| 10:00 AM | Adam Gabriel | The next evolutionary steps of the Rhodotron, introducing high power solid state amplification technology in the RF chain and digitalization of E-Beam and Xray systems. | |
| 10:15 AM | Micahel Paul Christofaro | Reveam, Inc.'s Groundbreaking Application of Accelerator Systems to Treat Food Using their Patented Electronic Cold Pasteurization (ECPTM) Process | |
| 10:30 AM | Marcos Ruelas | The impact of recent advances in accelerator sterilization and irradiator systems on cost, adoption, and availability. | |
| 10:55 AM | Leo Fifield | Toward Use of Low Energy Electron Beams for Sterilization | |
| 11:10 AM | Matt Pharr | Effects of Radiation-Driven Changes in Physical Properties of Polymers | |

| MC-NE-01 | | Title: Nuclear Energy: Basics and Advances | Post Oak |
|----------|----------------|--|----------|
| | | Chair: Yongqiang Wang | |
| 10:00 AM | Peter Hosemann | Electrical Power from Nuclear Fission: A Tutorial for Conventional and Advanced Reactors | |

11:30 - 1:00
PM

Lunch (on your own)

| RE-04 | | Title: Combination of Irradiation + Stress + Corrosion, I | Elm Fork I |
|---------|-------------------|--|------------|
| | | Chair: Charles Hirst & Franziska Schmidt | |
| 1:00 PM | David Lunt | Synergistic irradiation-thermomechanical loading with integrated strain mapping capability | |
| 1:30 PM | Laurence Skidmore | Developing synergistic irradiation-thermomechanical testing capability | |
| 1:50 PM | Timothy Lach | Multimodal characterization of radiation and transmutation extremes in SNS components | |

CAARI 2024 SPEAKER SCHEDULE SUMMARY - WEDNESDAY, JULY 24, 2024

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|--------------|--------------|---|--------------------|
| AF-05 | | Title: Accelerator Facilities II | Elm Fork II |
| | | Chair: Fuhao Ji | |
| 1:00 PM | Mark Palmer | Recent Scientific and R&D Highlights from Brookhaven's Accelerator Test Facility (ATF) | |
| 1:30 PM | Xueying Lu | The Argonne Wakefield Accelerator (AWA) facility and recent advances in two-beam acceleration | |
| 2:00 PM | Adrien Talon | Cable installation management for the Advanced Light Source Upgrade (ALS-U) Project | |

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|--------------|-----------------------------|---|------------------------|
| IA-05 | | Title: Industrial Neutron and X-Ray Imaging and Radiography Devices and Applications | Trinity Central |
| | | Chair: Jay Theodore Cremer | |
| 1:00 PM | Andrey Valentinovich Mishin | High Energy Sources Development and Production at Varex Imaging Corporation | |
| 1:30 PM | Charles Gary | Fast and Thermal Neutron Imaging for Industrial Radiography with Neutron Generators | |

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| NP-12 | | Title: Nuclear Astrophysics, II | West Fork I |
| | | Chair: Dan Bardayan | |
| 1:00 PM | Ania Kwiatkowski | Advances in mass spectrometry towards the r-process path at TITAN-TRIUMF | |
| 1:20 PM | Adrian A Valverde | Precision mass measurements with the Canadian Penning Trap for the astrophysical r-process | |
| 1:40 PM | Mallory Smith | Creating New Isotopes at FRIB for Experiments in Nuclear Astrophysics | |
| 2:00 PM | Andrea Richard | Experimentally Constrained $^{93}\text{Sr}(n,\gamma)^{94}\text{Sr}$ Cross Section via the Surrogate Reaction Method | |

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| NST-06 | | Title: Focused Ion Beams | West Fork II |
| | | Chair: Michael Titze & Alex Belianinov | |
| 1:00 PM | Luca Basso | Development of diamond platforms for quantum sensing by ion implantation | |
| 1:30 PM | Shane Cybart | Nanofabrication of Josephson Junctions with Focused Helium Ion Irradiation | |
| 2:00 PM | Harriet Ahlgren | Ultra-low energy ion implantation as a powerful tool to create new nanostructures within 2D materials | |

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| MC-VAC-02 | | Title: Vacuum Class II | Post Oak |
| | | Chair: John Screech | |
| 1:00 PM | John Screech | Ultra-High Vacuum Seminar: Part 2 of 2 Session Series | |

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| 3:30 - 9:00 PM | Excursion - Billy Bob's | |
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CAARI 2024 SPEAKER SCHEDULE SUMMARY - THURSDAY, JULY 25, 2024

| Plenary Sessions | | Rio Grande |
|------------------|------------------|---|
| | PS-03 | Chair: Arlyn Antolak |
| 9:00 AM | Cathy Sue Cutler | Accelerator Production of Medical Radionuclides |

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| 9:45 - 10:00 AM | Break |
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| General Sessions | | |
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| RE-02 | | Title: Irradiation Effect in Low-Dimensional Materials and Devices | Elm Fork I |
|----------|-------------------|--|------------|
| | | Chair: Yang Tan & Feng Ren | |
| 10:00 AM | Yongqiang Wang | Ion Beam Synthesis of Layer-Tunable and Transfer Free Graphene for Device Applications | |
| 10:25 AM | Tristan Olsen | Mechanisms of Ion Irradiation Induced Ordering in Amorphous TiO ₂ Nanotubes: Effects of Ion Mass and Energy | |
| 10:40 AM | Chenyi Qu | Interfaces enhanced plasma irradiation resistance in CrMoTaWV/W multilayer films through blocking He diffusion | |
| 10:55 AM | Mina Tavakolzadeh | Hydrogen Retention in Copper-Tungsten Nanocomposites | |
| 11:10 AM | Feng Ren | Modification of (Photo)electrocatalytic nanomaterials by ion beam technology | |

| MA-01 | | Title: Developments in Medical Accelerator Technology and Applications | Elm Fork II |
|----------|----------------------|--|-------------|
| | | Chair: Martin Bues | |
| 10:00 AM | Christopher PJ Barty | FLASH Radiotherapy and Precision X-ray Imaging enabled by Distributed Charge Compact Accelerators | |
| 10:20 AM | Yuewen Tan | Electron beam optimization on a modified Varian clinical linear accelerator for FLASH preclinical studies at RARAF | |
| 10:40 AM | Homeira Faridnejad | Dosimetry calibration for low-energy protons (2-4 MeV) using Gafchromic film dosimeters | |
| 11:00 AM | Alexander Dunaevsky | Neutron Beam System for Accelerator-based Boron Neutron Capture Therapy | |

| AMP-01 | | Title: Atomic Collisions: Fundamental Processes & Applications | Trinity Central |
|----------|---------------------|--|-----------------|
| | | Chair: Sylwia Ptasinska | |
| 10:00 AM | Dipayan Chakraborty | Development of a velocity map imaging spectrometer and its application in understanding the dynamics of low energy electron-molecule collisions. | |
| 10:30 AM | Javier Miranda | L X-ray production cross sections of Ag induced by the impact of ¹² C ³⁺ and ¹³ C ³⁺ ions | |
| 11:00 AM | Felix Olise | Calculated He+ Induced L X-ray Production Cross Sections for Rare Earth Elements | |

CAARI 2024 SPEAKER SCHEDULE SUMMARY - THURSDAY, JULY 25, 2024

| TA-01 | | Title: Teaching with Accelerators | West Fork II |
|--------------|-------------------------|---|---------------------|
| | | Chair: Andy Roberts & Graham F Peaslee | |
| 10:00 AM | Andy Robert | Undergraduate training and research with 400 keV electrons at Minnesota State University | |
| 10:15 AM | Anthony Miller | Undergraduate Training and Research Involvement on the St. Andre 9SDH 3-MV Tandem Accelerator at the University of Notre Dame | |
| 10:35 AM | Paul Ellison | University of Wisconsin Isotope Production HIPPOcampus Summer School | |
| 10:55 AM | Rahul Mehta | An Undergraduate Advanced Lab teaching: Measurement and analysis of Ions and Photons | |
| 11:15 AM | Raquel Gonzalez-Arrabal | Teaching activities with accelerators at the Universidad Politécnic de Madrid in Undergraduate and Graduate Programs | |

| IBTM-02 | | Title: Light Element Detection Using IBA | Post Oak |
|----------------|---------------------|--|-----------------|
| | | Chair: Mikko Laitinen | |
| 10:00AM | Masoud Dialameh | Elemental Quantification of Carbon Nanotube (CNT) Pellicles for EUV Lithography Applications | |
| 10:25 AM | Kristina Komander | Investigating hydrogen in nanoscale transition metal hydrides with high-energy ion beams | |
| 10:50 AM | Lyudmila Goncharova | Hydrogen thin film standards for high-resolution hydrogen depth profiling | |
| 11:05 AM | Mikko Laitinen | Detection of light elements by a ToF-ERD telescope | |
| 11:20 AM | Charles Bowen | Development of a Compact Magnetic Backscattered Ion Beam Deflector System for Light Element Ion Microscopy | |

11:30 - 1:00 PM

Lunch (on your own)

| RE-08 | | Title: Radiation Effects in Nuclear Materials | Elm Fork I |
|--------------|------------------------|--|-------------------|
| | | Chair: Andy Smith & David Lunt | |
| 1:00 PM | Khalid Hattar | Development of In-situ Ion Irradiation Tools for Nuclear Engineering Applications: Lessons Learned and Future Directions | |
| 1:30 PM | Tongjun Niu | Microshear deformation for evaluating effects of void swelling on mechanical properties of heavy ion irradiated metals | |
| 1:50 PM | Alvaro Lopez Cazalilla | Effect of surface orientation on blistering of copper under high fluence of keV hydrogen ion irradiation | |
| 2:10 PM | Pengcheng Zhu | Effect of Mo on oxidation, irradiation and creep properties of FeCrAl alloys | |

| AF-04 | | Title: Neutron generator-based technology for planetary science | Trinity Central |
|--------------|------------------|---|------------------------|
| | | Chair: Mauricio Ayllon Unzueta | |
| 1:00 PM | Jani Reijonen | Neutron Generator for Space Applications: From Oil Field to Outer Space | |
| 1:25 PM | Ann Parsons | The BECA and DraGNS Instruments for In situ Planetary Geochemistry | |
| 1:50 PM | Craig Hardgrove | Exploring the Surface of Mars with Active Neutron Measurements on the Mars Science Laboratory Curiosity Rover | |
| 2:15 PM | Emily Kaye Surry | Non-Destructive Interrogation using Associated Particle Imaging for Planetary Surface Missions | |

CAARI 2024 SPEAKER SCHEDULE SUMMARY - THURSDAY, JULY 25, 2024

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|--------------|-----------------|--|--------------------|
| NP-05 | | Title: Artificial Intelligence -Machine Learning Advancements and Applications, I | West Fork I |
| | | Chair: Jakub Kvapil & Xuan Li | |
| 1:00 PM | Xilin Zhang | Report on STREAMLINE collaboration | |
| 1:25 PM | Yihui "Ray" Ren | Towards Realtime Neural Compression for Sparse Time-Projection Chamber Data | |
| 1:50 PM | Chris Tennant | Graph Learning for Operation of Particle Accelerators | |

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| SD-01 <i>(Session to run long)</i> | | Title: Accelerator-Based Security & Defense Systems | West Fork II |
| | | Chair: Joseph Bendahan & Arlyn Antolak | |
| 1:00 PM | Amy Shiroma | Battery-Operated Linacs for Portable Threat Detection | |
| 1:20 PM | James Hunter | How a 40 year old machine remains world class, characteristics and use of a Scanditronix M22 Microtron for industrial imaging | |
| 1:40 PM | Igor Jovanovic | Tunable Intense High-Energy Photon Source Development and Testing | |
| 2:00 PM | Andrea Schmidt | Portable Isotopic Assay via Nuclear Resonance Transmission Analysis Using a Short-Pulse Neutron Source | |
| 2:20 PM | Saeed Assadi | Impact of Solid-State Pulsed Power on The Scorpius Multi-Pulsed Radiography Accelerator | |

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| NBAT-01 | | Title: Neutron Production and Detection Methods | Post Oak |
| | | Chair: Jason Dugger | |
| 1:00 PM | Ryan Hedlof | Computational Techniques for Electrostatic Ion Accelerator Component Design and Optimization | |
| 1:30 PM | Kevin Yim | Computational study of tungsten and depleted uranium photoneutron targets for a 20 MeV electron linear accelerator | |
| 2:00 PM | Amber Guckes | Prediction of performance for a short, multi-pulse photoneutron source based on the NNSS Scorpius linear induction accelerator | |

2:30 - 3:00 PM

Break

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|--------------|------------------|--|-------------------|
| RE-09 | | Title: Radiation Effects in Chemical and Biological Systems | Elm Fork I |
| | | Chair: Naresh Deoli | |
| 3:00 PM | Alexandra Miller | Identification of an Epigenomic Signature of Mixed Field Neutron Exposure at Low Doses: Benefit to Military Operators in a Post-Nuclear Detonation | |
| 3:25 PM | Sylwia Ptasinska | DNA damage as a probe to assess the dose rate and chemistry of low-temperature plasma radiation | |
| 3:50 PM | Yuijie Chi | Simulation Study of Ionizing Radiation Effects on Biomolecular Structures | |
| 4:15 PM | Rahul Mehta | Differential analysis of Normal Rat Leg Bones subjected to Space Conditions | |
| 4:30 PM | Maxwell Omeje | Measurements of Radiological Health Risks to Students in Abo-Odo Ota, Nigeria | |

CAARI 2024 SPEAKER SCHEDULE SUMMARY - THURSDAY, JULY 25, 2024

| | | | |
|--------------|-------------------|---|--------------------|
| MA-04 | | Title: Radioisotopes in Medicine | Elm Fork II |
| | | Chair: Cathy Sue Cutler & Sergey Chemerisov | |
| 3:00 PM | Lauren McIntosh | Hot Stuff—producing At-211 for novel medical applications | |
| 3:20 PM | Sergey Chemerisov | Accelerator Based Production of Mo-99: Target Design Considerations. | |
| 3:40 PM | Laura Lambert | The CERN-MEDICIS facility – An offline mass separation facility for the production of research medical radionuclides | |
| 4:00 PM | Shakilur Rahman | Photonuclear cross-section and yields of $^{100}\text{Mo}(g,x)^{99}\text{Mo}$, $^{100}\text{Mo}(g,np)^{98}\text{mNb}$, and $^{59}\text{Co}(g,xn; x=1-4)^{58-55}\text{Co}$ reactions with intermediate bremsstrahlung energies | |

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|--------------|---------------------|---|--------------------|
| NP-07 | | Title: Artificial Intelligence -Machine Learning Advancements and Applications, III | West Fork I |
| | | Chair: Jakub Kvapil & Xuan Li | |
| 3:00 PM | Alexander Scheinker | Online Autonomous Tuning of the FRIB Accelerator Using Machine Learning: DOE NP AI Project Status | |
| 3:30 PM | Adam Carpenter | Machine Learning Tools for Improved SRF Operations at CEBAF | |
| 3:55 PM | Nicholaos Tsoupas | An Induction type of Septum for the EIC | |

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|---------------|----------------------|---|---------------------|
| ISM-01 | | Title: Special Topics on Ion Enhanced Synthesis and Modification | West Fork II |
| | | Chair: Anand Prakash Pathak | |
| 3:00 PM | Anand Prakash Pathak | Studies on the gamma and swift heavy ion irradiation induced effects on the Resistive Switching Properties of Transition Metal Oxides | |
| 3:30 PM | Tom Kubley | High Energy Wafer Implantation updates at the Tandem User Facility at Brookhaven National Lab | |
| 4:00 PM | Barney Doyle | The new Pulsed Power Electron Gun (PPEG) at Sandia National Labs | |

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|----------------|---------------------|--|-----------------|
| IBTM-03 | | Title: Multiple Technique Analyses Including Ion Beams (TOTAL IBA) | Post Oak |
| | | Chair: Iva Bogdanovic Radovic & Lyudmila Goncharova | |
| 3:00 PM | Tiago Fiorini Silva | Bias and synergy in the self-consistent analysis of IBA data | |
| 3:30 PM | Felix Junge | Fast simulation of ion beam analysis spectra using binary collision approximation | |
| 3:50 PM | Sage Buchanan | Progress on Improving SIMS Quantification of Erbium Through the Development of Ion-Implanted Calibration Standards | |
| 4:10 PM | Igor Usov | The Upgraded Ion Beam Analysis Capability at LANL | |

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| 6:00 - 9:00 PM | Networking Dinner | Hotel Terrace |
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CAARI 2024 SPEAKER SCHEDULE SUMMARY - FRIDAY, JULY 26, 2024

| Closing | | Rio Grande |
|---------|------------------------------|---|
| 9:00 AM | Closing Ceremony (CC) | Chair: All Conference Organizers |

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| 9:15 - 9:30 AM | Break |
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General Sessions

| RE-05 | | Title: Combination of Irradiation + Stress + Corrosion, II | Elm Fork I |
|----------|-------------------|---|------------|
| | | Chair: Franziska Schmidt & Charles Hirst | |
| 9:30 AM | Weiyue Zhou | Exploring Radiation-Corrosion Coupling in High-Temperature Molten Salt and Liquid Metal Environments through Proton Irradiation Studies | |
| 10:00 AM | Franziska Schmidt | Isolating the effects of beam heating in simultaneous irradiation-corrosion experiments | |
| 10:20 AM | Matthew Chancey | Development of microscale in-situ irradiation and corrosion experiment (Micro-ICE) | |
| 10:40 AM | Yongqiang Wang | Exploring 2D graphene as atomic armor to protect uranium from ambient corrosion | |

| MA-03 | | Title: Medical Imaging and Real Time Adaptive AI in Particle Therapy | Elm Fork II |
|----------|------------|---|-------------|
| | | Chair: You Zhang & Anissa Bey | |
| 9:30 AM | Mingwu Jin | Prompt gamma imaging for particle therapy: from sparse sampling to AI | |
| 9:50 AM | You Zhang | AI-enabled Real-time Imaging for Adaptive Particle Radiotherapy | |
| 10:10 AM | Weiguo Iu | Mid-range probing and range-guided adaptive particle therapy | |
| 10:30 AM | John Cesar | PET Image-Guidance for Conventional and FLASH Proton Therapy | |
| 10:50 AM | Anissa Bey | Advances in In Vivo Imaging for Particle Radiotherapy: A Topical Overview | |

| IA-06 | | Title: Advanced Manufacturing of Industrial Accelerators and Power Supplies | Trinity Central |
|----------|---------------|--|-----------------|
| | | Chair: Matthew Coventry | |
| 9:30 AM | Vincent Ernst | On the Simulations and Control of Cockcroft-Walton Ladders | |
| 10:00 AM | Paul Groth | Managing Electric Fields in Compact Accelerator Environments | |
| 10:20 AM | Amirari Diego | Split Structure Manufacturing of Compact Accelerators for Industrial Applications | |
| 10:40 AM | Yunlong Chi | Development of 10 MeV electron linear accelerator for space environment simulation | |

CAARI 2024 SPEAKER SCHEDULE SUMMARY - FRIDAY, JULY 26, 2024

| | | | |
|-----------------|-------------------------------|--|--------------------|
| NP-06 | | Title: Artificial Intelligence -Machine Learning Advancements and Applications, II | West Fork I |
| | | Chair: Jakub Kvapil & Xuan Li | |
| 9:30 AM | Cristiano Fanelli | AI-Assisted Detector Design at EIC | |
| 10:00 AM | Brahim Mustapha | Machine Learning Tools to support Accelerator Operations | |
| 10:20 AM | Torri Jeske | Machine learning based control systems for Nuclear Physics Experiments | |
| 10:40 AM | Tyler Wheeler | 2D Convolutional Neural Networks with Early Data Fusion for Rare Event Search in GADGET II TPC Data | |
| NBAT-03 | | Title: Neutron detector material development and beamline measurement/characterization facilities | Post Oak |
| | | Chair: Patrick Feng | |
| 9:30 AM | Alexander Long | Harnessing Event-Based Neutron Imaging Systems for Fast Neutron Imaging at LANSCE | |
| 9:55 AM | Cody Parker | Neutron production and detection capabilities at Ohio University for basic science and applications | |
| 10:10 AM | Gail Frances Hernandez Garcia | Scalable Manufacturing of Melt-Blended Organic Scintillators for High Efficiency Neutron Detectors | |
| 10:25 AM | Patrick Feng | Net Shape Production of Organic Glass-Based Neutron Detectors | |
| 10:40 AM | Peter Dyszel | New neutron detectors for beta-delayed neutron studies | |
| 11:00 AM | Conference Concludes | | |

CAARI 2022 SPEAKER SCHEDULE SUMMARY - POSTER SOCIAL

5:00 - 7:00
PM

POSTER SOCIAL -- Monday, 07/22/2024

Grand Ballroom

| Topic Code | Presenter | Title |
|------------|---------------------------|--|
| AA-IBTM | Anthony Miller | Homogenous and Robust Gypsum-Based Standard Materials for Trace Element Analysis by PIGE/PIXE |
| AA-IBTM | Mikko Laitinen | Required for novel semiconductor materials: ToF-ERDA spectrometer |
| AA-IBTM | Patrick Kirscht | Lithium depth profiling with proton beam NRA |
| AA-IBTM | Devesh Bhosale | Ion Resonance Energy Coupling using Induction Field |
| AA-IBTM | Sage Buchannan | A Multimodal Approach Towards Advancing the Characterization and Analysis of Erbium |
| AA-IBTM | Taya Sailza | Investigation of Elemental concentration in Olivine using PIXE, EDAX, and XRF. |
| AA-IBTM | Felix Junge | Low energy ion-solid interactions: a quantitative experimental verification of binary collision approximation simulations |
| AA-NBAT | Galina Yakubova | Advancements in field measurement of soil composition: Introducing the tagged neutron technique mobile system |
| AC-AF | Ihor Ihnatiev | Suppression of X-ray radiation from a 2 MV electrostatic ion accelerator |
| AC-AF | Mark Harrison | Improving Charge Exchange Performance in a Tandem Accelerator through Simulations |
| AP-IA | John Tolar | Compensated Neutron Logging with nGen® D-D Neutron Source |
| AP-IA | Nerine Cherepy | MeV Neutron and X-ray Imaging Radiography and Computed Tomography using Advanced Scintillators |
| AP-SD | Caryanne Wilson | Comparison of Neutron Generator Output Estimate Using a LaBr3 and an Organic Scintillator |
| AR-ISM | Beatriz Elizabeth Fuentes | Ongoing research on surface modification by low energy protons |
| AR-ISM | Olakunle Oluwaleye | Effects of Induced Structural Modification on Properties of V^{5+} Ion implanted RF - Magnetron Sputtering Deposited ZnO Thin Films of thickness 120 nm on borosilicate glass substrates |
| AR-NST | Benli Jiang | Real-time In-situ and Post-facto Study of the Mechanisms of Ion Beam Nanopatterning: Angle Dependence and Stress Behavior |
| AR-NST | Ella Schneider | Single Ion Multispecies Positioning at Low Energy for Fabrication of Quantum Technologies |
| AR-RE | Soumya Sahoo | Synthesis of topological surface and superconductivity via implantation of Sn into InSb crystal |
| AR-RE | Thai Hang Chung | Measurements of radiation tolerance of Superlattice (Al)GaAs by Positron Annihilation Spectroscopy |
| AR-RE | Vitalij Kovalevskij | High energy ion implantation for photoconducting terahertz switches |
| AR-RE | David Wright | Carbon Reinforced Boron sub-Oxide Nanocomposite (CaRBON) |
| AR-RE | Oleksandr Morozov | Temperature range of deuterium retention from ferritic-martensitic steel implanted deuterium at 100K and 300K V.I. Zhurba, O. Morozov, V.O. Progoaleva |
| SN-TA | Allan Chen | Compact Ion Beam System for Studying D-D and $p-^{11}B$ Fusion Reactions |
| SN-TA | Daniel Marble | Educational Activities and Research at Tarleton's Nuclear Laboratory |