

NAPAC'22 Synoptic table including invited speakers and abstract #'s (as of July 26)

Talk titles abbreviated for brevity

| Sunday, Aug 7 | | Monday, Aug 8 | | Tuesday, Aug 9 | | Wednesday, Aug 10 | | Thursday, Aug 11 | | Friday, Aug 12 | | | | |
|---------------|--|--|--|---|---|--|---|--|---|--|---|--|---|--|
| 7:30 | | Student breakfast MOODE — Chair: S. Biedron Conference Opening @ 7:55 am Thom Mason, Director of Los Alamos National Laboratory | | Student breakfast | | Student breakfast | | Student breakfast | | Student breakfast | | | | |
| 7:55 | | | | TUXD — Chair: R. Geometrante TUXE — Moderator: C. Sweeney | | WEXD — Chair: J. Byrd WEXE/WEXF | | THXD — Chair: J. Dooling THXE/THXF | | FRXD — Chair: J. Cruz FRXE — Chair: A. Scheinker | | | | |
| 8:00 | Project Management and Accelerator Development, M. Georgsson, S. Biedron, SUXF1 | Applications of Particle Accelerators Mitsuru Uesaka (Japan Atomic Energy Commission) MOODE1 | | Radiation Concerns and Mitigation Schemes for Accelerator Facility Components, F. Pellegrino (FNAL) TUXD1 | | Advances in Beam Dynamics at Nuclear Physics Accelerator Facilities, A. Sy (JLab) WEXD1 | | Machine Learning for Improved Accelerator Health and Reliability, Y. A. Yucean (ORNL) THXD1 | | Demonstration of Optical Stochastic Cooling in an Electron Storage Ring, J. Jarvis (FNAL) FRXD1 | | | | |
| 8:30 | | Expanding the Boundaries of X-ray Lasers: LCLS Upgrades and Future Greg Hays (SLAC) MOODE2 | | An E-Beam Irradiation Beamline at Jefferson Lab for PFAS Remediation in Wastewater, X. Li (ODU) TUXD2 | | Storage Ring Tracking Using Generalized Gradient Representations of Full Magnetic Field Maps, M. Borland/R. R. Lindberg (ANL) WEXD2 | | 6D Phase Space Diagnostics Based on the Latent Space of Encoder-Decoder CNNs, A. Scheinker (LANL) THXD2 | | Experimental Demonstration of Multi-Function Longitudinal Beam Phase-Space Manipulation via Double Emittance-Exchange, J. Seok (ANL) FRXD2 | | | | |
| 9:00 | | Building a Global, Collaborative Accelerator Economy: Summary of the IPAC 2022 Industrial Session Raffaella Geometrante (Kyma) MOODE3 | | Production Pathways for Medically Interesting Isotopes, L. Del Rio (JoPPR) TUXD3 | | The Importance of Data, High-Performance Computing, and Artificial Intelligence/Machine Learning, C. Sweeney (LANL), D. Martin (ANL), A. Edelen (SLAC) TUXE1 | | Accelerator Science and Technology via Inventive Principles of TRIZ, A. Seryi (JLAB) WEXE1 | | Accelerators for Quantum Technologies, A. Romanenko (FNAL), K. Brown (BNL), S. Sosa (UNM) THXE1 | | Measurements of the Five-Dimensional Phase Space Distribution of a High-Intensity Ion Beam, A. Hoover (ORNL) FRXD3 | | |
| 9:30 | | PW-Class Lasers for Accelerators - Overview and an Industry Perspective Olivier Chalus (Thales) MOODE4 | | Laser-Plasma-Accelerator-Driven Electron Radiography on the OMEGA EP Laser, G. Bruhaug (LE) TUXD4 | | Development of Achromatic Imaging Capabilities for pRad at LANSCE, M. Schanz (LANL) TUXD5 | | Map Tracking in Rings With Stochastic Radiation Emission Effects, D. Sagan (Cornell) WEXD3 | | Improved Multi-Dimensional Bunch Shape Monitor, A. Araujo (RadiaBeam) THXD3 | | Bayesian algorithms for practical accelerator control and adaptive machine learning for time varying systems, R. Roussel (SLAC), A. Scheinker (LANL) FRXE1 | | |
| 10:00 | | Coffee Break (30 min) refreshments provided | | Development of Chromatic Imaging Capabilities for pRad at LANSCE, M. Schanz (LANL) TUXD5 | | Dual RF Monochromatization for High Resolution Electron Energy Loss Spectroscopy, A. Kulkarni (UCLA) TUXD6 | | OPAL for Self-Consistent Start-to-End Simulation of Undulator-Based Facilities, A. Arnaud/A. Adelman (PSI) WEXD4 | | Online Accelerator Tuning with Adaptive Bayesian Optimization, N. Kuklev (ANL) THXD4 | | Suppressing the Microbunching Instability at ATF using Laser Assisted Bunch Compression, Q. Marksteiner (LANL) FRXD4 | | |
| 10:30 | | Alvarado G | | Coffee Break (30 min) refreshments provided | | | | Simulation for AWA Drive Linac and EEX Beamline Using OPAL, GPT, and Impact-T, S. Kim (ANL) WEXD5 | | ML-Based Tuning of Control Parameters for LLRF System of Superconducting Cavities, J. Cruz (UNM) THXD5 | | Nonlinearly Shaped Pulses at LCLS-II, N. Neveu (SLAC) FRXD5 | | |
| 11:00 | MOYD — Chair: F. Pilat MOYE — Chair: J. Merrick | | High Voltage DC Gun for High Intensity Polarized Electron Source, O. H. Rahman (BNL) TUYD1 | | Coulomb Crystals in Storage Rings for Quantum Information Science, K. A. Brown (BNL) TUYE1 | | Ultra-high Energy Electrons from Laser Wakefield Accelerators, B. M. Hegelich (UT Austin) WEYD1 | | XFEL as a Low-Emittance Injector for a 4th-Generation Synchrotron Radiation Source, T. Hara (RIKEN) THYD1 | | Accelerator Searches for Axions and Dark Matter, Richard G Van de Water (LANL) FRCDE1 | | | |
| 11:30 | Options for Future Colliders at Fermilab, P. C. Bhat (FNAL) MOYD2 | | Progress Towards Long-Lifetime, High-Current Polarized-Electron Sources, J. Biswas (SBU) TUYD2 | | Next Generation Computational Tools For The Modeling And Design Of Particle Accelerators At Exascale, A. Huebl (LBNL) TUYE2 | | First Lasing of a Free-Electron Laser With a Compact Beam-Driven Plasma Accelerator, S. Romeo (LNF-INFN) WEYD2 | | The Challenging Physics Regimes of High Current Electron Beams, J. E. Coleman (LANL) THYD2 | | Accelerator Production of Medical Radionuclides, Cathy Cutler (BNL) FRCDE2 | | | |
| 12:00 | EIC Transverse Emittance Growth due to Crab Cavity RF Noise: Estimates and Mitigation, T. Mastoridis (CalPoly) MOYD3 | | The Quest for the Perfect Cathode, J. Smedley (SLAC) TUYD3 | | Data Management and Processing Framework on a Server for Scientific Experimental Data, A. Liu (Euclid Techlabs) TUYE3 | | Efficiency and Beam Quality for Positron Acceleration in Loaded Plasma Wakefields, J. Cao (UoO) WEYD3 | | Update on the Status of the C-Band Engineering Research Facility at LANL, E. Simakov (LANL) THYD3 | | Radiation Effects in Microelectronics - Why We Need Particle Accelerators, Jonny Pellish (NASA) FRCDE3 | | | |
| 12:30 | Model Parameters Determination in EIC Strong-Strong Simulation, D. Xu (BNL) MOYD4 | | Towards High Brightness from Plasmon-Enhanced Photoemitters, C. Pierce (Cornell) TUYD4 | | Machine Learning for Anomaly Classification in Particle Accelerators, I. Lobach (ANL) TUYE4 | | Design and Fabrication of a Metamaterial Wakefield Accelerating Structure, D. Merenich (NIU) WEYD4 | | Progress on the APS-U Injector Upgrade, J. Calvey (ANL) THYD4 | | Conference Closing | | | |
| 13:00 | Tolerances of Crab Dispersion at the Interaction Point in the Hadron Storage Ring of EIC, Y. Luo (BNL) MOYD5 | | Epitaxial Alkali-Antimonide Photocathodes on Lattice-matched Substrates, P. Saha (ASU) TUYD5 | | Multiobjective Optimization of the LCLS-II Photoinjector, N. Neveu (SLAC) TUYE5 | | Highly Spin-Polarized Electron Beams Generated From Plasma Photocathodes, Z. Nie (UCLA) WEYD5 | | Emittance Measurements of Nanoblade-Enhanced High Field Cathode, G. Lawler (UCLA) THYD5 | | | | | |
| 13:30 | Chromatic Correction of the EIC Electron Ring Lattice, Y. Cai (SLAC) MOYD6 | | Commissioning of the ASU Cryocooled 200 kV DC Electron Gun, G. Gevorkyan (ASU) TUYD6 | | High-Fidelity Simulations and Machine Learning for Accelerator Design and Optimization, A. Adelman (PSI) TUYE6 | | Studies of a PIP-II Mu2e Experiment, M. Cummings (Muons) WEYD6 | | Arrival Time and Energy Jitter Effects on the Performance of X-ray FERRO, G. Tiwari (BNL) THYD6 | | | | | |
| 14:00 | Lunch Break (90 min) food not provided | | Lunch Break (90 min) food not provided | | Alvarado E Sustainability Brown Bag Luncheon: Let's get the conversation started, M. Uesaka, R. Geometrante, and S. Milton | | Lunch Break (90 min) food not provided | | Lunch Break (90 min) food not provided Vendors Close up Booths | | Lunch Break (90 min) food not provided | | | |
| 14:30 | MOZD — Chair: K. Harkay MOZE — Chair: N. Majernik | | The Electron/Positron Future Circular Collider, F. Zimmermann (CERN) TUZD1 | | Experimental Phase-Space Tracking of a Single Electron in a Storage Ring, A. L. Romanov (FNAL) TUZE1 | | ARDAP's Perspective on Accelerator Technology Research and Development in the US, B. Carlsten (DOE) WEZD1 | | Instant Phase Setting in a Large Superconducting Linac, A. Piastun (FRIB) THZD1 | | Machine Learning-Based Longitudinal Phase Space Prediction of Particle Accelerators, A. Edelen/C. Emma (SLAC) THZE1 | | | |
| 15:00 | Single Pass High Efficiency THz FEL, A. C. Fisher (UCLA) MOZD2 | | The International Effort Towards a Muon Collider, D. Stratakis (FNAL) TUZD2 | | Nonlinear Optics from Off-Energy Closed Orbits, D. K. Olsson (MAX IV) TUZE2 | | Solid State Active Resonance Induction Technology to Accelerate kA Electron Beam, J. Ellsworth (LLNL) WEZD2 | | Advances in the ATLAS Accelerator, M. Kelly (ANL) THZD2 | | Developing Control System Specifications and Requirements for Electron Ion Collider, A. Blednykh (BNL) THZE2 | | | |
| 15:30 | Development of Two-Color Sub-Femtosecond Pump/Probe Techniques With X-Ray FELs, Z. Guo (Stanford) MOZD3 | | Ultimate Limits of Future Colliders, M. Bai (SLAC) TUZD3 | | Optimizing the Discovery of Underlying Nonlinear Beam Dynamics, L. Pocher (JLab) TUZE3 | | Magneton R&D Progress for High Efficiency CW RF Sources of Industrial Accelerators, H. Wang (JLab) WEZD3 | | Design of 3-GeV High-Gradient Booster for Upgraded Proton Radiography at LANSCE, Yu. Batygin (LANL) THZD3 | | An Electroless Diamond Beam Monitor, S. Kuzikov (Euclid) THZE3 | | | |
| 16:00 | Uncertainty Quantification of Beam Parameters in an LIA Inferred from Bayesian Analysis, M. Jaworski (LANL) MOZD4 | | Plans for Future Energy Frontier Accelerators to Drive Particle Physics Discovery, M. Turner (BNL) TUZD4 | | PIC Simulations of High Current Density Electron Beams in the Scorpion Accelerator, S. Clark (LLNL) TUZE4 | | Using off Axis Undulator Radiation as a Longitudinal Electron Beam Diagnostic, Q. Marksteiner (LANL) WEZD4 | | Accelerating Structures for High-Gradient Proton Radiography Booster at LANSCE, S. Kurenov (LANL) THZD4 | | Gas Sheet Ionization Diagnostic for Transverse Profile Measurement, N. Burger (RadiaBeam) THZE4 | | | |
| 16:30 | An ERL-Based Compact X-Ray FEL, F. Lin (ORNL) MOZD5 | | Experience and Challenges With Electron Cooling of Colliding Ion Beams in RHIC, A. Fedotov (BNL) TUZD5 | | Studies of Ion Beam Heating by Electron Beam, S. Seletskiy (BNL) TUZE5 | | Micro-Electromechanical Systems Based Multi-Beam Ion Accelerators, Q. Ji (LBNL) WEZD5 | | Modelling H- Injection and Painting in Vertical and Horizontal FFAs Using OPAL, A. Adelman (PSI) THZD5 | | Recent Developments of the soft X-ray Beam Position Monitor Project, B. Podobedov (BNL) THZE5 | | | |
| 17:00 | Accelerator Physics Lessons From CBETA, the First Multi-Turn SRF ERL, K. Deltrick (JLab) MOZD6 | | Fulfilling the Mission of ATF as a DOE Flagship User Facility in Accelerator Stewardship, M. Palmer (BNL) MOZE6 | | Studies of Ion Instability Using a Gas Injection System, J. Calvey (ANL) TUZE6 | | Manufacturing the Harmonic Kicker Cavity Prototype for the Electron-Ion Collider, S. Overstreet (JLab) WEZD6 | | An 8 GeV Linac for the Fermilab 2.5 MW Upgrade, D. Neuffer (FNAL) THZD6 | | A Time-Resolved Beam Halo Monitor Using Diamond Detectors and High Speed Digitizers, B. Rotter (Nalu) THZE6 | | | |
| 17:30 | Coffee Break (30 min) MOPA | | Coffee Break (30 min) TUPA | | Coffee Break (30 min) WEPA | | Coffee Break (30 min) | | BREAK TO CHANGE ATTIRE FOR AWARDS SESSION AND CONFERENCE DINNER | | Coffee Break (30 min) | | | |
| 18:00 | Posters (90 min) | | Posters (90 min) | | Posters (90 min) | | Posters (90 min) | | Louis Costrell Awards Session Moderator: S. Milton | | Posters (90 min) | | | |
| 18:30 | Welcome Reception | | Entertainment and Historical Talk: Los Alamos National Laboratory: Beyond Manhattan, Alan B. Carr (LANL) Alvarado D Moderator: L. Peterson (LANL) | | Celebration of Diversity, Equity, and Inclusion in the Accelerator Community, Celebration Speaker: Katherine Saunders Haight, Office of Diversity and Strategic Staffing, LANL (30 minutes) Participative interactive celebration to follow!!!!!! Alvarado D Moderator: E. Simakov (LANL) | | Conference Banquet, Alvarado DE Dress code -Suggested business attire up to black tie if you wish! Cocktails 6 PM Greeting from John Sarrau Deputy Director for Science, Technology, and Engineering, LANL Dinner 6:30 PM Special Performance 7:30 PM Dancing 8:00 PM - Until Dawn Moderator: S. Biedron | | Conference Banquet, Alvarado DE Dress code -Suggested business attire up to black tie if you wish! Cocktails 6 PM Greeting from John Sarrau Deputy Director for Science, Technology, and Engineering, LANL Dinner 6:30 PM Special Performance 7:30 PM Dancing 8:00 PM - Until Dawn Moderator: S. Biedron | | LEGEND Opening / Closing / Awards MC1 MC2 MC3 MC4 MC5 MC6 MC7 MC8 MC9 Social Posters Tutorials / Short Courses | | LEGEND Opening and Closing Sessions Colliders Photon Sources and Electron Accelerators Advanced Acceleration Hadron Accelerators Beam Dynamics Beam Instrumentation and Controls Accelerator Technology Accelerator Applications Computing and Data Science for Acc Sys Poster sessions Tutorials and short courses | |
| 19:00 | | | | | | | | | | | MC1 Colliders | | | |
| 19:30 | | | | | | | | | | | MC2 Photon Sources and Electron Accelerators | | | |
| 20:00 | | | | | | | | | | | MC3 Advanced Acceleration | | | |
| 20:30 | | | | | | | | | | | MC4 Hadron Accelerators | | | |
| 21:00 | | | | | | | | | | | MC5 Beam Dynamics | | | |
| 21:30 | | | | | | | | | | | MC6 Beam Instrumentation and Controls | | | |