

IPAC'24 - 15th International Particle Accelerator Conference

Sunday, 19 May 2024

Student Poster Session: SUPC - Country (14:00 - 18:00)

[id] title	presenter	board
[2066] An electron beam modulation laser for steady-state microbunching	LU, Xinyi	
[2067] Monte Carlo modeling of spin-polarized photoemission from NEA GaAs with low-temperature and strained-lattice effects	CALLAHAN, John	
[2068] BAGELS: A General Method for Minimizing the Rate of Radiative Depolarization in Electron Storage Rings	SIGNORELLI, Matthew	
[2073] Towards mitigation of challenges in development of high power ISOL targets	GHOSH, Sundeep	
[2084] Analyzing sudden beam loss in the SuperKEKB/Belle-II experiment with RFSoc technology	NOMARU, Riku	
[2094] Picometer scale emittance from plasmonic spiral photocathode for particle accelerator applications	KACHWALA, Alimohammed	
[2097] ELISA: a compact linear accelerator for societal applications	PASINO, Eleonora	
[2098] Beam dynamics research for high-repetition-rate infrared FEL linac	YANG, Yimin	
[2078] Design and development of array multipoint accelerator tube	Mr LI, Qingzhu	
[2083] Experimental characterization of the timing-jitter effects on a beam-driven plasma wakefield accelerator	DEMURTAS, Francesco	
[2085] Crystal collimation for the HL-LHC upgrade using MERLIN++	BABU, Raiza	
[2088] First implementation of KO extraction at COSY	NIEDERMAYER, Philipp	
[2089] Studies of space-charge compensation of positive ions by creating time-dependent secondary electrons in low-energy beam transport line	COSGUN, Emre	
[2309] Magnetic field modelling and symplectic integration of magnetic fields on curved reference frames for improved synchrotron design: first steps	VAN DER SCHUEREN, Silke	
[2077] Characterisation and optimisation of a C-band photo-injector for compact light sources	DEMURTAS, Francesco	
[2076] Transfer learning for field emission mitigation in CEBAF SRF cavities	AHAMMED, Kawser	
[2314] Simulation of coupled space charge and wakefield effects for a prototype TW-gun at SwissFEL	CHRIST, Jonas	
[2074] Numerical methods for emittance computation from luminosity	RUFOLO, Matteo	
[2086] High power experimental results of a multicell dielectric disk accelerating structure	WEATHERLY, Sarah	
[2105] Beam correction for multi-pass arcs in FFA@CEBAF: status update	COXE, Alexander	
[2143] Energy deposition and radiation level studies for the FCC-ee experimental insertions	FRASCA, Alessandro	
[2169] LHC ion commissioning	FERRENTINO, Vittorio	
[2290] Test of a metamaterial structure for structure-based wakefield acceleration	MERENICH, Dillon	

[2291] Application and comparative analysis of the APES_CBI module in BEPC-II experimental results	FENG, Siyuan	
[2293] Flat beam transport for a PWFA experiment at AWA	MANWANI, Pratik	
[2299] Feasibility study of electron beam probe based longitudinal bunch shape monitor in high-intensity proton linac	WANG, Heng	
[2125] Study on high energy coupling efficiency of laser-electron interaction via vortex beam	XU, Xiazhen	
[2115] Lattice design of a pulsed synchrotron for a muon collider fitting within the Fermilab site boundary	CAPOBIANCO-HOGAN, Kyle	
[2117] Optimization of nanostructured plasmas for laser wakefield acceleration using a Bayesian algorithm	RODRÍGUEZ PÉREZ, Juan	
[2118] Measurement, tuning and test for the two-mode TDS	GONG, Hanyu	
[2132] Design of prototype magnet for FETS-FFA	KUO, Ta-Jen	
[2155] High fidelity numerical modelling and condition monitoring applied to septum magnets at CERN	KAWA, Krzysztof	
[2173] Improvements to 4-rod RFQs with additive manufacturing processes	STORCH, Julius-Stephan	
[2174] A faster algorithm to compute lowest order longitudinal and transverse resistive wall wake for non-ultrarelativistic case	Mr TANG, Jiazhen	
[2180] An experimental proposal for the strong-filed Terahertz generation at SXFEL facility	ZHANG, Kaiqing	
[2181] Application of common points selection method based on uniformity dividing space in HALF	DING, Ting	
[2191] Particles and photon attenuating behavior of lead free Eu^{3+} doped barium phosphate glass system	UPADHYAY, Devendra	
[2201] Simulations of CXFEL with the MITHRA code	ROS, Elena	
[2206] Beam dynamics and injection condition in a ring-type dipole of a laser-accelerated electron beam for compact light sources	KIM, Keonho	
[2209] Thermal emission measurement and research of cesium telluride photocathodes	FENG, Zhiwen	
[2211] Instability of asymmetric electron drive beams in hollow plasma channels	LEGASPI, Rafael Yrjosmiel	
[2198] Studies of beams with non-factorizable transverse beam distributions at the CERN PSB	LAMB, Eleanor	
[2218] High gradient operation of cryogenic C-band RF photogun at UCLA	LAWLER, Gerard	
[2139] Single-shot meV-resolution hard X-ray spectrograph for CBXFEL diagnostics	Mr KAUCHHA, Keshab	
[2233] Optimization of ELSA electron beam transport for its inverse Compton scattering X-ray source	PIRES, Abel	
[2237] Exploiting optical interference effects to enhance the quantum efficiency of photocathodes	PENNINGTON, Chad	
[2238] Background mitigation concepts for Super-NaNu	STUMMER, Florian	
[2254] Novel high-intensity X and Gamma-rays sources using crystals	NEGRELLO, Riccardo	
[2260] Characterization of FEL mirrors with long ROCs	DELOOZE, William	
[2268] UV-Soft X-ray betatron radiation characterization from laser-plasma wakefield acceleration	FRANCESCONI, Daniele	

[2196] Quest for an optimal spin-polarized electron source for the Electron Ion Collider	BISWAS, Jyoti	
[2219] Simulation optimization of electrom beams from the ELBE superconducting RF gun for ultrafast electron diffraction	NIEMCZYK, Raffael	
[2275] Chemical robustness enhancement of negative electron affinity photocathodes through cesium-iodide deposition	LEVENSON, Samuel	
[2276] Pulsed Compton Gamma-ray beam generation using pulsed FEL beam	MIKHAILOV, Stepan	
[2239] Preliminary design consideration for CEPC fast luminosity feedback system	LI, Meng	
[2282] Linking edge-ML X-ray diagnostics and adaptable photoinjector laser shaping for leveraging the capabilities of LCLS-II	HIRSCHMAN, Jack	
[2250] Optimization of cooling distribution of the EIC cooler ERL	WANG, Ningdong	
[2286] Simulating the transverse probing of laser-driven plasma wakefields using ultrarelativistic electrons	TROMMER, Evan	
[2287] Transport and dosimetry of laser-driven proton beams for radiobiology at the BELLA center	DE CHANT, Jared	
[2292] Optimization of laser coupling into optically field ionized plasma channels for laser-plasma acceleration	STACKHOUSE, Josh	
[2297] Temporal profile optimization for beamline design using an improved multi-objective genetic algorithm	SUN, Zheng	
[2285] Evaluation of ultrafast terahertz near-fields for electron streaking	GABRIEL, Annika	
[2242] Electron cloud build-up studies for DAΦNE collider and FCCee damping ring	OZDEMIR, Senem	
[2114] Design, fabrication, and testing of a W-band corrugated waveguide for Wakefield acceleration	LEUNG, Brendan	
[2127] Magnetic field study for air-cored HTS skeleton cyclotron	CHONG, Tsun Him	
[2130] Various methods for computing dominant spin-orbit resonance strengths in storage rings	DEVLIN, Joseph	
[2227] Optimization of bunch charge distribution for space charge emittance growth compensation in the PERLE injector	MONAGHAN, Connor	
[2202] Optimizations and updates of the FCC-ee collimation system	BROGGI, Giacomo	
[2170] Performance optimization design of photocathode injector based on multi-objective genetic algorithm	SUN, Zheng	
[2210] Study of the radiation field from multiple out-coupling holes in an infrared free electron laser oscillator	XIA, Mengqi	
[2179] An ultimate single-ion source using a Coulomb crystal in a Paul trap	MUROO, Kento	
[2288] Computational simulations and beamline optimizations for an electron beam degrader at CEBAF	LIZÁRRAGA-RUBIO, Victor	
[2144] Simulating a rectilinear cooling channel using BDSIM for the 6D muon cooling demonstrator	KAMATH, Rohan	
[2172] The design of a 2.3-cell X-band photocathode RF electron gun	XU, Xiazhen	
[2195] Development of new method of NEA Activation with Cs-Sb-O	WAKITA, Yukiya	
[2263] Experimental investigation of zero transverse force modes in sub-THz dielectric lined waveguide	PHILLIPS, Cassandra	

[2266] Commissioning of spectral diagnostics and future concepts for the PAX experiment at FACET-II	HESSAMI, Rafi	
[2277] High-energy and narrow-bandwidth X-ray regenerative amplifier FEL design for LCLS-II-HE	SINGLETON, Madison	
[2294] Comparison of flat beam PWFA analytic model with PIC simulations	MANWANI, Pratik	
[2159] The design of the proton-EDM injection line, from BNL AGS booster	LEE, Jonathan	
[2269] Optimizations for ultrafast electron diffraction with a cryogenic C-band gun	PENNINGTON, Chad	
[2272] Thermomechanical and nonlinear plasmonic modeling of laser-field emission from extended nanostructured cathodes	MANN, Joshua	
[2280] Dark current in the LCLS-II Injector: characterization and mitigation strategies	LITTLETON, Sean	
[2107] Towards operating low mean transverse energy alkali antimonide photocathodes at Argonne Cathode Test-stand	HASAN, Tariqul	
[2141] Dark current reduction for NSRRC photoinjector system by collimation	LIN, Yang Jen	
[2106] Optimizing the beam parameters for plasma wakefield acceleration at FACET-II	STOBBE, Mason	
[2116] Dark current studies for a SW C-band electron gun with a deflector	TIAN, Jia Hao	
[2145] Expanding the CERN ion injector chain capabilities: new beam dynamics simulation tools for future ion species	WAAGAARD, Elias	
[2166] Dynamic aperture of the RCS during bunch merges	KUZOVKOVA, Daria	
[2186] Novel positron beam generation based on Shanghai Laser Electron Gamma Source	JIN, Sheng	
[2199] Luminosity effects of heavy tailed beams with transverse x-y correlation	LAMB, Eleanor	
[2207] Compact high peak power THz source driven by thermionic RF gun	YANG, Yining	
[2228] First FCC-ee lattice design with combined function magnets	GARCIA JAIMES, Cristobal Miguel	
[2168] Energy dependence of PS main unit harmonics	FERRENTINO, Vittorio	
[2184] Generating tunable X-ray optical frequency combs using a free-electron laser	NI, Lanpeng	
[2187] Introducing a semi-Gaussian mixture model for simulating multiple coulomb scattering in RF-Track	STECAUNER, Bernd	
[2188] Optimizing initial beam parameters for efficient muon ionization cooling	STECAUNER, Bernd	
[2099] A study for emittance growth compensation by space charge effects at the injector of KEK-STF after dry ice cleaning of the RF gun	MUKHERJEE, Sayantan	

Student Poster Session: SUPG - Bluegrass (14:00 - 18:00)

[id] title	presenter	board
[2069] Comparison of WarpX and GUINEA-PIG for electron positron collisions	Mr NGUYEN, Bao	
[2072] A pole design optimization method for permanent quadrupole magnet	DONG, Shaoxiang	
[2075] An experimental study on plasma cleaning of room temperature copper cavity: design and analysis	XIA, Qianxu	
[2079] Generation of attosecond electron bunches through terahertz regulation	WANG, Yian	

[2087] A large momentum acceptance gantry for light-weight proton therapy facility: its beam lattice, magnets design and clinical advantages	LIAO, Yicheng	
[2090] Impact of octupoles on the Schottky spectra of bunched beams	LANNOY, Christophe	
[2092] SRF cavity instability detection with machine learning at CEBAF	FERGUSON, Hal	
[2298] Measurement and modeling of beam transport in the FODO line of the Spallation Neutron Source Beam Test Facility	THOMPSON, Trent	
[2091] RF design of a C-band spherical pulse compressor for Super Tau-Charm linac	CAO, Zexin	
[2082] New design techniques on matching couplers for travelling wave accelerating structures	CAO, Zexin	
[2080] Beam dynamics study of the bimodal RF cavity for advanced light source	SU, Dinghui	
[2095] Near-Infrared noise in intense electron beams	KLADOV, Sergei	
[2123] Multi-mode cavity design and characterization	Mr SIMS, Benjamin	
[2065] Effects of implantation temperature and annealing on structural evolution and migration of ruthenium in glassy carbon	JAFER, Tasabeeh Alabid	
[2070] Enhanced harmonic stability in magnet resonant power supplies via multi-harmonic closed-loop control and current feedforward	LI, Ran	
[2284] Slow longitudinal mode-1 instability in electron storage rings with harmonic cavities	ALVES, Murilo	
[2255] Optimizing the sextupole configuration for simultaneous correction of third order resonances at the recycler ring	GONZALEZ-ORTIZ, Cristhian	
[2262] Discovering transient models of emittance growth via mode interaction of phase space nonuniformities	POCHER, Liam	
[2283] Measuring uniformity and gas density of gas sheet profile monitor for use with heavy-ion accelerators	LOKEY, Aubrey	
[2101] Study of the beam-beam interaction in an electron-positron collider with large Pwinski angle and crabbed waist	LI, Sangya	
[2102] SRF cavity fault prediction using deep learning at Jefferson Lab	RAHMAN, Monibor	
[2112] Magnetron diagnostics with a novel optical fibre-Cherenkov detector	Prof. WELSCH, Carsten	
[2113] Exploring high gradient limit with cryogenic experiments at FREIA laboratory	COMAN, Mircea	
[2124] Bunch-by-bunch simulations of beam-beam driven particle losses in the LHC	BELANGER, Philippe	
[2129] Current status of MINIBEE – minibeam beamline for preclinical experiments on spatial fractionation in the FLASH regime	ROUSSETI, Aikaterini	
[2135] Progress on pulsed electron beams for radiation effects characterization of electronics	KULKARNI, Atharva	
[2137] Topology optimization of a dipole magnet using normalized gaussian network	LI, Jie	
[2147] Simulations of simultaneous measurement of GHz bunches using a fast kicker	ZHANG, Xiao-Yang	
[2148] Focusing of high-energy electron beam using silicon crystals for application in radiotherapy	MONIKOWSKA, Marta	
[2149] Detailed simulation study of wakefield induced beam dynamics in the dielectric dechirper at CLARA	HIGUERA GONZALEZ, Beatriz	

[2151] Beam studies using a Cherenkov diffraction based beam position monitor for AWAKE	SPEAR, Bethany	
[2153] Generation of symmetrical optical caustic beams for precise alignment	DUSEK, Martin	
[2154] PIP-II laser beam profile monitor laser system	LANDON, Parker	
[2157] Optimizing current density measurements for intense low beta electron beams	HOWARD, Madison	
[2158] Modeling and optimization of the FACET-II injector with machine learning algorithms	CHAUHAN, Sanjeev	
[2163] Differentiable modeling of Siberian Snakes in BNL's AGS: nonlinear maps, symplectic tracking, and optical compensation	HAMWI, Eiad	
[2171] Development of novel beam instrumentation for in vivo and in vitro end stations for Laser-hybrid Accelerator for Radiobiological Applications	RAZAK, Rehanah	
[2182] Research on spatial alignment of laser and electron beam in the generation of ultra-short electron pulses by laser modulation	LI, Jingya	
[2190] Devices and preparation methods for niobium coupon samples used to investigate high-Q mechanism	ZONG, Yue	
[2197] Review of MAD-X for FCC-ee studies	FAUS-GOLFE, Angeles	
[2108] Measurement of stability diagrams in the IOTA ring at Fermilab	BOSSARD, Mary	
[2203] Minimizing space charge tune spread and increasing beam quality parameters with circular modes	GILANLIOGULLARI, Onur	
[2205] Status of coil-dominated discrete-cosine-theta quadrupole prototype for high rigidity isotope beams	GREENE, David	
[2208] Detailed characterization of coherent synchrotron radiation effects using generative phase space reconstruction	GONZALEZ-AGUILERA, Juan Pablo	
[2216] Superconducting thin films on higher order mode antennas for increase the CW performance of SRF cavities at MESA	PLATTNER, Paul	
[2217] Buffered chemical polishing process of 3.9 GHz cavities for SHINE	WANG, Zheng	
[2220] Enhanced position resolution of L-band cavity BPM via matching its resonance frequencies	Mr KIM, Geunwoo	
[2234] Investigating X-ray detector systems using Monte Carlo techniques	ELEY, Lauryn	
[2236] Real-time measurements of the RF-path of an electro-optical bunch arrival-time monitor with integrated planar pickup-structure with low-charge electron beams at ELBE	Mr SCHEIBLE, Bernhard	
[2247] Second generation Cherenkov diffraction radiation studies at Diamond Light Source	CLAPP, Alec	
[2244] Commissioning and experiments with a compact transverse deflecting system at FLUTE	NABINGER, Matthias	
[2246] Gas jet-based beam profile monitor for the electron beam test stand at CERN	STRINGER, Oliver	
[2248] Magnetic measurements for Halbach-type permanent quadrupoles using a single-stretched wire system	CUNEO, Davide	
[2253] Measuring transverse momentum space of alkali-antimonide photocathodes with the Cornell cryo-MTE-meter	ZHANG, Charles	
[2264] The design of a rocket based RF electron accelerator for space applications	Mr ROPER, Christopher	

[2265] Analysis of laser engineered surface structures' roughness and surface impedance	KRKOTIC, Patrick	
[2267] Bayesian optimization for beam centroid correction at ISAC	GHELFI, Emma	
[2271] Field emission assisted heating of Cs₂Te photocathode: implication toward RF breakdown	SHINOHARA, Ryo	
[2279] Autofocusing accelerator beams	KATRUSIAK, Alexander	
[2281] CXLS ionizing and laser radiation safety interlock systems	EVERETT, Eric	
[2295] Parameters and process study of copper chamber coating with niobium thin films in DC and HIPIMS modes	KAN, Jiawen	
[2270] Improvements of longitudinal stability with LLRF optimization at SIRIUS	DAMINELLI, David	
[2300] Mapping of an SRF electron gun focusing solenoid assembly	JONES, Christopher	
[2274] Automation upgrade of the CXLS photoinjector	BROWN, Taryn	
[2303] Simulation studies of laser cooling for the Gamma Factory proof-of-principle experiment at the CERN SPS	KRUYT, Peter	
[2278] Dynamics study of the crab crossing at the electron ion collider using square matrix and iterative methods	ANDERSON, Kelly	
[2192] 3D beam tracking studies including intrabeam scattering	ENGEDA, Alexander	
[2243] The FORTRESS Beamline at Tsinghua University	LV, Peng	
[2257] Computational fluid dynamics design of a very high-power rotating positron target	MAHLER, Kathleen	
[2176] Dark current simulations in accelerating structures operating with short RF pulses	RIJAL, Gaurab	
[2138] Findings of simulation studies for the fast corrector magnets of PETRA IV	CHRISTMANN, Jan-Magnus	
[2231] Implementing bunch-by-bunch diagnostics at the KARA booster synchrotron	NOLL, Marvin	
[2240] Microscopic understanding of the effects of impurities in low RRR SRF cavities	HOWARD, Katrina	
[2313] Beam Tomography using Markov Chain Monte Carlo	TRAN, Anthony	
[2213] Design of an X-band parallel-coupled travelling-wave accelerating structure for future linacs	CAO, Zexin	
[2160] Mechanical design, structural requirements and optimization of the FCC e⁺e⁻ interaction region components	FRANSESINI, Francesco	
[2140] Emittance growth studies due to Crab Cavity induced amplitude noise in the SPS	FORNARA, Andrea	
[2161] Novel materials for beam acceleration	SEDDON-STETTLER, Sadie	
[2175] Superradiant cooling and dynamics of ultrashort electron beams	LIU, Zhuoyuan	
[2185] Simulations of an electro-optical in-vacuum bunch profile monitor and measurements at KARA for use in the FCC-ee	REISSIG, Micha	
[2224] Simulation study of nanosecond pulse power based on gyromagnetic nonlinear transmission line	ZHANG, Wenbin	
[2302] A wireless method for beam coupling impedance bench measurement of resonant structures	ANTUONO, Chiara	
[2122] Characterization of single-cell elliptical niobium thin film cavity at cryogenic temperatures	ABDISATAROV, Bektur	

[2110] Study and Simulation of Cryogenic Photonic-Band-Gap Disk-loaded Structure	SU, Dinghui	
[2296] SiPM integration testing for FACET-II pair spectrometer	PHILLIPS, Jack	
[2177] Direct measurements of RHIC BPM data at the IP using linear regression	FUNG, William	
[2178] Design of a 3-cell rectangular deflecting cavity for a compact THz-FEL	LUO, Ruiying	
[2214] Simulations of beam loading compensation scenarios with RF-Track	OLIVARES HERRADOR, Javier	
[2230] Advancing non-linear Space Charge Simulations: Neural Networks and Analytical Approaches	VOJSKOVIC, Isabella	
[2164] Proposal for a proton-bunch compression experiment at IOTA in the strong space-charge regime	SIMONS, Benjamin	
[2252] Investigation of hot-spot and quench location due to trapped flux in niobium superconducting radiofrequency cavities	KHANAL, Bashu	
[2131] AGS Booster model calibration and digital-twin development	LIN, Weijian	
[2111] Fabrication and tuning of a 325 MHz ion-injector for particle therapy facility	GUO, Yusen	
[2256] Experimental study into the invasiveness of a gas jet beam profile monitor for charged particle beams	STRINGER, Oliver	
[2193] Diffusion and acoustic properties of Nb thin films studied by time-domain thermoreflectance	ISLAM, Md Obidul	
[2226] The gamma activation measurements at Shanghai Laser Electron Gamma Source	YANG, Yuxuan	
[2306] Two slit emittance measurement with thermal emittance isolation for an SRF injector	Mr SIMS, Benjamin	
[2150] Real time monitoring of the crystal collimation system at the CERN Large Hadron Collider	RICCI, Gianmarco	
[2133] Characterization of meter-scale Bessel beams for plasma formation in a plasma wakefield accelerator	NICHOLS, Travis	
[2136] Waveguide system for SRF cryomodule in KEK	JOSHI, Prakash	
[2104] Decoupling of nitrogen and oxygen impurities in nitrogen doped SRF cavities	HU, Hannah	
[2134] Bayesian optimization scheme for the design of a nanofibrous high power target	ASZTALOS, William	