## JPAC'25 Scientifc Program

Time	Sun. 1 June	n. 1 June Monday 2 June		Tuesday 3 June		Wednesday 4 June		Thursd	ay 5 June
	Juli I Julie		Hall, TICC		Hall 201, TICC		Hall 201, TICC	Hall 101 , TICC	Hall 201
		Chair : Min	g-Chyuan Lin	Hall 101 , TICC Chair: TU1D	Chair: TU1N	Hall 101, TICC Chair: WE1D	Chair: WE1N	Chair: TH1D	Chair:
9:00		Welcome Address		Personnel and machine protection for high power	Elevating Beam Quality and Stability in Linear Accelerators	Experimental demonstration of particle acceleration with normal	Upgrade of KEK electron/ positron Injector Linac	Guiding of charged particle beams in curved	Review of b correcti
9:30				accelerator commissioning, operations, and power ramp up Masanori Ikegami , FRIB	through High Order Mode Analysis Sanae Samsam , INFN	conducting acceleratingstructure at cryogenic temperature Mamdouh Nasr, SLAC	by using pulse magnets and machine learning Takuya Natsui , KEK	plasma-discharge capillaries Riccardo Pompili, INFN	optimisation fo Xiaobiao Hu
9:30		The Operational Challenges: Achieving 500 mA High Beam Current at Taiwan Photon Source Ping-Jung Chou, NSRRC		Challenges and solutions for high-intensity beam operations	Study on the eddy current distribution in the coating layer on	20 years of CESR-B cavity	Measurement techniques using the electron beam profile scanner at the Fermilab Main Injector	Progress on experimental demonstration of high-power	Assessing the or
9:50				in the J-PARC Linac Yong Liu, KEK	the ceramic chamber of a nonlinear kicker Hao-Wen Luo, NSRRC	operation at the CLS Frédéric Le Pimpec, CLS	Fermilab Main Injector Matilda Mwaniki, Illinois Institute of Technology	generation from 0.4 THž corrugated structure MinKyu Seo, Korea University	<b>beam</b> Milica Rak
10:00				Status of the proton linac for boron neutron capture therapy	No parametric instabilities in actual linear accelerators except	High power RF testing of high-temperature	Data-driven hysteresis compensation in the CERN SPS	First measurements of electron acceleration with plasma density	Coherent stabilit aperture with stro
10:10		High Beam Power Operations at Heavy Ion Facilities: Technical Developments, Challenges and Resolutions Osamu Kamigaito, RIKEN Nishina Center		in the iBNCT project Masaharu Sato, KEK	the envelope instability Dong-O Jeon, IBS	superconductors Ankur Dhar, SLAC	main magnets Anton Lu, CERN	steps at AWAKE Fern Pannell, UCL	for the FAIR SIS1 Adrian O John Adam
10:10				Injection into resonance	Comprehensive study of Robinson instability in active and passive	Further high power tests of the additive manufacturing	Machine learning-based orbit	Development of the sub-nanosecond grid-controlled	Dynamic dipole
10:30				islands Henry Lovelace III, BNL	higher harmonic cavities for bunch lengthening Youngmin Park, POSTECH	IH-type cavity Hendrik Hähnel, Goethe Universität Frankfurt	correction in the RCS of CSNS Xiaohan Lu, IHEP	electron source for Hefei Advanced Light Facility injector Feng-lei Shang, USTC	rippling sexto Podobed
10:30		Coffee break (30 mins) @TWTC		Coffee break (30 mins) @TWTC		Coffee break (30 mins) @TWTC		Coffee break (30 mins) @TWT(	
		Hall 101 , TICC Chair : Tadashi Koseki		Hall 101 , TICC Chair: TU2D	Hall 201 , TICC Chair: TU2N	Hall 101 , TICC Chair: WE2D	Hall 201 , TICC Chair: WE2N	Hall 101 , TICC Chair: TH2D	Hall 201 Chair:
11:00	Student Traning	Review of nonlinear resonances in accelerators and storage rings; including adiscussion of chaos, particle diffusion and dynamic aperture Shyh-Yuan Lee, Indiana University		superconducting ECR ion sources	Design Initiatives for a 10 TeV pCM Wakefield Collider Spencer Gessner, SLAC	Assessing and Increasing the sustainability of future accelerator based facilities Ben Shepherd, STFC	Ultrafast visualization of an electric field under the Lorentz transformation Koichi Kan, QST	Reinforcement Learning in Particle Accelerators	Beam commissi
	nanng							Andrea Santamaria Garcia, University of Liverpool / Cockcroft	Superconductir VE(
11:30								Institute	Jayanta Del
11:30		Liquid lithium charge stripping technology: achievement and lessons learned Takuji Kanemura, FRIB, Michigan State University		Experimental generation of petawatt power, extreme electron beams in a particle accelerator	The third long shutdown (LS3) of the CERN accelerator complex	Cryogenic eficiency and sustainability aspects for	Empowering a broad and diverse community in beam dynamics simulations with Xsuite	Development of an RFSoC-based low-level RF controller for an electron linac	Commissioning Beam for the I
11:50				Claudio Emma, SLAC	Jean-Philippe Tock, CERN	particle accelerators & detectors Antonio Perin,CERN	Szymon Lopaciuk,CERN	Hirokazu Maesaka, RIKEN SPring-8 Center	Upgrade Nicholas Ev
12:00				TUBD2	RHIC polarized proton operation in Run24	Active 3rd harmonic RF system for ALBA	A module for fast auto differentiable simulations	Development of non-invasive beam diagnostics by quantum	FAIR commissio first sc
12:10		RF Acceleration with Short Pulses: Breaking the High-Gradient Barrier Xueying Lu, ANL			Kiel Hock, BNL	Francis Perez, ALBA	Ji Qiang, LBNL	optics-based detection Shukui Zhang, Jefferson LAB	Stephan Rei
12:10				off-momentum dynamic aperture by analyzing resonance driving terms	Exceeding high-luminosity LHC performance targets during the 2024 Pb-Pb ion run Roderik Bruce, CERN	Integrating permanent magnets and electromagnets: a hybrid dipole magnet design Yang-Yang Hsu, NSRRC	Off-resonance scheme for highly coupled lattice design in the diffraction-limited light sources Yihao Gong, SSRF	Supersonic gas curtain-based in-vivo transverse beam profile	Upgrade prog CSNS-I
12:30								monitoring for medical accelerators Narender Kumar, Cockcroft Institute	Ming-Yang H
12:30		Lunch break (90 mins) @ TWTC		Junha Kim, PAL Lunch break (90 mins) @ TWTC		Lunch break (90 mins) @ TWTC		Lunch break (60 mins) @ TWT	
13:30 14:00									
		Hall 101 , TICC Chair: MO3D	Hall 201 , TICC Chair: MO3N	Hall 101 , TICC Chair: TU3D	Hall 201 , TICC Chair: TU3N	Hall 101 , TICC Chair: WE3D	Hall 201 , TICC Chair: WE3N	Hall 10: Chair: In	
14:00			Overview of permanent	Toward realization of few-cycle free electron lasers: basic	Carbon ion therapy facility at		Cascaded hard X-ray self-seeded free-electron laser at megahertz		
14:20		ILC accelerator status Hiroshi Sakai, KEK	magnetimplementations for advanced lightsources Ciro Calzolaio, PSI	concept and its experimental demonstration	Carbon ion therapy facility at Taipei Veterans General Hospital Keng-Li Lan, TVGH		repetition rate		
14:30			, , , , , , , , , , , , , , , , , , ,	Takashi Tanaka, RIKEN SPring-8	Compact hadren courses and	Industry Session	Shan Liu, DESY	Award S	
14:30		Status of the Baseline Design for a 10 TeV Muon Collider	Development for Various Applications at Compact ERL as a high-power CW SRF linac in KEK	SPS-II Project: Status update Porntip Sudmuang, SLRI	Compact hadron sources and linacs for societal applications		LCLS-II commissioning and operation with high-repetition-rate CW FELs	13:30 -	-14:50
15:00		Daniel Schulte, CERN	Masahiro Yamamoto, KEK		Alessandra Lombardi, CERN		Yuantao Ding , SLAC		
		Hall 101 , TICC Chair: MO4D	Hall 201 , TICC Chair: MO4N	Hall 101 , TICC Chair: TU4D	Hall 201 , TICC Chair: TU4N	Hall 101 , TICC Chair: WE4D	Hall 201 , TICC Chair: WE4N	Best Student Poster	Award 14:50-
15:00	Student	Updated baseline design for HALHF: the hybrid, asymmetric,	Nb3Sn cavity development based on vapor deposition	Operational status and future project of the KEK Photon	High-level environmental sustainability guidelines for large accelerator facilities	Future e+e- colliders using recycling Energy-Recovery Linacs	SLS 2.0 storage ring commissioning	Entertainme	
15:20	Poster Session (TWTC)	linear Higgs factory Carl A. Lindstrøm, Univ. of Oslo	method at KEK Hayato Ito, KEK	Factory Takashi Obina, KEK	Hannah Wakeling, John Adams Institute	Vladimir Litvinenko, Stony Brook University	Michael Böge, PSI	- 15:00 Why Did My Ancest	
15:20	(	Commissioning of		Commissioning of the Advanced Photon Source Upgrade the first	Engineering magnetic carbon nanotubes via swift heavy ion irradiation for spintronics and	Development of cold atom electron source in KEK	An ultrafast strong-field terahertz light source to characterize	Futuru C	
15:40		BEPCII-U Huiping Geng, IHEP	MOCN2	swap-out injection-based synchrotron light source Vadim Sajaev, ANL	irradiation for spintronics and quantum technologies: XAS and RAMAN study Priyal Singhal, Panjab University	Yosuke Honda, KEK	quantum functional materials Tong Zhang, USTC		
15:40		Observations and efforts to reduce sudden beam loss at	Searches for RF breakdown precursors using Cherenkov light in		Commissioning of the South	Experimental demonstration of transient-beam-loading compensa- tion using new digital LLRF system	First beam commissioning of the HZB superconducting radio-fre-	Poster Sessi	ion / Coffee
16:00		SuperKEKB Hitomi Ikeda, KEK	optical fibers Paarangat Pushkarna, Univ. of Melbourne	the beam loss in fourth-generation light sources Toshihiko Hiraiwa, RIKEN SPring-8	African Isotope Facility Adriaan Barnard, iThemba LABS	at the Photon Factory storage ring Daichi Naito, KEK	quency photoelectron gun Thorsten Kamps, HZB	15:30- (TW	
16:00		Poster Sess	sion / Coffee	Poster Ses	sion / Coffee	Poster Ses	sion / Coffee	(100	10)
17:30 18:00		(TWTC)		(TWTC)		(TWTC)			
18:10	Welcome	ption		Productive Research Enviroment 17:50-20:40					
18:45	Reception							Conference Banquet 18:45-20:40 (Grand HiLai Taipei)	
20:00	(TICC 1F)								
20:40								(Grand Hil	Lai iaipei)

	Friday 6 June					
201 , TICC ir: TH1N	Hall 101 , TICC Chair: FR1D	Hall 201 , TICC Chair: FR1N				
of beam based ection and n for accelerators o Huang, SLAC	Review of impedance effects for acclerators Takeshi Toyama, KEK	Deceleration of Ion Beams - Related Callenges and Opportunities Frank Herfurth, GSI				
e origin of the LHC am halo Rakic, EPFL bility and dynamic strong space charge	Review of Linear and Nonlinear Optics Measurements in the CERN LHC Ewen Hamish Maclean, CERN	Enhanced proton and neutron production using the ultra-short (24 fs) and high-power (2 PW) Apollon laser facility Julien Fuchs, CNRS				
SISIO0 synchrotron an Oeftiger, dams Institute pole kick due to a sextupole Boris bedov, BNL	<b>EIC accelerator status</b> Sergei Nagaitsev, BNL	Neutron target for high-intensity operation at J-PARC MLF Katsuhiro Haga, JAEA				
NTC	Coffee break (30 mins) @TWTC					
201 , TICC ir: TH2N	Hall 101 , TICC Chair : Yoichi Sato					
issioning of K=500 cting Cyclotron at VECC Debnath, DAE	Future circular Higgs factories: Status and prospective Yuhui Li , IHEP					
ing 1.7 MW, 1.3 GeV he Proton Power ade at SNS s Evans, ORNL ssioning - Towards t science	Latest Achievements in Femtosecond Synchronization of Large Scale Facilities Sebastian Schulz, DESY					
Reimann, GSI progress for the NS-II RCS Ig Huang, IHEP	BeamPIE – a suborbital test of an accelerator for space applications Quinn Marksteiner, LANL					
WTC	Closing Remarks (12:30 - 13:30)					
	Facility Tour 13:30 - Taiwan Photon Source , National Synchrotron Radiation Research Center or Heavy Ion Therapy Center , Taipei Veterans General Hospital Plenary talk					
50-15:00						
	MC1 Colliders and Related Accelerators					
iwan?	MC2 Photon Sources and Electron Accelerators					
	MC3 Novel Particle Sources and Acceleration Techniques					
	MC4 Hardron Accelerators					
	MC5 Bean Dynamics and EM Fields					
	MC6 Beam Instrumentation and Controls, Feedback and Operational Aspects					
	MC7 Accelerator Technolog					
	MC8 Applications of Acceler and Engagement for Ir	rators, idustry and Society				