

April 24 (MON)

Time	Session / Chair	No.	Speaker	Affiliation	Title of talk
10:00 - 10:30 (each 5 - 10min)	Opening (Chaired by Y. SANO, T. HOSOKAI and M. KANDO)		Conference Chair	SANKEN, Osaka U., Japan MEXT, Japan	Opening, welcome to Q-BASIS 2023
			Tohru SEKINO		Welcome to SANKEN, Osaka University
			Hiroyuki KAMAI		Greetings from MEXT (Ministry of Education, Culture, Sports, Science and Technology)
10:30 - 11:00 <i>Invited</i>	Application of high-power lasers (Chaired by Y. SANO)	24A-01	Domenico FURFARI	Airbus, Germany	The use of Lights for Structural Performance Enhancement of Metallic Airframes. LEOPARD, a Laser Shock Peening industrial solution for Maintenance Repair Overhaul Use
11:00 - 11:30	Break				
11:30 - 12:00 <i>Invited</i> 12:00 - 12:30 <i>Invited</i>	Application of high-power lasers (Chaired by K. NOMURA)	24A-02	Laurent BERTHE	PIMM, CNRS, France	New advance on laser shock generation and related applications : Laser shock peening, laser adhesion test and damaging
		24A-03	Noboru HASEGAWA	KPSI, QST, Japan	Development of a laser hammering system for tunnel and bridge concrete inspection using the high-power lasers
12:30 - 14:00	LUNCH TIME 12:30 ~ Group Photo				
14:00 - 14:30 <i>Invited</i> 14:30 - 15:00 <i>Invited</i> 15:00 - 15:30 <i>Invited</i>	Laser-material interaction for science and industry (Chaired by T. MOCEK)	24P-01	Kenichi ISHIKAWA	U. of Tokyo, Japan	Building Artificial Intelligence, Science and Theory for Smart Laser Manufacturing
		24P-02	Yusuke ITO	U. of Tokyo, Japan	Ultrafast processing of transparent materials by selective absorption of continuous-wave laser into transiently excited electrons
		24P-03	Tomokazu SANO	Osaka U., Japan	Femtosecond Laser-Shock Processing: Fundamentals and Applications
15:30 - 16:00	Break				
16:00 - 16:30 <i>Invited</i> 16:30 - 17:00 <i>Invited</i>	Quantum beams for material science and industry (Chaired by T. SANO)	24P-04	Makoto OCHIAI	Toshiba ESS, Japan	Achievements and future expectations of laser applications for energy solutions
		24P-05	Kentaro UESUGI	JASRI, Japan	High speed 2D/3D X-ray imaging at SPring-8
17:00 - 17:30 <i>Invited</i> 17:30 - 18:00 <i>Invited</i>	High-power laser development and applications (Chaired by S. TOKITA)	24P-06	Tomas MOCEK	HILASE, Czech Rep.	Advanced DPSSL technologies and applications at HILASE
		24P-07	Takashi SEKINE	Hamamatsu Photonics, Japan	A 100 J, 10 Hz operation with LD pumped Yb:YAG ceramics laser

April 25 (TUE)

Time	Session / Chair		Speaker	Affiliation	Title of talk
9:00 - 9:30 Invited	Quantum beam applications for imaging and inspection (Chaired by T. KANAI)	25A-01	Haruo MIYADERA	Toshiba ESS, Japan	Muon imaging and applications
9:30 - 10:00 Invited		25A-02	Fesseha MARIAM	LANL, USA	The LANL Proton radiography Facility and Investigations toward Achromatic Imaging
10:00 - 10:30 Invited		25A-03	Yoshie OTAKE	RIKEN, Japan	RIKEN Accelerator-driven compact neutron system and its applications and achievements
10:30 - 11:00	Break				
11:00 - 11:30 Invited	Quantum beams for medical and biological science & engineering (Chaired by M. NOZAKI)	25A-04	Masahiko KOIZUMI	Osaka U., Japan	Radiation Sensitization for Radiation Therapy
11:30 - 12:00 Invited		25A-05	Thomas KLUGE	HZDR, Germany	High Energy Proton Acceleration at DRACO-PW and Radiobiological Applications for Medical Tumor Therapy Research
12:00 - 12:30		25A-06	Kiminori KONDO	KPSI, QST, Japan	Development of laser driven injector for a compact heavy ion radiotherapy system
12:30 - 14:00	LUNCH TIME (Organization Committee Meeting of US-Japan Forum for Advanced Accelerators)				
14:00 - 14:30 Invited	Quantum beams for medical and biological science & engineering (Chaired by K. KONDO)	25P-01	Antoine SNIJDERS	LBNL, USA	The BELLA PW laser proton beamline: a new platform for ultra-high dose rate radiobiological research
14:30 - 15:00 Invited		25P-02	Kei NAKAMURA	LBNL, USA	Proton beamlines for radiation biology application at the BELLA PW facility
15:00 - 15:30 Invited		25P-03	Takayasu KAWASAKI	KEK, Japan	Terahertz radiation to amyloid fibrils
15:30 - 16:00	Break				
16:00 - 16:30 Invited	Quantum beams for medical and biological science & engineering (Chaired by T. KLUGE)	25P-04	Keiichi NAKAGAWA	U. of Tokyo, Japan	Single-shot ultrafast imaging for observation of non-repetitive laser-induced plasma and shockwaves
16:30 - 17:00 Invited		25P-05	Takeharu NAGAI	Osaka U., Japan	Use of quantum beams in improving the properties of glowing pants
17:00 - 17:20		25P-06	Tomonao HOSOKAI	Osaka U., Japan	Drug discovery with high-energy electron beams
17:20 - 17:40 Invited		25P-07	Yasunobu YAMASHITA	Osaka U., Japan	Chemotherapy triggered by electron beams
Banquet	19:00 - 21:00		Senri Hankyu Hotel		

April 26 (WED)

Time	Session / Chair		Speaker	Affiliation	Title of talk
9:00 - 9:10		26A-01	Mitsuhiro YOSHIDA	KEK, Japan	Introductory talk
9:10 - 9:30 Invited	Joint session with U.S. - Japan Forum for Advanced Accelerators (Chaired by M. YOSHIDA and M. BAI)	26A-02	Mei BAI	Stanford, USA	Grand challenges of future colliders
9:30 - 10:00 Invited		26A-03	Eric ESAREY	LBNL, USA	Laser plasma accelerator research at the BELLA Center
10:00 - 10:30 Invited		26A-04	Robert Joel ENGLAND	Stanford, USA	Particle Acceleration Using Laser-Driven Photonic Structures
10:30 - 11:00		Break			
11:00 -11:30	Laser electron acceleration and FEL (Chaired by R. LOPEZ-MARTENS)	26A-05	Masaki KANDO	KPSI, QST, Japan	Current status of the MIRAI free-electron laser project using laser accelerated electron beams in Japan
11:30 -12:00 Invited		26A-06	Marie-Emmanuelle COUPRIE	SOLEIL, France	The COXINEL seeded Free Electron Laser driven by the HZDR Laser Plasma Accelerator
12:00 -12:20 Invited		26A-07	François Sylla	SourceLAB, France	KAIO-BEAMLINE, à modular high repetition rate laser electron accelerator for broad range of applications
12:20 - 15:30	Lunch (Q-BASIS 2024 Kickoff Meeting) / Poster presentations at SANKEN CReA (Chaired by Y. Gu and A. Rondépierre)				
15:30 - 16:00 Invited	Laser electron acceleration and FEL (Chaired by M. COUPRIE)	26P-01	Rodrigo LOPEZ-MARTENS	LOA, France	Lightwave control of relativistic plasmas
16:00 -16:30 Invited		26P-02	Liming CHEN	SJTU, China	Ultra-high charge electron acceleration and nuclear applications
16:30 - 17:00 Invited		26P-03	Min CHEN	SJTU, China	Recent progresses of laser plasma based electron acceleration and radiation at Shanghai Jiao Tong university
17:00 -17:20	Closing (Chaired by Y. SANO, T. HOSOKAI and M. KANDO)		Conference Chair		Closing, announcement of Q-BASIS 2024

Poster presentations at SANKEN CReA (Chaired by Y. Gu and A. Rondepierre)

Poster No.	Presenter	Title
PO-01	Boyuan Li	Efficient high-order harmonic generation via surface plasma compression with lasers
PO-02	Alexandre Rondepierre	Challenges to make LPA viable for industrial XFEL sources
PO-03	Wenchao Yan	Fold-rotational Symmetric Radiation Vortex stem from Nonlinear Thomson Scattering of Intense Laser with Circular Polarization Topology
PO-04	Duthika Dilrangi Perera	Development of a compact electron source using self-modulated laser wakefield acceleration driven by a Sub-TW class laser
PO-05	Sadaoki Kojima	Induction heating for desorption of surface contamination for high-repetition laser-driven heavy-ion acceleration
PO-06	Masayasu Hata	Numerical simulation of laser ion injector for quantum scalpel project
PO-07	Matthew S Freeman	LPA-Driven Electron Radiography at OMEGA EP
PO-08	Jinfeng Yang	Ultrafast electron microscopy with relativistic femtosecond electron pulses
PO-09	Tsuneto Kanai	Supercontinuum-seeded 4-micron KTA optical parametric amplifier for seeding TW-class Fe:ZnSe multipass amplifiers
PO-10	James Kevin Koga	Simulation of self-focusing ultrashort femtosecond lasers in air for the detection of viruses and VOCs
PO-11	Hitoshi Soyama	Laser Cavitation Peening Using a Nd:YAG Laser with and without Q-switch
PO-12	Daiki Okazaki	Development of a 6-mJ, 100-Hz, femtosecond Yb:CaF2 regenerative amplifier for driving 4-micron KTA parametric amplifiers
PO-13	Shigeki Tokita	Temperature-driven, Sub-100-fs Mode-locked Fiber Oscillators Based on the Symmetry-Broken Nonlinear Polarization Evolution Method
PO-14	Kazufumi Nomura	In-line Detection of Internal Defects in Fillet Welded Sheet of Lap Joint by Laser Ultrasonic and Its Robotic Application Using Microchip Laser
PO-15	Haruya Matsumoto	Development of a Start-to-End simulation code for the laser-driven ion injector
PO-16	Tatsuhiko Miyatake	Optimization of laser irradiation conditions for high-brightness beam generation in laser-driven ion beams
PO-17	Kai Huang	Temporal measurement of laser wakefield electrons via electro-optic sampling
PO-18	Yuta Suzuki	Development of a high-power terahertz source based on laser-produced plasma for electron acceleration
PO-19	Yoshio Mizuta	Laser peening with microchip laser mounted on a controlled robotic arm
PO-20	Shigeru Yamamoto	Undulator light source with a compact, slender and lightweight frame based on a magnet technology developed for very-short-period undulators
PO-21	Yoshihide Honda	Current status and prospect of RLQBS in SANKEN
PO-22	Thanh-Hung Dinh	Development of a compact 50 TW laser for energetic quantum beam generation toward practical applications
PO-23	Alexei Zhidkov	Plasma Effects on Electron Beam Bunching in External Periodic Fields
PO-24	Naveen Chandra Pathak	Focusing and reduction of correlated energy spread of chirped electron beams in passive plasma lens.
PO-25	Yanjun Gu	Study of gas jet stability for LWFA in the context of shock injection
PO-26	Zhan Jin	An Overview of Laser Wakefield Acceleration Platform in Spring-8
PO-27	Shingo Sato	Characterization of Plasma Targets for Electron Beam Generation in Laser Wakefield Acceleration Systems
PO-28	Illia Zymak	The electron beam diagnostic system for MeV range high repetition rate LWFA sources
PO-29	Masao Gohdo	The electronic structure of the solvated electron investigated by pulse radiolysis
PO-30	Nobuhiko Nakanii	Beam pointing control of laser wakefield accelerator by shaping near field profile of laser pulse
PO-31	Yusa Muroya	Picosecond pump-probe study on radiation-induced primary reaction processes of solutions at extreme conditions

April 27 (THU)

Optional tour	<p>Bus Tour Schedule</p> <p>10:30 Departure from Senri Hankyu Hotel</p> <p>11:50 – 12:45 Lunch(Japanese style)</p> <p>13:30 Arrival at RIKEN SPring-8 Campus (VisitingSPring-8, SACLA and LAPLACIAN)</p> <p>16:00 Departure form RIKEN SPring-8 Campus</p> <p>18:00 Arrival at Senri Hankyu Hotel</p> <p>18:30 Arrival at Shin-Osaka Station</p> <p>*Arrival time may be delayed due to traffic conditions.</p>	RIKEN SPring-8 Center
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