

Program ERL 2019

Sunday, 15 th September 2019		
16:00	Registration	HZB Foyer
18:00	Welcome Reception	HZB Foyer
20:00	End	
Monday, 16 th September 2019		
08:00	Registration	WISTA Building
	Opening	
09:00	<i>Atoosa Meseck (Helmholtz-Zentrum Berlin)</i>	WISTA - Bunsen Saal
	Welcome	
09:10	<i>Jan Lüning (Helmholtz-Zentrum Berlin)</i>	WISTA - Bunsen Saal
ERL facilities (Chair: M. Abo-Bakr)		
	CBETA, a 4-turn ERL Based on SRF Linacs: construction and commissioning	
09:25	<i>Georg Hoffstaetter (Cornell, USA)</i>	WISTA - Bunsen Saal
	Compact ERL (cERL), stable 1 mA operation with a small beam emittance at KEK	
09:55	<i>Tsukasa Miyajima (KEK, Japan)</i>	WISTA - Bunsen Saal
10:30	Coffee Break	WISTA - Einstein-Newton-Kabinett
ERL facilities (Chair: M. Arnold)		
	ERL Operation of S-DALINAC	
10:45	<i>Norbert Pietralla (TU Darmstadt, Germany)</i>	WISTA - Bunsen Saal
	Status of Novosibirsk ERL	
11:10	<i>Nikolay Vinokurov (BINP, Novosibirsk, Russia)</i>	WISTA - Bunsen Saal
	The bERLinPro Project	
11:35	<i>Andreas Jankowiak (HZB, Germany)</i>	WISTA - Bunsen Saal
	The MESA ERL Project	
12:00	<i>Florian Hug (Mainz University, Germany)</i>	WISTA - Bunsen Saal
12:30	Lunch on your own	
ERL applications (Chair: N. Vinokurov)		
	PERLE: A High Power Energy Recovery Facility at Orsay	
14:00	<i>Walid Kaabi (IN2P3, France)</i>	WISTA - Bunsen Saal
	A hard X-ray FEL and Nuclear Physics facility based on a Multi-pass re-circulating superconducting CW Linac with Energy Recovery	
14:25	<i>Peter Williams (STFC, UK)</i>	WISTA - Bunsen Saal
	Nuclear photonics with an ERL-based hard X-ray source	
14:50	<i>Norbert Pietralla (TU Darmstadt, Germany)</i>	WISTA - Bunsen Saal
	Electrodisintegration of ¹⁶O and the Rate Determination of the Radiative Alpha Capture on ¹²C at Stellar Energies	
15:15	<i>Ivica Friscic (MIT, USA)</i>	WISTA - Bunsen Saal
15:45	Coffee Break	WISTA - Einstein-Newton-Kabinett
ERL applications (Chair: D. Angal-Kalinin)		
	The Use of ERLs to Cool High Energy Ions in Electron-Ion Colliders	
16:00	<i>Stephen Benson (Jlab, USA)</i>	WISTA - Bunsen Saal
	Industrial Applications of cERL	
16:30	<i>Hiroshi Sakai (KEK, Japan)</i>	WISTA - Bunsen Saal
	Recent Advances in Terahertz Photonics and Spectroscopy at Novosibirsk Free Electron Laser	
17:00	<i>Yulia Choporova (BINP, Novosibirsk, Russia)</i>	WISTA - Bunsen Saal
	ERL as a versatile SRF test facility	
17:30	<i>Erk Jensen (CERN, Switzerland)</i>	WISTA - Bunsen Saal
18:00	End	

Tuesday, 17 th September 2019		
	ERL beam dynamics and instrumentation (Chair: A. Bogacz)	
09:00	Longitudinal Phase Space Dynamics in ERLs <i>Stephen Benson (JLAB, USA)</i>	WISTA - Bunsen Saal
09:30	Beyond the limits of 1D coherent synchrotron radiation <i>Peter Williams (ASTeC, UK)</i>	WISTA - Bunsen Saal
10:00	CSR phase space dilution in ERLs <i>William Lou (Cornell, USA)</i>	WISTA - Bunsen Saal
10:30	Coffee Break	WISTA - Einstein-Newton-Kabinett
	ERL beam dynamics and instrumentation (Chair: G. Hoffstaetter)	
10:45	Beam Halo in Energy Recovery Linacs <i>Olga Tanaka (KEK, Japan)</i>	WISTA - Bunsen Saal
11:10	Beam timing and cavity phasing <i>Rosalyn Koszica (Cornell, USA)</i>	WISTA - Bunsen Saal
11:35	The LHeC ERL - Optics and Performance Optimizations <i>Alex Bogacz (JLab, USA)</i>	WISTA - Bunsen Saal
12:00	Beam dynamics layout of the MESA ERL <i>Florian Hug (Mainz University, Germany)</i>	WISTA - Bunsen Saal
12:30	Lunch on your own	
	Superconducting RF (Chair: A. Neumann)	
14:00	KEK ERL SRF Operation Experience <i>Hiroshi Sakai (KEK, Japan)</i>	WISTA - Bunsen Saal
14:25	Superconducting Twin-Axis Cavity for ERL Applications <i>Jean Delayen (ODU, USA)</i>	WISTA - Bunsen Saal
14:50	Integration of the MESA modules to bERLinPro for high power beam tests <i>Sebastian Thomas (KPH, Germany)</i>	WISTA - Bunsen Saal
15:15	Time for discussion	WISTA - Bunsen Saal
15:45	Coffee Break	WISTA - Einstein-Newton-Kabinett
	Superconducting RF (Chair: H. Sakai)	
16:00	Cryomodules for the Mainz Energy-recovering Superconducting Accelerator (MESA) <i>Florian Hug (KPH, Germany)</i>	WISTA - Bunsen Saal
16:20	A ferroelectric Fast Reactive Tuner (FRT) to combat microphonics <i>Alick Macpherson (CERN, Switzerland)</i>	WISTA - Bunsen Saal
16:45	Characterization of Microphonics in the cERL main linac superconducting cavities <i>Feng Qiu (KEK, Japan)</i>	WISTA - Bunsen Saal
17:10	LLRF ERL experience at the S-DALINAC <i>Manuel Steinhorst (TU Darmstadt, Germany)</i>	WISTA - Bunsen Saal
17:35	Time for discussion	WISTA - Bunsen Saal
18:00	End	
18:30	Scientific Opportunities of bERLinPro 2020+ <i>Satellite Workshop "Barcamp"</i> <i>Starts with a light Dinner, Barcamp starts 19:00</i>	Magnusstr. 2, 12489 Berlin near WISTA Building & HZB

Wednesday, 18 th September 2019		
	Electron sources and injectors (Chair: E. Wang)	
	Vertical test results and preparation for horizontal test of the KEK SRF gun #2	
09:00	<i>Taro Konomi (KEK, Japan)</i>	WISTA - Bunsen Saal
09:30	Using a protective layer for alkali cathodes <i>John Smedley (LANL, USA)</i>	WISTA - Bunsen Saal
10:00	High current polarized electron source development <i>Luca Cultrera (Cornell, USA)</i>	WISTA - Bunsen Saal
10:30	Coffee Break	WISTA - Einstein-Newton-Kabinett
	Electron sources and injectors (Chair: L. Cultrera)	
10:45	Photocathode preparation and characterization at HZB <i>Sonal Mistry (HZB, Germany)</i>	WISTA - Bunsen Saal
11:10	Cathode performance for high current operation in LEReC <i>Mengjia Gaowei (BNL, USA)</i>	WISTA - Bunsen Saal
11:35	Bench Test Results of CW 100 mA Electron RF Gun for Novosibirsk ERL based FEL <i>Vladimir Volkov (BINP, Russia)</i>	WISTA - Bunsen Saal
11:55	Time for discussion	WISTA - Bunsen Saal
12:30	Lunch on your own	
14:00	Postersession	WISTA - Einstein-Newton-Kabinett
15:45	Coffee Break	WISTA - Einstein-Newton-Kabinett
	Mixed session (Chair: O. Shevchenko)	
16:00	Asymmetric SRF dual axis cavity for ERLs: studies and design for ultimate performance and applications <i>Yaroslav Shashkov (JAI, UK)</i>	WISTA - Bunsen Saal
16:30	ERL with Fixed Field Alternating Gradient Linear Gradient Role in EIC <i>Dejan Trbojevic (BNL, USA)</i>	WISTA - Bunsen Saal
16:50	High-Efficiency Broadband THz Emission via Diffraction-Radiation Cavity <i>Miho Shimada (KEK, Japan)</i>	WISTA - Bunsen Saal
17:20	Applying Machine Learning Approaches to bERLinPro <i>Bettina Kuske (HZB, Germany)</i>	WISTA - Bunsen Saal
17:40	Time for discussion	WISTA - Bunsen Saal
18:00	End	
19:00	Workshop Dinner (Shuttle departs 18:30 in front of the WISTA - Building)	
23:00	End (Shuttle departs 22:00 & 23:00 in front of the Dinner Location)	

Thursday, 19th September 2019		
Superconducting RF (Chair: F. Gerigk)		
09:00	System Identification Procedures for Resonance Frequency Control of SC Cavities <i>Sebastian Orth (TU Darmstadt, Germany)</i>	WISTA Bunsen-Saal
09:20	Passive and active control of microphonics at CBETA and elsewhere <i>Nilanjan Banerjee (Cornell, USA)</i>	WISTA Bunsen-Saal
09:45	The development of HOM-damped 166.6MHz SRF cavities for High Energy Photon Source in Beijing <i>Pei Zhang (IHEP, China)</i>	WISTA Bunsen-Saal
10:10	Beam breakup limit estimations and HOM characterisation for MESA <i>Christian Stoll (KPH, Germany)</i>	WISTA Bunsen-Saal
10:30	Coffee Break	WISTA - Einstein-Newton-Kabinett
Superconducting RF (Chair: P. McIntosh)		
10:45	Waveguide HOM loads for high current elliptical cavities <i>Jiquan Guo (JLAB, USA)</i>	WISTA Bunsen-Saal
11:10	Development of HOM coupler with C-shaped waveguide for ERL operation <i>Masaru Sawamura (QST, Japan)</i>	WISTA Bunsen-Saal
11:35	Degradation and Recovery of Cavity Performance in Compact-ERL Injector Cryomodule at KEK <i>Eiji Kako (KEK, Japan)</i>	WISTA Bunsen-Saal
12:00	High Q 704 MHz cavity tests at CERN <i>Alick Macpherson (CERN, Switzerland)</i>	WISTA Bunsen-Saal
12:30	Lunch on your own	
Electron sources and injectors (Chair: J. Knobloch)		
14:00	Metal/ semiconductor photocathode in HZDR SRF gun <i>Rong Xiang (HZDR, Germany)</i>	WISTA Bunsen-Saal
14:30	Peking Univ. DC-SC/SRF gun progressing <i>Huamu Xie (Peking U., China)</i>	WISTA Bunsen-Saal
15:00	High charge high current beam from BNL 112MHz SRF gun <i>Igor Pinayev (BNL, USA)</i>	WISTA Bunsen-Saal
15:30	Time for discussion	WISTA - Bunsen Saal
15:45	Coffee Break	WISTA - Einstein-Newton-Kabinett
Electron sources and injectors (Chair: D. Kayran)		
16:00	Injector development at KeK <i>Tsukasa Miyajima (KEK, Japan)</i>	WISTA Bunsen-Saal
16:30	Novosibirsk ERL injector <i>Oleg Shevchenko (BINP, Russia)</i>	WISTA Bunsen-Saal
17:00	Status of SRF Gun for bERLinPro <i>Axel Neumann (HZB, Germany)</i>	WISTA Bunsen-Saal
17:30	Magnetized beam generated from DC gun for JLEIC Electron Cooler <i>Stephen Benson (JLAB, USA)</i>	WISTA Bunsen-Saal
18:00	End	

Friday, 20 th September 2019		
	ERL beam dynamics and instrumentation (Chair: P. Evtushenko)	
09:00	Essential instrumentation for the characterization of ERL beams <i>Nilanjan Banerjee (Cornell, USA)</i>	WISTA Bunsen-Saal
09:30	Design and commissioning experience with state of the art MPS for LEReC accelerator <i>Sergei Seletskiy (BNL, USA)</i>	WISTA Bunsen-Saal
10:00	Beam Commissioning Experience at Low Energy RHIC Electron Cooler (LEReC) <i>Dmitry Kayran (BNL, USA)</i>	WISTA Bunsen-Saal
10:30	Coffee Break	WISTA - Einstein-Newton-Kabinett
	ERL beam dynamics and instrumentation (Chair: T. Kamps)	
10:45	Electronic modulation of the FEL-oscillator radiation power driven by ERL <i>Oleg Shevchenko (BINP, Russia)</i>	WISTA Bunsen-Saal
11:10	Adjusting bERLinPro optics to commissioning needs <i>Bettina Kuske (HZB, Germany)</i>	WISTA Bunsen-Saal
11:35	Beam dynamics simulations for the twofold ERL mode at the S-DALINAC <i>Felix Schließmann (TU Darmstadt, Germany)</i>	WISTA Bunsen-Saal
12:00	Status of the Control System for the Energy Recovery Linac bERLinPro at HZB <i>Thomas Birke (HZB, Germany)</i>	WISTA Bunsen-Saal
12:30	Lunch on your own	
	WG reports and close out (Chair: A. Matveenko)	
14:00	Report WG1: ERL facilities <i>Michael Abo-Bakr / Michaela Arnold</i>	WISTA Bunsen-Saal
14:20	Report WG2: ERL beam dynamics and instrumentation <i>Georg Hoffstaetter / Pavel Evtushenko</i>	WISTA Bunsen-Saal
14:40	Report WG3: Electron sources and injectors <i>Erdong Wang / Luca Cultrera</i>	WISTA Bunsen-Saal
15:00	Report WG4: Superconducting RF <i>Frank Gerigk</i>	WISTA - Bunsen Saal
15:20	Report WG5: ERL applications <i>Deepa Angal-Kalinin / Oliver Bruning</i>	WISTA - Bunsen Saal
15:45	Coffee Break	WISTA - Einstein-Newton-Kabinett
16:00	bERLinPro/BESSY II tour (Albert-Einstein-Str. 15, 12489 Berlin)	HZB
18:00	End	